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, SEPTEMBER 2, 2022
HYBRID GOVERNING BOARD MEETING

Pursuant to Assembly Bill 361, a meeting of the South Coast Air Quality Management District Board will be held at 9:00 a.m. on Friday, September 2, 2022 through a hybrid format of in-person attendance in the Dr. William A. Burke Auditorium at the South Coast AQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, and/or virtual attendance via videoconferencing and by telephone. Please follow the instructions below to join the meeting remotely.

Given health and safety concerns, seating availability may be limited, and the meeting format may be changed to full remote via webcast. Please refer to South Coast AQMD's website for information regarding the format of the meeting, updates if the meeting is changed to a full remote via webcast format, and details on how to participate:

http://www.aqmd.gov/home/news-events/meeting-agendas-minutes

Face coverings: State and local public health officials strongly recommend, but do not require, the wearing of face coverings while in an indoor public setting.

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

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

PUBLIC COMMENT WILL STILL BE TAKEN

Phone controls for participants:
The following commands can be used on your phone's dial pad while in Zoom Webinar meeting:
- *6 - Toggle mute/unmute
- *9 - Raise hand

Questions About an Agenda Item	▪ The name and telephone number of the appropriate staff person to call for additional information or to resolve concerns is listed for each agenda item. ▪ In preparation for the meeting, you are encouraged to obtain whatever clarifying information may be needed to allow the Board to move expeditiously in its deliberations.
Meeting Procedures	▪ The public meeting of the South Coast AQMD Governing Board begins at 9:00 a.m. The Governing Board generally will consider items in the order listed on the agenda. However, any item may be considered in any order. ▪ After taking action on any agenda item not requiring a public hearing, the Board may reconsider or amend the item at any time during the meeting.

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

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

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

CALL TO ORDER

- Pledge of Allegiance
- Roll Call
- Opening Comments: Ben J. Benoit, Chair
  Other Board Members
  Wayne Nastri, Executive Officer

PUBLIC COMMENT PERIOD – (Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3) The public may comment on any subject within the South Coast AQMD's authority that **does not** appear on the agenda, during the Public Comment Period. Each speaker addressing non-agenda items may be limited to a total of (3) minutes.

Staff/Phone (909) 396-

CONSENT AND BOARD CALENDAR (Items 1 through 28)

Note: Consent and Board Calendar items held for discussion will be moved to Item No. 29.

Items 1 and 2 – Action Items/No Fiscal Impact

1. Comply with AB 361 Requirements to Allow South Coast AQMD Board and South Coast AQMD Brown Act Committees to Continue to Meet Remotely — **Gilchrist/3459**

2. Approve Minutes of August 5, 2022 Meeting — **Thomas/3268**

Items 3 through 11 -- Budget/Fiscal Impact

3. Appropriate Funds From Undesignated (Unassigned) Fund Balance for Engineering and Permitting Assistance — **Aspell/2491**

   In order to reduce the pending permit application inventory consistent with the agency's Goals and Objectives, assistance from qualified consultants and retirees are temporarily needed on an as needed basis. A total of $400,000 will be appropriated from the General Fund Undesignated (Unassigned) Fund Balance into Engineering and Permitting's FY 2022-23 Budget to cover consultant contracts and temporary staffing costs. (Reviewed: Administrative Committee, August 12, 2022; Recommended for Approval)

4. Recognize Revenue and Appropriate Funds for U.S. EPA Pass Through Grants to Develop Low-Cost Sensor Device for Measuring VOCs and Reference Method for Validating Open-Path Remote Sensing Systems **Low/2269**

Recently, U.S. EPA awarded multiple nationwide competitive Science to Achieve Results research grants. South Coast AQMD staff will be a co-investigator for two of these grants, one with Virginia Polytechnic Institute and State University (Virginia Tech) to develop a low-cost sensor device for time-resolved measurements of VOCs, and one with the University of California, Los Angeles (UCLA) to develop a reference method for validating the performance of open-path remote sensing systems for air toxic measurements. These actions are to recognize revenue up to $199,949 from Virginia Tech and up to $208,187 from UCLA into the General Fund, and appropriate up to $46,120 and $41,320, respectively from the two universities, in the Monitoring and Analysis FY 2022-23 and/or, FY 2023-24 and/or, FY 2024-25 Budgets to support efforts on these projects. (Reviewed: Administrative Committee, August 12, 2022; Recommended for Approval)

5. Recognize Revenue, Appropriate Federal Funds, and Issue Solicitations and Purchase Orders for Air Monitoring Equipment **Low/2269**

South Coast AQMD is expected to receive grant funds up to $272,052 for the NATTS Program and $333,500 from the American Rescue Plan (ARP) from U.S. EPA. These actions are to recognize revenue and appropriate funds for the NATTS program and ARP grant and issue solicitations and purchase orders for air monitoring equipment. (Reviewed: Administrative Committee, August 12, 2022; Recommended for Approval)

6. Appropriate Funds, Issue Solicitations and Purchase Orders for Laboratory and Air Monitoring Equipment **Low/2269**

Laboratory equipment is needed to support current ethylene oxide investigations, including ones in AB 617 communities. In addition, the FY 2022-23 budget authorized Capital Outlays in the amount of $513,000 for air monitoring and laboratory equipment. An additional $250,000 is needed to purchase equipment to analyze ethylene oxide samples and other toxic air contaminants. These actions are to appropriate funds up to $250,000 from the General Fund Undesignated (Unassigned) Fund Balance to Monitoring & Analysis FY 2022-23 Budget to issue solicitations and purchase orders for laboratory and air monitoring equipment in an amount up to $718,000. (Reviewed: Administrative Committee, August 12, 2022; Recommended for Approval)

7. Amend Contract for Joint Electric Truck Scaling Initiative Pilot Project **Katzenstein/2219**

In June 2021, the Board approved the execution of several contracts for the CARB and CEC awarded Joint Electric Truck Scaling Initiative (JETSI) Pilot Project, including a contract with Gladstein, Neandross and Associates to develop the ZEV workplan. The JETSI Pilot Project will deploy 100 Daimler and Volvo Class 8 battery electric trucks, charging infrastructure, and distributed energy resource technologies at two fleets in disadvantaged communities. Due to the large number of project partners and strict reporting requirements to submit quarterly progress reports within 10 days of the end of each quarter, CARB has approved the reallocation of $220,000 in South Coast AQMD administrative funds for project reporting. This action is to amend an existing contract with Gladstein, Neandross and Associates, adding $220,000

in CARB grant funds from the GHG Reduction Projects Special Revenue Fund (67) for project reporting. (Reviewed: Technology Committee, August 19, 2022; Recommended for Approval)

8. Adopt Resolution Recognizing Funds for FY 2021-22 Community Air Protection Incentives and Reimburse General Fund for Administrative Costs **Katzenstein/2219**

In June 2022, South Coast AQMD executed a grant agreement with CARB to receive FY 2021-22 Community Air Protection Program (CAPP) incentive funds in the amount of $98,799,787, which includes 6.25 percent in administrative funds. This action is to adopt a Resolution recognizing CAPP revenue up to $98,799,787 from CARB into the Community Air Protection AB 134 Fund (77). Eligible projects include those submitted under the Carl Moyer Program and Proposition 1B–Goods Movement Program, projects consistent with the Community Air Protection Incentives Guidelines, and other projects included in an approved community emissions reduction programs. This action is to also reimburse the General Fund for administrative costs in implementing the CAPP grant. (Reviewed; Technology Committee, August 19, 2022; Recommended for Approval)

9. Recognize Revenue, Transfer Funds and Execute Contract with San Bernardino County, Acting on Behalf of Arrowhead Regional Medical Center for Deployment of Zero Emission Mobile Clinics **Katzenstein/2219**

Arrowhead Regional Medical Center (ARMC) operates two mobile pediatric asthma clinics referred to as Breathmobiles. In June 2022, U.S EPA awarded $500,000 to the South Coast AQMD under the Clean Air Technology Initiative to help replace an existing older gasoline powered Breathmobile with a new zero emission platform. San Bernardino County is supporting the development of a new third mobile clinic and has requested additional support in making this a zero emission clinical platform also. These actions are to: 1) recognize revenue up to $500,000 from U.S. EPA into the Advanced Technology, Outreach and Education Fund (17); 2) transfer $500,000 from the Clean Fuels Program Fund (31) as cost-share into the Advanced Technology, Outreach, and Education Fund (17); and 3) execute a contract with San Bernardino County acting on behalf of ARMC for the purchase of two zero emission mobile clinics in an amount not to exceed $1,000,000 from the Advanced Technology, Outreach, and Education Fund (17). (Reviewed: Technology Committee, August 19, 2022; Recommended for Approval)

10. Approve Amendments to MOU With Teamsters Local 911 and Administrative Code Provisions for Non-Represented Employees Regarding Employer Contributions for Health Insurance Premiums **Olvera/2309**

South Coast AQMD management and Teamsters Local 911, representing the Office Clerical & Maintenance (OCM) and Technical & Enforcement (T&E) bargaining units, have reached agreement to address health insurance premium increases effective January 1, 2023. The proposed MOU amendment provides for an additional $50 per month to be paid directly to health insurance providers on behalf of each employee. This action is to request Board approval of the MOU amendment. This action is also to approve an amendment to the South Coast AQMD Administrative Code for an additional payment of $50 per month to the health insurance providers on behalf of each non-represented employee. Sufficient funds are available in the FY 2022-23 Budget and will be requested in the FY 2023-24 Budget. (No Committee Review)

11. Issue Request for Information and Approve Award as Approved by MSRC **McCallon/**

The MSRC approved a Request for Information for zero emission goods movement infrastructure as part of their FYs 2021-24 Work Program. Additionally, the MSRC approved an award to provide special bus service to Dodger Stadium in 2023 and 2024. At this time, the MSRC seeks Board approval of the contract award and to release the solicitation as part of the FYs 2021-24 Work Program. (Reviewed: Mobile Source Air Pollution Reduction Review, August 18, 2022; Recommended for Approval)

Items 12 through 20 – Information Only/Receive and File

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

This report highlights the July 2022 outreach activities of the Legislative, Public Affairs and Media Office, which includes: Major Events, Community Events/Public Meetings, Environmental Justice Update, Speakers Bureau/Visitor Services, Communications Center, Public Information Center, Business Assistance, Media Relations and Outreach to Business and Federal, State and Local Government. (No Committee Review)

13. Hearing Board Report **Verdugo-Peralta/**

This reports the actions taken by the Hearing Board during the period of July 1 through July 31, 2022. (No Committee Review)

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

This report summarizes monthly penalties and legal actions filed by the General Counsel's Office from June 1, 2022 through July 31, 2022. An Index of South Coast AQMD Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, August 19, 2022)

15. Lead Agency Projects and Environmental Documents Received **Rees/2856**

This report provides a listing of CEQA documents received by South Coast AQMD between July 1, 2022 and July 31, 2022, and those projects for which South Coast AQMD is acting as lead agency pursuant to CEQA. (Reviewed: Mobile Source Committee, August 19, 2022)

16. Rule and Control Measure Forecast **Rees/2856**

This report highlights South Coast AQMD rulemaking activities and public hearings scheduled for 2022. (No Committee Review)

17. Report of RFPs/RFQs Scheduled for Release in September **Jain/2804**

This report summarizes the RFPs/RFQs for budgeted services over $100,000 scheduled to be released for advertisement for the month of September. (Reviewed: Administrative Committee, August 12, 2022)

18. FY 2021-22 Contract Activity **Jain/2804**

This report lists the number of contracts let during FY 2021-22, the respective dollar amounts, award type and the authorized contract signatory for South Coast AQMD. This report includes the data provided in the March 4, 2022 report covering contract activity for the first six months of FY 2021-22. (No Committee Review)

19. Status Report on Regulation XIII – New Source Review **Aspell/2491**

This report presents the state and federal Final Determination of Equivalency for January 2020 through December 2020. As such, it provides information regarding the status of Regulation XIII – New Source Review (NSR) in meeting state and federal NSR requirements and shows that South Coast AQMD's NSR program is in compliance with applicable state and federal requirements from January 2020 through December 2020. (Reviewed: Stationary Source Committee, August 19, 2022)

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

Information Management is responsible for data systems management services in support of all South Coast AQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects. (Reviewed: Administrative Committee, August 12, 2022)

Items 21 through 28 -- Reports for Committees and CARB

21. Administrative Committee (Receive & File) **Chair: Benoit** **Nastri/3131**

22. Investment Oversight Committee (Receive & File) **Chair: Cacciotti** **Jain/2804**

23. Legislative Committee **Chair: Cacciotti** **Alatorre/3122**

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

Agenda Item	Recommendation
AB 1749 (C. Garcia) Community emissions reduction programs: toxic air contaminants and criteria air pollutants.	Withdraw Support

24. Mobile Source Committee (Receive & File) **Chair: Kracov** **Rees/2856**

25. Stationary Source Committee (Receive & File) **Chair: Benoit** **Aspell/2491**

26. Technology Committee (Receive & File) **Chair: Richardson** **Katzenstein2219**

27. Mobile Source Air Pollution Reduction Review Committee (Receive & File) **Board Liaison: Benoit** **Katzenstein/2219**

28. California Air Resources Board Monthly Report (Receive & File) **Board Rep: Kracov** **Thomas/3268**

29. Items Deferred from Consent and Board Calendar

PUBLIC HEARINGS

30. Determine That Proposed Amendments to BACT Guidelines Are Exempt from CEQA and Amend BACT Guidelines **Aspell/2491**

This item is to add new and amended listings to South Coast AQMD BACT Guidelines. Periodically, after consultation with stakeholders through the BACT Scientific Review Committee, staff proposes amendments to the BACT Guidelines to make them consistent with recent changes to South Coast AQMD rules and regulations as well as state requirements. Staff is proposing to add new and amended listings to Part B: Lowest Achievable Emission Rate Determinations for Major Polluting Facilities, Part D: BACT Determinations for Non-Major Polluting Facilities and to update the Overview, Parts A and C: Policy for Major and Non-Major Polluting Facilities, respectively. This action is to determine that the proposed amendments to the BACT Guidelines are exempt from the requirements of the California Environmental Quality Act and to amend the BACT Guidelines. (Reviewed: Stationary Source Committee, June 17, 2022)

31. Determine That Proposed Amended Rule 218.2 - Continuous Emission Monitoring System: General Provisions, and Proposed Amended Rule 218.3 - Continuous Emission Monitoring System: Performance Specifications, Are Exempt from CEQA; and Amend Rule 218.2 and Rule 218.3 **Krause/2706**

Rules 218.2 and 218.3 provide guidance for installation and operation of CEMS at non-RECLAIM and former RECLAIM facilities. The proposed amendments establish additional requirements for the installation and operation of CEMS including an alternative calibration procedure for dual range analyzers, specifications when measuring mass emissions and applying data substitution procedures, and extensions to recordkeeping and reporting requirements. This action is to adopt the Resolution: 1) Determining that Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications, are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications. (Reviewed: Stationary Source Committee, June 17, 2022)

32. Determine That Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen, Is Exempt from CEQA; and Amend Rule 429 **Krause/2706**

Proposed Amended Rule 429 will provide an alternative limit from NOx and CO concentration limits in various rules in Regulation XI – Source Specific Standards when units are starting up and shutting down for specified durations. Proposed Amended Rule 429 will also include provisions limiting the frequency of scheduled startups, best management practices, and notification and recordkeeping requirements. This action is to adopt the Resolution: 1) Determining that Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen, is exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen. (Reviewed: Stationary Source Committee, June 17, 2022)

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 DISCLOSURE – (*No Written Material*)

The District will enter into a contract with SA Recycling (Contract # C193892). SA Recycling made a campaign contribution to Governing Board Chair Benoit on October 28, 2021, and to Governing Board Member Carlos Rodriguez on November 1, 2021. Both Chair Benoit and Board Member Rodriguez have abstained from any participation in the making of these contracts.

CLOSED SESSION -- (*No Written Material*)

Gilchrist/3459

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

- In the Matter of SCAQMD v. Southern California Gas Company, Aliso Canyon Storage Facility, SCAQMD Hearing Board Case No. 137-76 (Order for Abatement); People of the State of California, ex rel SCAQMD v. Southern California Gas Company, Los Angeles Superior Court Case No. BC608322; Judicial Council Coordinated Proceeding No.4861;

- CalPortland Company v. South Coast Air Quality Management District; Governing Board of the South Coast Air Quality Management District; and Wayne Nastri, Executive Officer, and Does 1-100, San Bernardino County Superior Court, Case No. CIV DS 1925894;

- SCAQMD, et al. v. EPA, United States Court of Appeals, D.C. Circuit, Case No. 19-1241 (consolidated with Union of Concerned Scientists v. NHTSA, No. 19-1230);

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

- Natural Resources Defense Council, et al. v. City of Los Angeles, et al., San Diego Superior Court, Case No. 37-2021-00023385-CU-TT-CTL (China Shipping Case) (transferred from Los Angeles Superior Court, Case No. 20STCP02985); and

- California Trucking Association v. South Coast Air Quality Management; the Governing Board of the South Coast Air Quality Management District; and Does 1 through 25, inclusive, Case No.: 2:21-cv-06341.

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).

CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
Also, it is necessary for the Board to recess to closed session pursuant to Government Code section 54956.9(d)(2) to confer with its counsel because there is a significant exposure to litigation against the SCAQMD (two cases).

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

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

ADJOURNMENT

PUBLIC COMMENTS

Members of the public are afforded an opportunity to speak on any agenda item before consideration of that item. Persons wishing to speak may do so in person or remotely via Zoom or telephone. To provide public comments via a Desktop/Laptop or Smartphone, click on the "Raise Hand" at the bottom of the screen, or if participating via Dial-in/Telephone Press *9. This will signal to the host that you would like to provide a public comment and you will be added to the list.

All agendas are posted at South Coast AQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, and website, http://www.aqmd.gov/home/news-events/meeting-agendas-minutes, at least 72 hours in advance of the meeting. At the beginning of the agenda, an opportunity is also provided for the public to speak on any subject within the South Coast AQMD's authority. Speakers may be limited to a total of three (3) minutes for the entirety of the Consent Calendar plus Board Calendar, and three (3) minutes or less for each of the other agenda items.

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

Written comments will be accepted by the Board and made part of the record. Individuals who wish to submit written or electronic comments must submit such comments to the Clerk of the Board, South Coast AQMD, 21865 Copley Drive, Diamond Bar, CA 91765-4178, (909) 396-2500, or to cob@aqmd.gov, on or before 5:00 p.m. on the Tuesday prior to the Board meeting.

ACRONYMS

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

INSTRUCTIONS FOR ELECTRONIC PARTICIPATION

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

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

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

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

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

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

If interpretation is needed, more time will be allotted.

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

Directions for Video ZOOM on a DESKTOP/LAPTOP:

- If you would like to make a public comment, please click on the **"Raise Hand"** button on the bottom of the screen.

- This will signal to the host that you would like to provide a public comment and you will be added to the list.

Directions for Video Zoom on a SMARTPHONE:

- If you would like to make a public comment, please click on the **"Raise Hand"** button on the bottom of your screen.

- This will signal to the host that you would like to provide a public comment and you will be added to the list.

Directions for TELEPHONE line only:

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

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 1

PROPOSAL: Comply with AB 361 Requirements to Allow South Coast AQMD Board and South Coast AQMD Brown Act Committees to Meet Remotely

SYNOPSIS: This action is to adopt the attached Resolution finding that the Board: 1) has reconsidered the circumstances of the state of emergency; and 2) State or local officials continue to impose or recommend measures to promote social distancing. See California Government Code Section 54953(e)(3).

COMMITTEE: No Committee Review

RECOMMENDED ACTIONS:
Adopt the attached Resolution finding that the Board:
1. Has reconsidered the circumstances of the state of emergency; and
2. State or local officials continue to impose or recommend measures to promote social distancing.

Wayne Nastri
Executive Officer

BTG:lal

Background

Governor Newsom previously issued Executive Orders (EOs) N-29-20 and N-35-2 in March 2020, as a response to the public health crisis brought about by the COVID-19 pandemic. These EOs authorized local legislative bodies subject to the Ralph M. Brown Act to conduct meetings entirely via telephonic or other electronic means in lieu of requiring the physical presence of Board members or members of the public. On June 11, 2021, the Governor issued EO N-08-21 which continued suspension of the Brown Act's teleconferencing requirements, without requiring that members of the public be given the right to access all teleconference locations, through September 30, 2021, in anticipation of the State's proposed re-opening.

Assembly Bill 361, signed into law by Governor Newsom on September 16, 2021, amends the Brown Act and will stay in effect from October 1, 2021 through January 1, 2024. In part, AB 361 amends subparagraph (e) of Section 54953 of the California Government Code to state that local agencies may continue to use teleconferencing without complying with the teleconferencing requirements of the Brown Act in any of the following circumstances:

A. When the legislative body holds a meeting during a proclaimed state of emergency and State or local officials have imposed or recommended measures to propose social distancing;
B. When the legislative body holds a meeting during a proclaimed state of emergency for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees; or
C. When the legislative body holds a meeting during a proclaimed state of emergency and has already determined, by majority vote, pursuant to subparagraph (B), that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

In the event of an ongoing proclaimed state of emergency, or where state or local officials have imposed or recommended measures to promote social distancing, in order to continue to utilize the teleconferencing measures set forth above, a legislative body must, no later than 30 days after teleconferencing for the first time pursuant to Government Code Section 54953(e)(1), and every 30 days thereafter, make the following findings by majority vote:

A. The legislative body has reconsidered the circumstances of the state of emergency.
B. Any of the following circumstances exist:
    i. The state of emergency continues to directly impact the ability of the members to meet safely in person; or
    ii. State or local officials continue to impose or recommend measures to promote social distancing.

See California Government Code Section 54953(e)(1). Governor Newsom first declared a statewide emergency resulting from the COVID-19 pandemic on March 4, 2020. Furthermore, although the State no longer requires physical distancing, both South Coast AQMD and the Los Angeles County Department of Public Health, have recommended proposed social distancing measures.

Proposal
This action is to address the requirements of AB 361 to allow South Coast AQMD Board and South AQMD Brown Act Committees to continue to meet remotely. The recommended action is to adopt the attached Resolution finding that the Board: 1) has reconsidered the circumstances of the state of emergency; and 2) State or local officials continue to impose or recommend measures to promote social distancing. See Cal. Gov't Code Section 54953(e)(3).

Resource Impacts
No fiscal impact.

Attachment
Resolution

RESOLUTION 22-

A RESOLUTION OF THE GOVERNING BOARD OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RECOGNIZING THE PROCLAMATION OF A STATE OF EMERGENCY BY GOVERNOR NEWSOM ON MARCH 4, 2020 AND THAT THE COUNTY OF LOS ANGELES CONTINUES TO RECOMMEND MEASURES TO PROMOTE SOCIAL DISTANCING; AND AUTHORIZING FULLY OR PARTIALLY REMOTE TELECONFERENCE MEETINGS OF THE GOVERNING BOARD OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, AND SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT COMMITTEES SUBJECT TO THE BROWN ACT, FOR THE PERIOD OF SEPTEMBER 2, 2022 THROUGH OCTOBER 2, 2022 PURSUANT TO PROVISIONS OF THE BROWN ACT.

WHEREAS, the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) is committed to preserving and nurturing public access and participation in all meetings subject to the provisions of the Ralph M. Brown Act (Cal. Gov. Code §§54950-54963, hereafter Brown Act); and

WHEREAS, pursuant to the provisions of the Brown Act, all meetings of legislative bodies of the South Coast AQMD, which include the South Coast AQMD Governing Board, all Brown Act standing committees ultimately reporting to the South Coast AQMD Governing Board, and all advisory committees and groups subject to the Brown act, (collectively, hereinafter, "legislative bodies"), are required to be open and public so that any member of the public may attend, participate, and watch the South Coast AQMD's legislative bodies conduct their business; and

WHEREAS, the Brown Act Government Code §54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code §54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency has been declared by the Governor pursuant to Government Code §8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code §8558; and

WHEREAS, on March 4, 2020 the Governor proclaimed a State of Emergency to exist in California as a result of the threat of the novel coronavirus (COVID-19); and

WHEREAS, the jurisdiction of the South Coast AQMD includes portions of the Counties of Los Angeles, Orange, Riverside, and San Bernardino areas as set forth in Health & Safety Code §40410 and South Coast AQMD Rule 103; and

WHEREAS, the South Coast AQMD headquarters is located in the County of Los Angeles; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting would present imminent risks to the health and safety of attendees; and

WHEREAS, local and California public authorities still recommend measures promoting social distancing and/or mask wearing indoors and in public gatherings; and

WHEREAS, on April 21, 2022, the County of Los Angeles Department of Public Health issued further guidance promoting such measures; and

WHEREAS, on June 23 and August 10, 2021, the South Coast AQMD issued further guidance promoting such measures; and

WHEREAS, the spread of COVID-19 poses a continued risk to the health and safety of members of the South Coast AQMD legislative bodies, South Coast AQMD staff, and members of the general public who attend such meetings in that unvaccinated or partially vaccinated persons are at a high risk of contracting COVID-19 and even fully vaccinated persons can contract and potentially unknowingly spread COVID-19; and

WHEREAS, the Governing Board of the South Coast AQMD does hereby find that the legislative bodies of the South Coast AQMD shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code §54953, as authorized by subdivision (e) of §54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of §54953; and

WHEREAS, the legislative bodies of the South Coast AQMD will continue to ensure access to their meetings by making them available telephonically and via virtual access for both members of the legislative bodies and the general public; and

WHEREAS, a notice of meetings along with information regarding all methods which may be used for public participation in such meetings will continue to be published in the newspaper, posted at the South Coast AQMD's headquarters, posted at any teleconference

locations which are officially noticed on the agenda, posted on the South Coast AQMD's website, provided to anyone who requests such information, and clearly printed on any agendas produced for such meetings.

NOW, THEREFORE, BE IT RESOLVED, that the Governing Board of the South Coast AQMD hereby finds that highly contagious nature of COVID-19 poses an imminent risk to large numbers of persons meeting indoors in a single location; and

BE IT FURTHER RESOLVED, that the Governing Board of the South Coast AQMD hereby finds that the Governor of California issued a Proclamation of Emergency on March 4, 2020; and

BE IT FURTHER RESOLVED, that the Governing Board of the South Coast AQMD hereby finds that local officials continue to impose or recommend measures to promote social distancing in the South Coast AQMD's jurisdiction and where the South Coast AQMD's headquarters is located; and

BE IT FURTHER RESOLVED, that the Governing Board of the South Coast AQMD authorizes and directs staff to take all actions necessary to carry out the intent and purpose of this Resolution, including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act; and

BE IT FURTHER RESOLVED, that this resolution shall take effect immediately upon adoption and remain in effect until October 2, 2022, or until such time as the South Coast AQMD Governing Board adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which legislative bodies of the South Coast AQMD may continue to teleconference without strict compliance with paragraph 3 of Government Code section 54953(b).

DATE:_____ _____

CLERK OF THE BOARDS

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 2

MINUTES: Governing Board Monthly Meeting

SYNOPSIS: Attached are the Minutes of the August 5, 2022 Board Meeting.

RECOMMENDED ACTION:
Approve Minutes of the August 5, 2022 Board Meeting.

Faye Thomas
Clerk of the Boards

FT

FRIDAY, AUGUST 5, 2022

Notice having been duly given, the regular meeting of the South Coast Air Quality Management District Board was conducted in a hybrid format (in person and remotely via videoconferencing and telephone). Members present:

Mayor Ben J. Benoit, Chair
Cities of Riverside County

Senator Vanessa Delgado (Ret.), Vice Chair
Senate Rules Committee Appointee

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

Supervisor Andrew Do
County of Orange

Gideon Kracov
Governor's Appointee

Supervisor Sheila Kuehl
County of Los Angeles

Mayor Larry McCallon
Cities of San Bernardino County

Veronica Padilla-Campos
Speaker of the Assembly Appointee

Supervisor V. Manuel Perez
County of Riverside

Council Member Nithya Raman
City of Los Angeles

Vice Mayor Rex Richardson
Cities of Los Angeles County – Western Region

Mayor Carlos Rodriguez
Cities of Orange County

Supervisor Janice Rutherford
County of San Bernardino

Members absent: None

CALL TO ORDER: Chair Benoit called the meeting to order at 9:05 a.m.

- Pledge of Allegiance: Led by Board Member Padilla Campos
- Roll Call

Vice Mayor Richardson was absent for roll call. He joined the meeting at approximately 9:22 a.m.

For additional details of the Governing Board Meeting, please refer to the recording of the Webcast at: Live Webcast (aqmd.gov)

- Opening Comments

Chair Benoit acknowledged the 2022 South Coast AQMD student interns that were present in the auditorium and thanked them for their participation. He reported on attending a site visit to the CR&R Waste and Recycling Services anaerobic digestion and biomethane facility in Perris, CA, and the California Council for Environmental & Economic Balance (CCEEB) Summer Issues Seminar (SIS) on July 18-21 in Tahoe, Nevada with elected officials, top-level policymakers and other stakeholders. He commented on discussions at the CCEEB SIS that highlighted the power grid challenges and significant Gigawatts in new power capacity the energy transition will require.

Mayor Cacciotti shared photos of a site visit to the Kore Infrastructure pyrolysis facility in Downtown Los Angeles and commented on the pyrolysis process and its benefits. Mayor McCallon added that the goal of Kore Infrastructure is to use its technology to generate hydrogen out of waste to fuel hydrogen fuel cell cars.

Executive Officer Wayne Nastri reported on the ongoing investigations and air monitoring efforts of Ethylene Oxide (EtO) at two Sterigenics facilities in Vernon and Ontario, and Parter Medical Products in Carson. Staff has continued to conduct air sampling, take enforcement actions, and work with local communities and U.S. EPA. Staff has also initiated rulemaking for proposed amendments to Rule 1405 - Control of Ethylene Oxide and Chlorofluorocarbon Emissions from Sterilization or Fumigation Processes, to address ethylene oxide emissions from sterilization operations. The first working group meeting is scheduled for August 17, 2022.

In response to Chair Benoit's inquiry about which facilities are being investigated for emissions of EtO, Mr. Nastri responded that all facilities within the South Coast AQMD's jurisdiction with a focus on large facilities. He assured the Board that monitoring efforts for EtO emissions and other programs are going at full capacity but staffing resources are limited, noting that CARB is providing assistance.

Mayor Cacciotti asked for a status update on odor complaints for the Hyperion Water Reclamation Plant in Playa Del Rey.

Mr. Nastri commented on further actions staff has taken to address the thousands of complaints received regarding ongoing odor issues at the Hyperion Water Reclamation Plant. He added that more Notices of Violations had recently been issued and a second petition for an Order for Abatement filed with the South Coast AQMD Hearing Board, noting that staff is trying to accelerate the deployment of fenceline monitoring to collect data from the facility and requesting that Hyperion hire a third-party consultant to assess the plant's operations.

Board Member Kracov acknowledged the importance of investigating EtO emissions and commended staff for their enforcement and monitoring efforts to address the elevated levels of EtO at Sterigenics and Parter. He expressed appreciation to staff for providing monitoring data for the three facilities on South Coast AQMD's website to the public for transparency.

Supervisor Perez reported that he is serving as co-chair of the Coalition for Clean Air's California Clean Air Day Inland Empire Regional Working Group. He announced that Clean Air Day is scheduled for October 5 this year, and encouraged anyone wanting more information to visit the Coalition for Clean Air's website.

(The following Consent and Board Calendar was taken out of order)

CONSENT AND BOARD CALENDAR

1. Comply with AB 361 Requirements to Allow South Coast AQMD Board and South Coast AQMD Brown Act Committees to Continue to Meet Remotely

2. Approve Minutes of June 3, 2022 Board Meeting

3. Set Public Hearings September 2, 2022 to Consider Adoption of and/or Amendments to South Coast AQMD Rules and Regulations

   A. Determine That Proposed Amended Rule 218.2 - Continuous Emission Monitoring System: General Provisions; and Proposed Amended Rule 218.3 - Continuous Emission Monitoring System: Performance Specifications, Are Exempt from CEQA; and Amend Rule 218.2 and Rule 218.3

   B. Determine That Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen, Is Exempt from CEQA; and Amend Rule 429

Items 4 through 7 -- Budget/Fiscal Impact

4. Revise Financial Incentive Program to Reduce Emissions from Hexavalent Chromium Facilities, Issue Solicitations, and Authorize Executive Officer to Execute Contracts

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

6. Authorize Executive Officer to Initiate a Contract for Expert Technical Consulting Services with Zorik Pirveysian

7. Approve Appropriation of Funds to Re-Open Contract and Approve Fund Transfer for Miscellaneous and Direct Expenditures Costs in FY 2022-23 as Approved by MSRC

Item 8 – Staff Presentation/Board Discussion/Receive and File

8. 2022 Air Quality Management Plan Overview (Presentation in lieu of Board Letter)

Items 9 through 15 – Information Only/Receive and File

9. Legislative, Public Affairs and Media Report

10. Hearing Board Report

11. Civil Filings and Civil Penalties Report

12. Lead Agency Projects and Environmental Documents Received

13. Rule and Control Measure Forecast

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

15. Audit Reports of AB 2766 Fee Revenue Recipients for Fiscal Years Ending June 30, 2018 and 2019

Items 16 through 21 -- Reports for Committees and CARB

16. Administrative Committee

17. Legislative Committee

18. Mobile Source Committee

19. Stationary Source Committee

20. Mobile Source Air Pollution Reduction Review Committee

21. California Air Resources Board Monthly Report

22. Items Deferred from Consent Calendar

Agenda Item Nos. 8 and 17 were pulled.

Public comment was taken for Agenda Item Nos. 1-7, 9-16, and 18-21

Agenda Item No. 4

Jerry Desmond, Metal Finishing Association of Southern California, expressed appreciation for efforts to provide financial assistance for metal finishing facilities to convert their operations to non-hexavalent chromium alternatives. However, he expressed concerns that many of their customers are not willing to accept trichrome plating for their products and will take their business to other states and countries that do not have a comparable level of emission requirements and other environmental protections. He also expressed concerns with the financial incentive program's eligibility requirements, funding limitations, and reimbursement provisions; and consequences to the industry that could lead facilities to shut down or move out of state if CARB's proposed update to the statewide Airborne Toxic Control Measure passes. For additional details, please refer to the Webcast beginning at 22:49.

MOVED BY KRACOV, SECONDED BY CACCIOTTI, TO APPROVE AGENDA ITEMS 1 THROUGH 7; 9 THROUGH 16; AND 18 THROUGH 21 AS RECOMMENDED, AND ADOPT RESOLUTION NO. 22-26, RECOGNIZING THE PROCLAMATION OF A STATE OF EMERGENCY BY GOVENOR NEWSOM ON MARCH 4, 2020 AND THAT THE COUNTY OF LOS ANGELES CONTINUES TO RECOMMEND MEASURES TO PROMOTE SOCIAL DISTANCING; AND AUTHORIZING FULLY OR PARTIALLY REMOTE TELECONFERENCE MEETINGS OF THE GOVERNING BOARD OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, AND SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT COMMITTEES SUBJECT TO THE BROWN ACT, FOR THE PERIOD AUGUST 5, 2022 THROUGH SEPTEMBER 4, 2022 PURSUANT TO PROVISIONS OF THE BROWN ACT; AND RECEIVE AND FILE THE ADMINISTRATIVE, MOBILE SOURCE, STATIONARY SOURCE AND MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE AND CARB REPORTS. THE MOTION CARRIED BY THE FOLLOWING VOTE:

AYES: Benoit, Cacciotti, Delgado, Do, Kracov, Kuehl, McCallon, Padilla-Campos, Perez, Raman, Richardson, Rodriguez, and Rutherford

NOES: None

ABSENT: None

Items Pulled for Staff Presentation/Comment/Discussion

8. 2022 Air Quality Management Plan Overview

Dr. Sarah Rees, Deputy Executive Officer/Planning, Rule Development and Implementation, gave the staff presentation.

In response to Vice Chair Delgado's question about whether the public would be given an additional opportunity to provide feedback, Dr. Rees stated that the revised draft AQMP is scheduled for release in late summer for a 45-day public review and comment period.

Mayor Cacciotti inquired about grid reliability and the growth in electricity production needed to support the rapid transition to zero emissions technology. Dr. Rees responded that a transition is occurring, and she is raising the issue to make sure that the appropriate entities are planning for that future. For additional details, please refer to the Webcast beginning at 45:10.

Mayor McCallon expressed appreciation to staff for following his recommendation and preparing the policy briefing papers, which have been very helpful in understanding key issues.

Supervisor Kuehl, as Vice Chair of the Clean Power Alliance (CPA), expressed concerns about the additional burden on the grid if we are moving to electrification. She highlighted the use of microgrids derived from renewable sources to support the increase in zero emission sources. She asked whether existing gas infrastructure can be repurposed to deliver clean fuels. Staff highlighted innovative efforts and projects underway in the hydrogen space that includes using existing gas pipeline networks to transport and deliver hydrogen or carry a blend of hydrogen and natural gas. For additional details, please refer to the Webcast beginning at 47:03.

Supervisor Kuehl questioned whether the slight increase in the cost-effectiveness threshold for BARCT rulemakings, from $50,000 to $59,000 per ton of NOx emissions, is too low. She recommended that the threshold for stationary sources be revisited. Dr. Rees stated that the increase reflects the annual adjustment for inflation. She added that staff is seeking public input on both the cost effectiveness thresholds and the process for considering what to do when specific measures exceed cost effectiveness. For additional details, please refer to the Webcast beginning at 54:09.

Board Member Padilla-Campos asked whether “black box” measures have ever resulted in measurable achieved emission reductions. Dr. Rees explained that ozone levels have reduced dramatically in the Basin. The challenges of reaching attainment requires reliance on black box measures that are mostly subject to federal jurisdiction and deployment of advanced technologies that are not commercially available or feasible today. For additional details, please refer to the Webcast beginning at 59:05.

Board Member Padilla-Campos asked if there is health impact associated with not achieving or achieving the air quality standard. Dr. Rees explained that the socioeconomic analysis will assess the health benefits. Dr. Rees added that although the costs of implementing an AQMP is generally very expensive, the monetized benefits outweigh the costs of the plan. Mr. Nastri stated that the ozone standard is a health-

based standard, so achieving the standard will improve public health. For additional details, please refer to the Webcast beginning at 1:01:06.

Council Member Raman thanked staff for collecting and sharing public comments that have been received and emphasized the importance for everyone following this process to see the feedback. She asked for clarification on how the $59,000 cost effectiveness threshold per ton of NOx was developed. Dr. Rees explained that the average cost of control technologies was originally used as the basis and over time the threshold was adjusted to account for normal inflation. She stated that the threshold is not an absolute cap. For additional details, please refer to the Webcast beginning at 1:01:06.

Council Member Raman asked about the stringency of the building control measures in the Draft 2022 AQMP compared to CARB and the Bay Area Air Quality Management District. Dr. Rees responded that staff will be taking a closer look at CARB's most recent proposal. For additional details, please refer to the Webcast beginning at 1:06:07.

Mr. Nastri highlighted that the electrical infrastructure that needs to support these measures is about 7.5 Gigawatts per year through 2045, which is significantly lower than the state electrical capacity. The 2022 AQMP is based on a reasonable approach that recognizes the challenges of increasing the electrical infrastructure. For additional details, please refer to the Webcast beginning at 1:07:38.

Chair Benoit commented that doubling last year's growth in electrical capacity would provide about 3 to 4 Gigawatts, so it is questionable if the state can really achieve the needed 7 Gigawatts each year. The state has a huge hurdle to increase electrical capacity and a more reasonable approach for the 2022 AQMP makes sense. He added that it is important to push where we can, but cautioned that if we push too hard and the grid starts failing, then neighborhoods are impacted because there are electrical shortages. This could in turn affect efforts for promoting electrification. For additional details, please refer to the Webcast beginning at 1:09:40.

Mayor Rodriguez echoed Chair Benoit's comments and further highlighted that SCAG is forecasting an increase of 400,000 to 1.3 million housing units over the next eight years in our region. He commented that this further highlights the challenges of the electrical capacity needs and the importance of realistic expectations. For additional details, please refer to the Webcast beginning at 1:13:43.

Mayor McCallon expressed concerns about the potential for the residential building control measures to disproportionately impact low-income and elderly communities that live in older homes. He emphasized the need to mitigate this impact.

The public hearing was opened, and the following individuals addressed the Board on Agenda Item No. 8.

Whitney Amaya, East Yard Communities for Environmental Justice (EYCEJ) and AB 617 Wilmington, Carson, West Long Beach Community Steering Committee (CSC) member
Jan Victor Andasan, EYCEJ
Angie Balderas, AB 617 San Bernardino, Muscoy CSC member and Inland Empire resident
Janet Bernabe, Center for Community Action and Environmental Justice (CCAEJ) and Perris resident
Joaquin Castillejos, CCAEJ and Bloomington resident
Fernando Gaytan, Earthjustice
Theral Golden, a member of the public
Ana Gonzalez, CCAEJ
Maria Carmen Gonzalez, San Bernardino County resident
Malcolm Johnson, Lakewood resident
Yassi Kavezade, Sierra Club
Alondra Mateo, People's Collective for Environmental Justice
Marven Norman, CCAEJ and San Bernardino resident
Elizabeth Sena, CCAEJ and Fontana resident
Brenda Soto, People's Collective for Environmental Justice
Dave Shukla, Long Beach Alliance for Clean Energy
Gabriela Mendez, CCAEJ
Mandeera Wijetunga, Pacific Environment and Los Angeles resident
Kathleen Woodfield, San Pedro Peninsula Homeowners Coalition
Shane Ysais, CCAEJ

These commenters provided testimony on the following issues:

- Urgency to address health impacts from unhealthy air quality levels in the region that disproportionately affects frontline communities;
- Need to develop a strong AQMP that commits to clear emission reductions associated with the control measures being proposed;
- Establishing a clear path that focuses and promotes zero emission technologies;
- Eliminate subsidies and incentives to fund combustion technologies;
- Prioritize rulemaking and commit to target dates on the rulemaking schedule without delaying timelines;
- Pursue indirect source rules (ISRs) for the Ports and Railyards;
- Address impacts from growth of new warehouses;
- Expressed concerns with use of black box measures and cost-effectiveness threshold caps.

For additional details, please refer to the Webcast beginning at 1:15:47.

Rita Loof, RadTech, requested the inclusion of language in the AQMP as it appeared in the 2003 AQMP that provides a detailed description of UV/EB/LED technology, and removal of prescriptive permitting and recordkeeping requirements via permit exemptions to help incentivize the use of clean, low-VOC materials, which would achieve the incentive goals under Control Measure FLX-02.

Kim Orbe, Sierra Club, expressed concern for the significant NOx emissions from residential combustion sources and stressed the need for a stronger commitment to zero emissions technologies and control measures with measurable targets that will help reach attainment goals.

Chris Chavez, Coalition for Clean Air and Wilmington, Carson, West Long Beach AB 617 CSC member, expressed concerns with the reliance on 'black box' measures, which have not resulted in clean air, and an over-reliance on incentives that are subject to uncertain funding streams. He emphasized the need for South Coast AQMD to prioritize the development of ISRs for the Ports and Railyards, the turnover of pre-2010 trucks, and equity in its strategy to reduce air pollution to address long-standing environmental justice concerns in frontline communities. He also emphasized the need to ensure that defined measures achieve and exceed projected emission reductions and that incentives and investments are used to help vulnerable communities transition to cleaner technologies.

Sean Edgar, Clean Fleets, commented on the importance of natural gas vehicles as an effective and immediate option that achieves near-term emission reductions. towards the transition to zero emission. For additional details, please refer to the Webcast beginning at 1:52:31.

Mark Abramowitz, Community Environmental Services, commended staff for the robust public involvement and for preparing the policy briefing papers. He added that the cost-effectiveness should account for additional measures also needed to meet state standards. There are issues with new source review and BACT which also need to be addressed. For additional details, please refer to the Webcast beginning at 2:01:56.

Jennifer Cardenas, Inland Empire resident, described the effects of air pollution on children's health and quality of life, and emphasized the need to hold businesses accountable.

Taylor Thomas, EYCEJ, expressed frustration with comments that assert zero emissions technology is not feasible and will worsen the grid capacity.

Curt Coleman, Southern California Air Quality Alliance, emphasized the need to ensure that the grid capacity and transmission capability is there in time for wide-scale electrification. He also emphasized the need to recognize the resource and feasibility constraints that will be faced to implement the 2022 AQMP, noting that zero emission technologies are going to have a lag time because they are not available or scalable enough to fill all of the needs whereas near-zero emissions technology could provide emission reductions in the short term.

Bill Quinn, CCEEB, expressed concern that there is no plan to ensure infrastructure readiness and emphasized the need to collaborate with CARB, CEC and the CPUC on this issue.

Written Comments Submitted (See Attachment 1 to the minutes)

Chair Benoit asked about potential consequences if the black box measures were eliminated and noted the importance of addressing concerns about this issue. Mr. Nastri indicated that staff would put together an analysis to provide a perspective of the measures, costs, and feasibility that only focuses on a zero-emission approach for committee review and then report to the Board in October.

Dr. Rees noted that the Plan relies on CARB's Mobile Source Strategy, federal sources for which South Coast AQMD lacks authority, and black box measures to demonstrate attainment of the standard by 2037. Submitting a plan without the black box is one that could not be approved by U.S. EPA. For additional details, please refer to the Webcast beginning at 2:45:18.

Board Member Kracov, emphasized the need to finalize the AQMP and implement the proposed rules and regulations. He explained that it is important to hold ourselves accountable for emission reductions, and then address the additional emission reductions that are associated with the black box.

(Supervisor Perez and Vice Mayor Richardson left the meeting)

MOVED BY CACCIOTTI, SECONDED BY RUTHERFORD, TO RECEIVE AND FILE AGENDA ITEM NO. 8. THE MOTION CARRIED BY THE FOLLOWING VOTE:

AYES: Benoit, Cacciotti, Delgado, Do, Kracov, Kuehl, McCallon, Padilla-Campos, Raman, Rodriguez, and Rutherford

NOES: None

ABSENT: Perez and Richardson

Chair Benoit announced that Agenda Item No. 7 – Approve Appropriation of Funds to Re-Open Contract and Approve Fund Transfer for Miscellaneous and Direct Expenditures Costs in FY 2022-23 as Approved by MSRC, was being reopened for a disclosure to be read and a motion to vote.

General Counsel Bayron Gilchrist disclosed that Supervisor Kuehl does not have a financial interest in Agenda Item No. 7, but is required to identify for the record that she is a board member of the Los Angeles County Metropolitan Transportation Authority, which is involved in this item.

MOVED BY CACCIOTTI, SECONDED BY BENOIT, TO APPROVE AGENDA ITEM NO. 7 AS RECOMMENDED. THE MOTION CARRIED BY THE FOLLOWING VOTE:

AYES: Benoit, Cacciotti, Delgado, Do, Kracov, Kuehl, McCallon, Padilla-Campos, Raman, Rodriguez, and Rutherford

NOES: None

ABSENT: Perez and Richardson

17. Legislative Committee

Derrick Alatorre, Deputy Executive Officer/Legislative, Public Affairs & Media, reported that subsequent to the June 10, 2022 Legislative Committee's recommendations, AB 1944 (Lee) died in committee.

Supervisor Rutherford opposed the Legislative Committee's recommendation to "Work with Author" on AB 2766 (Maienschein) and noted that she would be a no vote on the recommendation.

MOVED BY CACCIOTTI SECONDED BY KUEHL TO RECEIVE AND FILE AGENDA ITEM NO. 17 AND APPROVE THE LEGISLATIVE COMMITTEE'S RECOMMENDATION ON LEGISLATION, AS SET FORTH BELOW. THE MOTION CARRIED BY THE FOLLOWING VOTE:

AYES: Benoit, Cacciotti, Delgado, Do, Kracov, Kuehl, McCallon, Padilla-Campos, Raman, Rodriguez, and Rutherford (except on AB 2766)

NOES: Rutherford (on recommendation for AB 2766)

ABSENT: Perez and Richardson

LEGISLATIVE COMMITTEE'S RECOMMENDATION

Agenda Item	**Recommendation**
AB 1944 (Lee) Local government: open and public meetings	Support with Amendments
AB 2449 (Rubio) Open Meetings: local agencies: teleconferences	Support with Amendments
AB 2766 (Maienschein) Unfair Competition Law: enforcement powers: investigatory subpoena	Work with Author

PUBLIC HEARINGS

23. Receive and File 2021 Annual Report on AB 2588 Program

The staff presentation was waived on this item.

The public hearing was opened; there being no requests for public testimony, the public hearing was closed.

MOVED BY CACCIOTTI, SECONDED BY BENOIT TO APPROVE AGENDA ITEM NO. 23 AS RECOMMENDED TO RECEIVE AND FILE THE 2021 ANNUAL REPORT ON THE AB 2588 PROGRAM. THE MOTION CARRIED BY THE FOLLOWING VOTE:

AYES: Benoit, Cacciotti, Delgado, Do, Kracov, Kuehl, McCallon, Padilla-Campos, Raman, Rodriguez, and Rutherford

NOES: None

ABSENT: Perez and Richardson

OTHER BUSINESS

24. Determine That Rule 2004 Continue Without Change and Report to CARB and U.S. EPA Results of Evaluation of Compliance and Enforcement Aspects of RECLAIM Program

The staff presentation was waived on this item.

Public comment was opened. There were no requests for public comment.

MOVED BY CACCIOTTI, SECONDED BY DELGADO TO APPROVE AGENDA ITEM NO. 24 AS RECOMMENDED AND ADOPT RESOLUTION 22-19 APPROVING STAFF'S RECOMMENDATION TO DETERMINE THAT PARAGRAPHS (d)(1) THROUGH (d)(4) OF RULE 2004 CONTINUE WITHOUT CHANGE, AS REPORTED IN THE EVALUATION AND REVIEW OF THE COMPLIANCE AND ENFORCEMENT ASPECTS OF THE RECLAIM PROGRAM AND DIRECTING THE EXECUTIVE OFFICER TO SUBMIT TO CARB AND U.S. EPA THE EVALUATION AND REVIEW OF THE COMPLIANCE AND ENFORCEMENT ASPECTS OF THE RECLAIM PROGRAM, INCLUDING THE DETERMINATION THAT PARAGRAPHS(d)(1) THROUGH (d)(4) OF RULE 2004 CONTINUE WITHOUT CHANGE. THE MOTION CARRIED BY THE FOLLOWING VOTE:

AYES: Benoit, Cacciotti, Delgado, Do, Kracov, Kuehl, McCallon, Padilla-Campos, Raman, Rodriguez, and Rutherford

NOES: None

ABSENT: Perez and Richardson

CLOSED SESSION

The Board recessed to closed session at 12:05 p.m., pursuant to Government Code sections:

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

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

  Natural Resources Defense Council, et al. v. City of Los Angeles, et al., San Diego Superior Court, Case No. 37-2021-00023385-CU-TT-CTL (China Shipping Case) (transferred from Los Angeles Superior Court, Case No. 20STCP02985).

CONFERENCE WITH LEGAL COUNSEL – INITIATING LITIGATION

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

CONFERENCE WITH LABOR NEGOTIATORS

- 54957.6 to confer with labor negotiators:

  Agency Designated Representative: A. John Olvera, Deputy Executive Officer – Administrative & Human Resources;

  Employee Organization(s): Teamsters Local 911, and South Coast AQMD Professional Employees Association; and

  Unrepresented Employees: Designated Deputies and Management and Confidential employees.

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

ADJOURNMENT

There being no further business, the meeting was adjourned by Mr. Gilchrist at 12:50 p.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on August 5, 2022.

Respectfully Submitted,

Faye Thomas
Clerk of the Boards

Date Minutes Approved: _____

_____
Ben J. Benoit, Chair

Attachment 1: Written Comments for Agenda Item No. 8

ACRONYMS

AQMP = Air Quality Management Plan
BACT = Best Available Control Technology
CARB = California Air Resources Board
CEC = California Energy Commission
CEQA = California Environmental Quality Act
CPUC = California Public Utilities Commission
FY = Fiscal Year
NOx = Oxides of Nitrogen
RECLAIM = Regional Clean Air Incentives Market
UV/EB/LED = Ultraviolet/Electron Beam//Light Emitting Diode

ATTACHMENT 1 TO THE MINUTES – AUGUST 5, 2022 GOVERNING BOARD MEETING: WRITTEN COMMENTS SUBMITTED FOR AGENDA ITEM NO. 8

- Bradford White Corporation (letter dated 6/21/22)

- Compilation of Written Comments Submitted by Yassi Kavezade from the following Sierra Club members:

Arlene Encell, Los Angeles
Dan Esposito, Manhattan Beach
Joan Bean, Yuciapa
Julie Bechtloff, Culver City
Jyh Lay, Newport Beach
Lurlie Edgecomb, Long Beach
Melina Paris, Rancho Palos Verdes
Nhu Tran, Redondo Beach
Penelope Moffet, Culver City
Penny Good, San Pedro
S Barryte, Rancho Palos Verdes
Summer Brown, Los Angeles
Aaron Jamieson, Midway City
Alan Gonzalez, Long Beach
Alan Solomon, Palm Desert
Alexander Dunaev, Marina Del Rey
Alexandra Lewandowski, Orange
Ali Hart, Los Angeles
Alice Hunt, Los Angeles
Amber Cohn, Los Angeles
Anne Earhart, Laguna Beach
Anne Zerrien-Lee, Los Angeles
Anthony Avila, Whittier
Anthony Gonzalez, Brea
Antoinette Nolan, Harbor City
Antonia Chianis, Bill Jay
April Kelley, Los Angeles
Avron Daniller, Tarzana
Barbara Bellano, Pasadena
Barbara Epstein, Redondo Beach
Barbara Ishida, Altadena
Barbara Mesney, Los Angeles
Beth Stein, Los Angeles
Birgitta Martinez, Los Angeles
Brenda Rodriguez, Mission Hills
Brooke Bergman, Sherman Oaks
Kathy Bilicke, Los Angeles
Kathy Monteleone, Kathy
Kay Ward, Santa Monica
Keenan Sheedy, Los Angeles
Candace Rocha, Los Angeles
Carol Eyster, Redlands
Carol Lam, Sacramento
Carol Lewis, Santa Clarita
Carolyn Leonard, San Bernardino
Catherine Des, Lauriers Los Angeles
Charlotte Gray, Hemet
Chris Geukens, Northridge
Chris Withrow, Los Angeles
Conni VanBilliard, Mission Viejo
Cora Luce, Sherman Oaks
Craig Galloway, Santa Monica
Dania De, Ramon Jurupa Valley
Danielle Watkins, Los Angeles
Darrell Trombley, Palm Springs
David Garfinkle, Tarzana
David Shreve, El Segundo
Debra Noble, Altadena
Diana Barbieri, San Pedro
Diane Loughbom, Manhattan Beach
Diane Shaw, Canyon Country
Donald Sparks, Northridge
Dr.Kenneth Daponte, Rancho Palos Verdes
Edward Costello, Santa Monica
Elizabeth Coombs, Culver City
Eric Ericson, Beverly Hills
Erin Suyehara, Torrance
Eugene Majerowicz, View Park
Felicia Tacto, Carson
Fernando Zavala, Costa Mesa
Flora Rosaa, Los Angeles
Flora Rosaa, Los Angeles
Florence Hoffert, El Segundo
Fred Schloessinger, Fred, CA
Gaille Heidemann, Los Angeles
Neal Steiner, Los Angeles
Nosferatu Baines, Yorba Linda
Pamela McBride, Topanga
Garry Star, Thousand Oaks
Genette Foster, Pasadena
Grant Smith, Westlake Village
Heather Adams, Los Angeles
Heidi Bean, Corona
Henry Klein, Van Nuys
Henry Rosenfeld, Riverside
Hilary Simonetti, Hilary
Holly Hall, Temecula
Holly Mcgee, Van Nuys
Isabel Freeman, Topanga
James Albert, San Bernardino
James Dwyer, Claremont
Jana Moreno, Brea
Jane Nachazel-Ruck, Los Angeles
Jeannine McGhee, Costa Mesa
Jessica Craven, Jessica
Joan Murray, Los Angeles
Joan Odwyer, Los Angeles
Joan Peter, Newhall
Joe Frleta, Laguna Niguel
John Crahan, Los Angeles
John Donlin, La Canada Flintridge
John Kerby, Fontana
John Strzelewicz, Riverside
Jollee Saphier, Woodland Hills
Jon Amsden, Santa Monica
Joseph McDonough, Hemet
Joyce Foster, Los Angeles
Judith Baker, Sherman Oaks
Julie Ries, Topanga
Kara Morgan, Los Angeles
Karen O'Rourke, Canoga Park
Karl Richter, Santa Monica
Kat Burgess, Santa Monica
Kathleen Herring, La Quinta
Susan Johnson, Manhattan Beach
Susan St, Louis Rancho Mirage
Susie Tortell, Santa Monica
Tamara Mccready, Simi Valley

Kenneth Miller, Topanga
Kent Morris, Fullerton
Kevin McKelvie, Palm Springs
Kevin O'Brien, Laguna Beach
Kirsten Green, Laguna Niguel
Kris Cordova, Loma Linda
Larry Taylor, Alta Loma
Lauren Libas, Orange
Laurie Rittenberg, Studio City
Linda Malik, Los Angeles
Linda Oeth, Linda, CA
Lindsey Hirway, Los Angeles
Liz Amsden, Los Angeles
Lori Kegler, San Pedro
Louise Bianco, Tarzana
Lyda Eddington, Los Angeles
Malcolm Groome, Topanga
Manel Saddique, Glendale
Mark Glasser, Los Angeles
Mark Reback, Los Angeles
Mark Rhomberg, Pacific Palisades
Mark Takeuchi, Claremont
Marta Quiroba, Santa Monica
Marvin Cruse, Costa Mesa
Mary Franz, Laguna Beach
Maryfrances Careccia, Los Angeles
Matt Mailander, Palm Desert
Matt Powell, Woodland Hills
Maureen Mcdonald, Desert Hot Springs
Maurice Edwards, Sherman Oaks
Melissa Atkinson, Los Angeles
Melissa Waters, Laguna Niguel
Michael Cardoza, Los Angeles
Michelle R, Riverside
Midori Sanchez, Long Beach
Mika Stonehawk, Tustin
Mike Breidegam, Canoga Park
Mike Honda, Santa Ana
N Daye, Los Angeles
Nancy Johnston, Torrance
Natalie Carroll, Van Nuys
Patricia Grogan, Glendale
Penny Elia, Laguna Beach
Ralph Smith, Los Angeles
Randy Baker, Placentia
Raul Mejia, Anaheim
Ray Plasse, West Hills
Renate Dolin, Malibu
Renee Klein, Marina Del Rey
Richard Langstaff, La Canada
Richard Toyon, La Crescenta
Richard Wightman, Arcadia
Rob Doucette, Playa Del Rey
Robert Blackey, Claremont
Robert Clark, West Covina
Robert Kolesnik, Upland
Robert Pann, Los Angeles
Robert Paquette, Pasadena
Robert Reed, Laguna Beach
Robert Seltzer, Malibu
Romona Williams, Carson
Ross Heckmann, Arcadia
Ruth Judkins, Altadena
Ryan Davis, Burbank
S. Swink, Granada Hills
Sadie Johnson, Long Beach
Sally Windsor, Palos Verdes Estates
Sam Butler, Los Angeles
Sara Ross, Los Angeles
Scott Jung, South Pasadena
Sheila Shane, Huntington Beach
Sherry Faust, Rancho Palos Verdes
Sherry Vatter, Los Angeles
Sofia Okolowicz, Temecula
Stella Ursua, Los Angeles
Steph Hart, Costa Mesa
Steve Hanlon, Los Angeles
Steve Jiannino, Moreno Valley
Steve Morgan, El Segundo
Steven Korson, Riverside
Steven Stewart, Yorba Linda
Terri Brown, Los Angeles
Tom Cantarine, Chatsworth
Trevor Anderson, Santa Monica
Tristan Dunker, Garden Grove
Vic Bostock, Altadena
Vicente Perez Martinez Los Angeles
Virginia Turner, Woodland Hills
Wanda Frank, Corona Del Mar
Wendy Brunell, Winnetka
Wendy Lohman, Los Angeles
Wendy Wallace, Redlands
William Perkins, Pacific Palisades
Mary Glazer Los, Angeles

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 3

PROPOSAL: Appropriate Funds from the Undesignated (Unassigned) Fund Balance for Engineering and Permitting Assistance

SYNOPSIS: In order to reduce the pending permit application inventory consistent with the agency's Goals and Objectives, assistance from qualified consultants and retirees are temporarily needed on an as needed basis. A total of $400,000 will be appropriated from the General Fund Undesignated (Unassigned) Fund Balance into Engineering and Permitting's FY 2022-23 Budget to cover consultant contracts and temporary staffing costs.

COMMITTEE: Administrative, August 12, 2022; Recommended for Approval

RECOMMENDED ACTION:
Appropriate a total of $400,000 from the General Fund Undesignated (Unassigned) Fund Balance to Engineering and Permitting's FY 2022-23 Budget, Services & Supplies Major Object to provide funding for assistance from qualified consultants and Engineering and Permitting retirees to reduce the pending permit application inventory.

Wayne Nastri
Executive Officer

SN:JA:JW

Background
In June 2016, South Coast AQMD embarked on an aggressive effort to expeditiously reduce its pending permit application inventory, with a goal of reducing the number of pending permit applications by 50 percent to a working inventory of 3,674 or less pending permit applications. This goal was achieved in 2018 and has been maintained for the past four years. However, due to a hiring freeze in 2020 because of the COVID-19 pandemic as well as a large number of retirements in the Engineering and Permitting division, the permit application inventory has recently exceeded the 50 percent threshold. A number of measures are being implemented to meet the permit application inventory goal as soon as possible.

Positions in Engineering and Permitting, through new hire and promotional recruitments, are being filled in an expeditious manner. While addressing the need to fill vacancies at all levels, it has also resulted in a majority of staff in permit processing positions having two years or less of experience in their current position. Retirees have the skills and knowledge to provide training and guidance to staff who are new to their positions to help increase the efficiency of permit processing.

In addition to addressing staff resources, there is a need for consultant services to provide permit review functions as part of the effort to resolve the permit application inventory. Certain permit analysis, such as compliance with CEQA and air dispersion modeling, can be accomplished efficiently by an outside contractor. Using consulting firms enables permitting staff to focus their review on critical and more complicated aspects of permit applications.

A combination of strategies is being used to reduce the pending permit application inventory and to ensure the Engineering and Permitting division and the agency meets its annual Goals and Objectives.

Proposal

Staff released RFP# P2022-14 on June 3, 2022 to seek consultant assistance, on an as needed basis. Three proposals were received and two were deemed to meet the minimum requirements of the RFP. Therefore, Castle Environmental Consulting and William Walters Air Quality Consulting were selected as qualified consultants. Both have experience providing analysis for permits relating to air quality regulations. The total amount for both contracts is not to exceed $100,000.

In response to outreach efforts, several retirees from Engineering and Permitting have expressed interest in returning to assist in permit application processing and review. In accordance with requirements and restrictions from the SBCERA retirement system, retirees will be utilized for training, evaluation, and advisory purposes to complement the work of existing Engineering and Permitting staff. It is anticipated that the retiree assignments will not extend beyond this fiscal year. Costs associated with engaging retirees for temporary services is estimated not to exceed $300,000 for retirees, depending on scheduling.

To implement measures to meet the permit application inventory goals, staff is requesting that a total of $400,000 be appropriated from the Undesignated Fund Balance to Engineering and Permitting's FY 2022-23 Budget, Services & Supplies Major Object for the temporary use of consultants and retirees for FY 2022-23.

Resource Impacts

Sufficient funding is available in the General Fund Undesignated (Unassigned) Fund Balance.

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 4

PROPOSAL: Recognize Revenue and Appropriate Funds for U.S. EPA Pass Through Grants to Develop Low-Cost Sensor Device for Measuring VOCs and Reference Method for Validating Open-Path Remote Sensing Systems

SYNOPSIS: Recently, U.S. EPA awarded multiple nationwide competitive Science to Achieve Results research grants. South Coast AQMD staff will be a co-investigator for two of these grants, one with Virginia Polytechnic Institute and State University (Virginia Tech) to develop a low-cost sensor device for time-resolved measurements of VOCs, and one with the University of California, Los Angeles (UCLA) to develop a reference method for validating the performance of open-path remote sensing systems for air toxic measurements. These actions are to recognize revenue up to $199,949 from Virginia Tech and up to $208,187 from UCLA into the General Fund, and appropriate up to $46,120 and $41,320, respectively from the two universities, in the Monitoring and Analysis FY 2022-23 and/or, FY 2023-24 and/or, FY 2024-25 Budgets to support efforts on these projects.

COMMITTEE: Administrative, August 12, 2022; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize revenue up to $199,949 from Virginia Polytechnic Institute and State University (Virginia Tech) to the General Fund, upon receipt, and appropriate up to $46,120 from the General Fund Unassigned (Undesignated) Fund Balance in the Monitoring and Analysis FY 2022-23 and/or, FY 2023-24 and/or, FY 2024-25 Budgets (Org 43), Services and Supplies Major Object, as shown in Table 1 (Salaries & Employee Benefits of $153,829 are already included in the budget); and
2. Recognize revenue up to $208,187 from University of California, Los Angeles (UCLA) to the General Fund, upon receipt, and appropriate up to $41,320 from the General Fund Unassigned (Undesignated) Fund Balance in the Monitoring and Analysis FY 2022-23 and/or, FY 2023-24 and/or, FY 2024-25 Budgets (Org 43),

Services and Supplies Major Object, as shown in Table 2 (Salaries and Employee Benefits of $166,867 are already included in the Budget).

Wayne Nastri
Executive Officer

JCL:AP:VP:OP:ld:kdl

Background

On March 25, 2021, U.S. EPA as part of its Science to Achieve Results (STAR) program, solicited applications from research institutions, governmental agencies and other organizations throughout the nation proposing research to advance "Measurement and Monitoring Methods for Air Toxics and Contaminants of Emerging Concern in the Atmosphere." South Coast AQMD partnered with Virginia Tech and UCLA to submit two separate grant proposals, one to develop a low-cost sensing device for time-resolved measurements of VOCs and another to develop a reference method for validating measurements of hazardous air pollutants (HAPs) from open-path remote sensing systems. Both proposals were selected for funding and, as co-principal investigator, South Coast AQMD staff will have a major role in the implementation of these two projects which will contribute to developing new tools that can be used for improving VOCs and HAPs measurements from point and stationary sources such as oil and gas wells and refineries. These projects have the potential to enhance the way air quality agencies, industry and communities monitor VOCs and HAPs at the local, regional and national scale by providing guidance for appropriate operation and validation of these technologies.

Proposal

The first proposal is: Enabling Real-time, Low-cost Measurement of Hazardous Air Pollutants. The objective of this three-year project is to develop, characterize and validate a new low-cost sensor-based prototype for quantitative measurements of VOCs. South Coast AQMD staff will work with Dr. Gabriel Isaacman-VanWertz at Virginia Tech to develop a new sensor device that is sufficiently small and lightweight to be deployed as part of a dispersed network, and/or on mobile platforms for time-resolved measurements of total and individual VOCs including benzene. South Coast AQMD will evaluate the performance of this device by conducting rigorous laboratory testing as well as stationary and mobile co-location measurements. The resulting testing data will be used to explore the use of advanced analysis techniques to improve data quality and the prototype's ability to speciate between different VOCs. The testing of this device, the assessment of different approaches to data processing and the resulting analysis of the collected data will result in recommendations for citizen scientists, researchers and other individuals interested in using this new device for measuring VOCs in ambient air.

The second proposal is: Development of a Reference Method for Open-path Remote Sensing of Air Toxics. The goal of this three-year project is to develop a reference instrument and methodology for the operation, validation and quality assurance/quality control (QA/QC) of Open-Path Optical Remote Sensing (OP-ORS) instruments for monitoring VOCs and other HAPs such as the fenceline systems employed by refineries as part of South Coast AQMD's Rule 1180 program. South Coast AQMD staff will collaborate with Dr. Jochen Stutz at UCLA on the testing and validation of a reference OP-ORS instrument to be developed by UCLA for this project. South Coast AQMD staff will design and build a trace gas release system and in collaboration with UCLA, perform a validation of the reference OP-ORS instrument. South Coast AQMD staff will also contribute to the development of an OP-ORS validation protocol and a guidance document for best practices for the operation, QA/QC and validation of OP-ORS systems.

The documents and instrumentation developed during this project will provide regulatory agencies and industry with the necessary guidance to appropriately operate OP-ORS systems, and to assess the quality of the data they produce. Results from this study will promote improvements and standardized use of OP-ORS within the South Coast Air Basin and across the United States. Findings from this study will also provide OP-ORS manufacturers and users with valuable guidance for improving current systems and designing the next generation open-path technology.

Benefits to South Coast AQMD

The successful implementation of these two projects will provide South Coast AQMD with additional tools that will ultimately enhance our ability to detect VOCs and HAPs from multiple point and stationary sources, and for community-level, fenceline and other important applications.

Resource Impacts

Upon Board approval, sufficient funding will be available for these projects. U.S. EPA has authorized funding of $800,000 for the Virginia Tech project and $797,988 for the UCLA project, and South Coast AQMD will receive sub-awards of up to $199,949 and $208,187, respectively. There is no cost-share by South Coast AQMD or the project partners for either project.

Attachments

Table 1: Proposed Expenditures for EPA STAR Grant (Virginia Tech subcontract) for FY 2022-23 and/or, FY 2023-24 and/or, FY 2024-25

Table 2: Proposed Expenditures for EPA STAR Grant (UCLA subcontract) for FY 2022-23 and/or, FY 2023-24 and/or, FY 2024-25

Table 1
Proposed Expenditures for EPA STAR Grant (Virginia Tech subcontract)
for FY 2022-23 and/or, FY 2023-24 and/or, FY 2024-25

Description	Account Number	Program Code	Estimated total cost
Mileage and Travel	67700/67800		$7,420
Laboratory Supplies*	68050/77000		$30,000
Rents & Leases Equipment	67300		$8,700
Total Appropriations Services & Supplies and/or Capital Outlays Major Object			**$46,120**
Salaries and Benefits			$153,829
Total Grant Award for South Coast AQMD			**$199,949**

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

Table 2
Proposed Expenditures for EPA STAR Grant (UCLA subcontract)
for FY 2022-23 and/or, FY 2023-24 and/or, FY 2024-25

Description	Account Number	Program Code	Estimated total cost
Mileage and Travel	67700/67800		$5,200
Communications	67900		$3,120
Laboratory Supplies*	68050/77000		$12,000
Office Expenses*	68100/77000		$6,000
Small Tools, Instruments, Equipment*	68300/77000		$7,000
Miscellaneous Expense (meeting supplies and publications)	69700		$8,000
Total Appropriations Services & Supplies and/or Capital Outlays Major Object			**$41,320**
Salaries and Benefits			$166,867
Total Grant Award for South Coast AQMD			**$208,187**

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

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 5

PROPOSAL: Recognize Revenue, Appropriate Federal Funds, and Issue Solicitations and Purchase Orders for Air Monitoring Equipment

SYNOPSIS: South Coast AQMD is expected to receive grant funds up to $272,052 for the NATTS Program and $333,500 from the American Rescue Plan (ARP) from U.S. EPA. These actions are to recognize revenue and appropriate funds for the NATTS program and ARP grant and issue solicitations and purchase orders for air monitoring equipment.

COMMITTEE: Administrative, August 12, 2022; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize revenue up to $272,052 and appropriate funds up to $95,291 from the U.S. EPA for the NATTS FY 2022-23 Program, upon receipt, into the Monitoring and Analysis FY 2022-23 Budget as detailed in Attachment 1;
2. Recognize revenue up to $333,500 and appropriate funds from the U.S. EPA American Rescue Plan (ARP) grant, upon receipt, into the Monitoring and Analysis FY 2022-23 and/or FY 2023-24 Budget as detailed in Attachment 2; and
3. Authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue "Prior Bid, Last Price" or "Sole Source" purchase orders, or solicitation(s), as needed, and based on results of the solicitation process, issue purchase orders for items listed in Table 1.

Wayne Nastri
Executive Officer

JCL:RMB:ld:eq

Background

NATTS Program

There are currently 188 hazardous air pollutants (HAPs) or air toxics regulated under the Clean Air Act that are associated with a wide variety of adverse health effects including cancer and neurological effects. The NATTS Program was developed to fulfill the need for long-term national HAP monitoring data. In 2007, U.S. EPA expanded the

NATTS Program and awarded Section 103 funds to conduct monitoring for toxic air contaminants at two existing monitoring sites, Central Los Angeles and Rubidoux. The air toxics data serves as a continuum between past and future air toxic measurement programs, such as MATES, and allows for more accurate evaluation of toxic trends on a regional basis.

American Rescue Plan (ARP)
On July 7, 2021, U.S. EPA announced that it will make $50 million in ARP funding available to improve ambient air quality monitoring for communities across the United States. U.S. EPA prioritized using these funds to upgrade manual monitoring of PM2.5 to automated continuous monitoring, as this is expected to reduce the frequency of required field visits while allowing real time data to continue to be available to the public.

Proposal
NATTS Program (FY 2022-23)
U.S. EPA is expected to provide Section 103 Grant funding in an amount up to $272,052 to continue the NATTS Program for the period from July 1, 2022 to June 30, 2023. Revenue for this grant in the amount of $176,761 has already been included in the FY 2022-23 Budget. This action is to recognize, upon receipt, the remaining revenue up to $95,291 and appropriate up to $95,291 to the Monitoring and Analysis FY 2022-23 Budget, as set forth in Attachment 1. U.S. EPA concurs with staff's proposed allocation.

American Rescue Plan (FY 2022-23 and/or FY 2023-24)
U.S. EPA is expected to provide grant funding in an amount up to $333,500 from the ARP. This action is to recognize, upon receipt, revenue up to $333,500 and appropriate this revenue to the Monitoring and Analysis FY 2022-23 and/or FY 2023-24 Budget, and issue solicitations as set forth in Table 1 and Attachment 2. U.S. EPA concurs with staff's proposed allocation.

Proposed Purchase through Solicitation Process or 'Prior Bid, Last Price'
PM10 Continuous FEM Monitors
The U.S. EPA ARP grant award includes funding for the purchase of up to five continuous PM10 FEM monitors. The approximate cost for up to five PM10 continuous FEM monitors is $110,000 (see Table 1). The purchase will be made by "Prior Bid, Last Price" or through a solicitation process, as needed, followed by issuance of a purchase order(s).

Monitor Shelters
The U.S. EPA ARP Grant award includes funding for the purchase of up to three monitor shelters. The approximate cost for up to three monitor shelters is $21,000 (see Table 1). The purchase will be made by "Prior Bid, Last Price" or through a solicitation process, as needed, followed by issuance of a purchase order(s).

Proposed Purchases through Sole Source Purchase Order
*Met One PM2.5 Continuous FEM Monitor*s
The U.S. EPA ARP grant award includes funding for the purchase of up to nine Met One PM2.5 FEM monitors. The Met One PM2.5 FEM monitor is the only commercially available FEM monitor that would allow South Coast AQMD to satisfy the U.S. EPA collocation requirement, which specifies that new FEM monitors added to the network must use the same monitor as those that are already in operation within the network. The cost of the monitors will not exceed $202,500 (see Table 1).

Sole Source Justification
Sole Source Justification Section VIII.B.3 of the South Coast AQMD's Procurement Policy and Procedure identifies four major provisions under which a sole source award funded in whole or in part with federal funds, may be justified. Specifically, this request for sole source award is made under provision VIII.B.3.a. the item is available only from a single source. The Met One Inc. PM2.5 FEM Monitor is the only manufacturer of a real-time, continuous PM2.5 mass monitor that employs a unique "in-situ" sampling technique that would allow South Coast AQMD to satisfy U.S. EPA collocation requirements.

Resource Impacts
U.S. EPA Section 103 Grant funding will support the continuation of the NATTS monitoring program, including equipment, contracts and supplies necessary to meet the objectives of the NATTS Program.

U.S. EPA ARP Grant funding will support the purchase of equipment to meet the objectives of the ARP.

Table 1
FY 2022-23 Adopted Budget Capital Outlays Major Object

Description	Qty	Funding Source	Contracting Method	Estimated Amount
PM10 Continuous FEM Monitors (Up to 5)	Up to 5	ARP FY 2022-23 and/or FY 2023-24	'Prior Bid, Last Price' or Solicitation	$110,000
Monitor Shelters (Up to 3)	Up to 3	ARP FY 2022-23 and/or FY 2023-24	'Prior Bid, Last Price' or Solicitation	$21,000
Met One PM2.5 Continuous FEM Monitors (Up to 9)	Up to 9	ARP FY 2022-23 and/or FY 2023-24	Sole Source	$202,500
		Total		**$333,500**

Attachments

1. Proposed NATTS FY 2022-23 Grant Expenditures (FY 2022-23 Appropriations)
2. Proposed American Rescue Plan Grant Expenditures (FY 2022-23 and/or 2023-24 Appropriations)

Attachment 1
Proposed NATTS FY 2022-23 Grant Expenditures
(FY 2022-23 Appropriations)

Account Description	Account Number	Program Code	Estimated Expenditures
Services & Supplies Major Object:			
Professional and Specialized Services	67450	47468	$10,000
Travel	67800	47468	$6,000
Maintenance of Equipment	67600	47468	$18,291
Laboratory Supplies	68050	47468	$50,000
Office Expenses	68100	47468	$1,000
Small Tools, Instruments, Equipment	68300	47468	$10,000
Total Services & Supplies:			**$95,291**
Total Appropriations			**$95,291**

Note: Salaries, Benefits and Indirect Costs are included in the FY 2022-23 Budget.

Attachment 2
Proposed American Rescue Plan Grant Expenditures
(FY 2022-23 and/or 2023-24 Appropriations)

Account Description	Account Number	Program Code	Estimated Expenditures
Capital Outlays Major Object:			
PM10 Continuous FEM Monitors (up to 5)	77000	47241	$110,000
Monitor Shelters (up to 3)	77000	47241	$21,000
Met One PM2.5 Continuous FEM Monitors (up to 9)	77000	47241	$202,500
Total Capital Outlays:			**$333,500**
Total Appropriations			**$333,500**

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 6

PROPOSAL: Appropriate Funds, Issue Solicitations and Purchase Orders for Laboratory and Air Monitoring Equipment

SYNOPSIS: Laboratory equipment is needed to support current ethylene oxide investigations, including ones in AB 617 communities. In addition, the FY 2022-23 budget authorized Capital Outlays in the amount of $513,000 for air monitoring and laboratory equipment. An additional $250,000 is needed to purchase equipment to analyze ethylene oxide samples and other toxic air contaminants. These actions are to appropriate funds up to $250,000 from the General Fund Undesignated (Unassigned) Fund Balance to Monitoring & Analysis FY 2022-23 Budget to issue solicitations and purchase orders for laboratory and air monitoring equipment in an amount up to $718,000.

COMMITTEE: Administrative, August 12, 2022; Recommended for Approval

RECOMMENDED ACTIONS:

1. Appropriate funds up to $250,000 from the General Fund Undesignated (Unassigned) Fund Balance to Monitoring & Analysis FY 2022-23 Budget; and
2. Authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue "Prior Bid, Last Price" or "Sole Source" purchase orders, or solicitation(s), as needed and based on results of the solicitation process, issue purchase orders for items listed in Table 1 upon appropriation and Table 2 as approved in the FY 2022-23 Adopted Budget.

Wayne Nastri
Executive Officer

JCL:RMB:SD:ld:ev

Background

VOCs and VOCs with toxic air contaminants are emitted from different sources, including solvent use, chemical manufacturing, and other general industrial activities, which have been identified as an air quality priority in the CAMPs of multiple AB 617

communities. Ethylene oxide is a VOC toxic air contaminant that is used in many industrial processes including sterilization of medical equipment. There are six large-scale ethylene oxide sterilization facilities within South Coast AQMD's jurisdiction, three of which are located in AB 617 communities. In March 2022, South Coast AQMD began investigating facilities that emit ethylene oxide and started ambient air monitoring of ethylene oxide near these facilities and in the surrounding communities.

South Coast AQMD conducts ambient monitoring of VOCs, including ethylene oxide, in accordance with the National Air Toxics Trend Sites (NATTS) program guidelines using U.S. EPA method TO-15, which is considered the gold standard for these measurements. The NATTS program is currently transitioning from TO-15 to TO-15A, and the South Coast AQMD laboratory has already started to adopt some of the more stringent quality control requirements, including the stricter canister cleanliness criteria described in U.S. EPA Compendium Method TO-15A, in anticipation of the updated guidelines. The gas chromatograph-mass spectrometer (GC-MS) system currently used to analyze VOC canister samples collected for AB 617, special monitoring and incident response projects does not reliably meet the stringent TO-15A quality control criteria and cannot provide the detection limits required for ambient air monitoring of ethylene oxide. Consequently, there is a need to replace this GC-MS with a system that is identical to the one currently used for NATTS, which is able to satisfy all TO-15A requirements for ethylene oxide detection and is fully compatible with our current sampling equipment and data validation and analysis tools.

FY 2022-23 Capital Outlays Approved in the Adopted Budget

In May 2022, the Board approved the Executive Officer's Proposed Goals and Priority Objectives and Proposed Budget for FY 2022-23. The FY 2022-23 Adopted Budget includes capital outlay funds for the replacement of air monitoring and laboratory equipment to support Priority Objective I, ensuring efficient air monitoring and laboratory operations as recommended.

Proposal

Proposed Purchases through an RFQ Process, "Prior Bid, Last Price" Solicitation or Cooperative Agreement

Air Monitoring Trailer Replacement

U.S. EPA requires criteria pollutant measurements be made in a temperature controlled secure environment to support compliance with the Ambient Air Quality Standards (NAAQS) and emissions strategy development. Two of the current air monitoring trailers were originally CARB property and date back to 1980. Replacement is critical to meeting data completeness requirements and providing air quality data to the public. The approximate cost for two air monitoring trailers is $210,000 (see Table 2). The purchase will be made through a solicitation process, followed by issuance of a purchase order(s).

Gas Dilution Systems
U.S. EPA requires the measurement of criteria pollutants at multiple sites. Periodic calibration of air monitors is required to meet U.S. EPA quality control criteria. Gas dilution systems are necessary to provide a known concentration of gas standard required for the calibration of air monitoring equipment. The current gas dilution systems are greater than ten years old and no longer meet U.S. EPA quality control requirements. The approximate cost for up to two gas dilution systems that meet U.S. EPA requirements is $50,000 (see Table 2).

PM10 Continuous FEM Monitors
The South Coast AQMD criteria pollutant air monitoring network contains 19 PM10 monitors, as part of U.S. EPA minimum monitoring requirement to support compliance with NAAQS and emissions strategy development. Replacement of the current PM10 FRM monitors with continuous FEM monitors will fulfill monitoring requirements and also provide hourly data to the public. The approximate cost for up to three PM10 continuous FEM monitors is $50,000 (see Table 2).

Proposed Purchases through Sole Source Purchase Orders
Agilent 8890 GC/5977B MSD Gas Chromatograph – Mass Spectrometer System
South Coast AQMD supports incident response and special monitoring projects in environmental justice communities and as part of facility investigations. The cryogenic gas concentrators are utilized for incident response, odor complaints, oil field-related activities, and source apportionment. Due to increasing sample overhead for NATTS and ethylene oxide analysis, a new GC-MS is required to keep pace with analytical needs, especially for detection of toxic compounds at low concentration. An Agilent GC-MS is required in order to meet the strict requirements of the TO-15A analysis. The technical specifications of the Agilent 7890GC/5977MSD Gas Chromatograph are consistent with the existing South Coast AQMD laboratory equipment. The approximate cost for the Agilent 7890GC/5977MSD Gas Chromatograph – Mass Spectrometer System is $165,000 (see Table 1).

Entech 7200A Cryogenic Pre-Concentrator with Auto Sampler
South Coast AQMD supports incident response and special monitoring projects in environmental justice communities and as part of facility investigations. The cryogenic gas concentrators are utilized for incident response, odor complaints, oil field-related activities, and source apportionment. The current pre-concentrators are more than 15 years old, replacement parts are no longer available, and the software operating system is no longer supported. The technical specifications of the cryogenic pre-concentrator with auto sampler are proprietary and consistent with the existing South Coast AQMD laboratory equipment. The approximate cost for each cryogenic pre-concentrator with auto sampler is $85,000 (see Tables 1 and 2).

Agilaire 8872 Data Loggers
The South Coast AQMD air monitoring network operates 42 sites utilizing data loggers as part of U.S. EPA minimum monitoring requirement to support compliance with NAAQS and emissions strategy development and to provide air pollution data to the public in a timely manner. The monitoring site data loggers are greater than 15 years old and will no longer be supported by the manufacturer beyond the most recent Windows 10 upgrade. Data loggers are used for real time reporting of air quality data to U.S. EPA and CARB and is converted to AQI values for the public. The technical specifications of the data loggers are proprietary and consistent with the existing South Coast AQMD air monitoring network. The approximate cost for four data loggers is $38,000 (see Table 2).

Fluke Calibration Modules
Currently flow standards are sent out to vendors to be certified. Recently, there has been a national shortage of vendors available to provide these services. The addition of the requested elements will provide the capability to certify flow measurement standards for particulate monitors. The current standards are certified by an outside vendor who has been unable to recertify standards regularly and is jeopardizing our ability to meet U.S. EPA PM10 and PM2.5 program requirements. The technical specifications of the calibration modules are proprietary and consistent with the existing South Coast AQMD flow calibration computer. The approximate cost for three calibration modules is $35,000 (see Table 2).

Sole Source Justification
Section VIII.B.2 of the South Coast AQMD's Procurement Policy and Procedure identifies provisions under which a sole source award may be justified. The request for sole source award for the Agilaire 8872 data loggers and Fluke calibration modules are made under provision VIII.B.2.c.(2). projects involve the use of proprietary technologies.

Agilaire, LLC is the only manufacturer who produces data loggers compatible with their AirVision® software which runs the data collection system for continuous monitoring equipment at all fixed South Coast AQMD air monitoring network sites. The calibration modules involve the use of proprietary technology and Fluke Calibration is the only manufacturer who produces calibration modules compatible with their Molbox mass flow terminal which South Coast AQMD methods use as the primary flow calibration system for quality control standards for air monitoring network sites.

The request for the Agilent GC-MS for sole source award is made under provisions VIII.B.2.b. public health or property may be endangered by delay; and VIII.B.2.d.(6), projects requiring compatibility with existing specialized equipment. South Coast AQMD has ongoing investigations into emissions of EtO from facilities within its jurisdiction due to its potential risk to off-site workers. Delays in purchasing this

instrumentation will delay analysis as investigations continue. Agilent Technologies is the manufacturer and supplier of the GC-MS system currently used by South Coast AQMD to implement U.S. EPA's NATTS program and used for analysis of samples for the ethylene oxide investigations. This system has been demonstrated to meet stringent TO-15A requirements, which is required. Staff are trained on the use, repair, and maintenance of this equipment, facilitating cross-training and interoperability. Consistency and compatibility amongst these GC-MS' are critical to meet the operational needs of the agency. The request for the cryogenic pre-concentrators with auto sampler for sole source award is made under provision VIII.B.2.d.6. projects requiring compatibility with existing specialized equipment. The laboratory operates four Entech cryogenic pre-concentrators. Staff are trained on the use, repair, and maintenance of this equipment, facilitating cross-training and interoperability. Consistency and compatibility amongst these pre-concentrators are critical to meet the operational needs of the agency.

Resource Impacts

Sufficient funding for the Capital Outlays listed in Table 1 is available from the General Fund Undesignated (Unassigned) Fund Balance and sufficient funding for the Capital Outlays listed in Table 2 is included in the FY 2022-23 Adopted Budget.

Attachments

Table 1: FY 2022-23 Proposed Capital Outlay Expenditures from Appropriation from the General Fund Undesignated (Unassigned) Fund Balance

Table 2: FY 2022-23 Adopted Budget Capital Outlays Major Object

Table 1
FY 2022-23 Proposed Capital Outlay Expenditures from Appropriation from the General Fund Undesignated (Unassigned) Fund Balance

Description	Qty	Work Program Code	Estimated Amount	Contracting Method
Agilent 8890 GC/5977BMSD887890GC/ 5977MSD Gas Chromatograph – Mass Spectrometer System	1	46064	$165,000	Sole Source
Entech 7200A Cryogenic Pre-Concentrator with Auto Sampler	1	46064	$85,000	Sole Source
Total			**$250,000**	

Table 2
FY 2022-23 Adopted Budget Capital Outlays Major Object

Description	Qty	Work Program Code	Estimated Amount	Contracting Method
Air Monitoring Trailer Replacement	Up to 2	46064	$210,000	Solicitation
Gas Dilution Systems	Up to 2	46064	$50,000	'Prior Bid, Last Price' or Solicitation
PM10 Continuous FEM Monitor	Up to 3	46064	$50,000	'Prior Bid, Last Price' or Solicitation
Agilaire 8872 Data Loggers	Up to 4	46064	$38,000	Sole Source
Fluke Calibration Modules	Up to 3	46064	$35,000	Sole Source
Entech 7200A Cryogenic Pre-Concentrator with Auto Sampler	1	46064	$85,000	Sole Source
Total			**$468,000**	

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 7

PROPOSAL: Amend Contract for Joint Electric Truck Scaling Initiative Pilot Project

SYNOPSIS: In June 2021, the Board approved the execution of several contracts for the CARB and CEC awarded Joint Electric Truck Scaling Initiative (JETSI) Pilot Project, including a contract with Gladstein, Neandross and Associates to develop the ZEV workplan. The JETSI Pilot Project will deploy 100 Daimler and Volvo Class 8 battery electric trucks, charging infrastructure, and distributed energy resource technologies at two fleets in disadvantaged communities. Due to the large number of project partners and strict reporting requirements to submit quarterly progress reports within 10 days of the end of each quarter, CARB has approved the reallocation of $220,000 in South Coast AQMD administrative funds for project reporting. This action is to amend the contract with Gladstein, Neandross and Associates, adding $220,000 in CARB grant funds from the GHG Reduction Projects Special Revenue Fund (67) for project reporting.

COMMITTEE: Technology, August 19, 2022; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Executive Officer to amend a contract with Gladstein, Neandross and Associates for JETSI Pilot Project reporting adding $220,000 from the GHG Reduction Projects Special Revenue Fund (67).

Wayne Nastri
Executive Officer

AK:PSK

Background

In June 2021, the Board approved the execution of several contracts for the CARB and CEC awarded Joint Electric Truck Scaling Initiative (JETSI) Pilot Project, including a contract with Gladstein, Neandross and Associates to develop the ZEV workplan. The JETSI Pilot Project will deploy 100 Daimler and Volvo Class 8 battery electric trucks,

charging infrastructure, and distributed energy resource technologies at two fleets in disadvantaged communities. South Coast AQMD was awarded $16,019,316 in CARB funds and $10,964,955 in CEC Funds for the JETSI Pilot Project. South Coast AQMD is leading a regional collaborative with the Mobile Source Air Pollution Reduction Review Committee, Southern California Edison, Port of Los Angeles, and Port of Long Beach. These partners provide a cost share of $21.4 million in addition to $25.4 million in cost share from fleet partners. This project will significantly advance the market penetration of Class 8 battery electric trucks through at-scale production of Daimler and Volvo trucks. The project also includes an existing contract with Gladstein, Neandross and Associates (GNA) to develop the ZEV workforce plan.

Proposal

Due to the large number of project partners and strict reporting requirements to submit quarterly progress reports within 10 days of the end of each quarter, CARB has approved the reallocation of $220,000 in South Coast AQMD administrative funds for project reporting. This action is to amend the existing contract with GNA to add $220,000 for JETSI Pilot Project reporting, in addition to the ZEV workforce plan, from the GHG Reduction Projects Special Revenue Fund (67).

Benefits to South Coast AQMD

The JETSI Pilot Project supports development and demonstration of various electric container and freight transport technologies and infrastructure, as well as solar and energy storage technologies to enable development and demonstration of microgrids for fleets charging heavy-duty trucks, yard tractors, and forklifts. These technologies are included in the *Technology Advancement Office Clean Fuels Program 2022 Plan Update* under the categories of "Develop and Demonstrate Electric and Hybrid Vehicles," "Develop and Demonstrate Electric Container Transport Technologies," "Develop and Demonstrate Electric Charging Infrastructure," and "Develop and Demonstrate Microgrids with Photovoltaic/Fuel Cell/Battery Storage/EV Chargers and Energy Management." These projects are to develop and demonstrate zero-emission heavy-duty trucks, freight handling equipment, infrastructure, and solar. Successful demonstrations of such projects will contribute to the attainment of national ambient air quality standards in the Basin by eliminating PM and NOx emissions from replaced diesel heavy-duty trucks and off-road freight handling equipment. The JETSI Pilot Project also includes installation of infrastructure powered by solar and energy storage.

Resource Impacts

This contract amendment will be fully covered by CARB administrative funds for the JETSI Pilot Project in the GHG Reduction Projects Special Revenue Fund (67).

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 8

PROPOSAL: Adopt Resolution Recognizing Funds for FY 2021-22 Community Air Protection Incentives and Reimburse General Fund for Administrative Costs

SYNOPSIS: In June 2022, the South Coast AQMD executed a grant agreement with CARB to receive FY 2021-22 Community Air Protection Program (CAPP) incentive funds in the amount of $98,799,787, of which 6.25 percent may be used to fund administrative costs. This action is to: 1) adopt a Resolution recognizing CAPP revenue up to $98,799,787 from CARB into the Community Air Protection AB 134 Fund (77). Eligible projects include those submitted under the Carl Moyer Program and Proposition 1B–Goods Movement Program, projects consistent with the Community Air Protection Incentives Guidelines, and other projects included in approved AB 617 community emissions reduction programs; and 2) reimburse the General Fund for administrative costs incurred in implementing the CAPP grant.

COMMITTEE: Technology, August 19, 2022; Recommended for Approval

RECOMMENDED ACTIONS:

1. Adopt the attached Resolution recognizing, upon receipt, up to $98,799,787 of FY 2021-22 CAPP incentive funds from CARB into the Community Air Protection AB 134 Fund (77); and
2. Reimburse the General Fund up to 6.25 percent of the CAPP grant amount from the Community Air Protection AB 134 Fund (77) for administrative costs incurred for implementating the CAPP grant.

Wayne Nastri
Executive Officer

AK:WS:AY:DH

Background

In June 2021, the Governor approved the Budget Act of 2021 (AB 128) which appropriated $320 million for financial incentives to reduce mobile and stationary sources of criteria air pollutants or toxic air contaminants, consistent with community emissions reduction programs pursuant to AB 617. In July 2022, South Coast AQMD

executed a grant agreement (G21-MCAP-24) with CARB to receive FY 2021-22 (Year 5) Community Air Protection Program (CAPP) incentive funds in the amount of $98,799,787, which includes 6.25% in administrative funds. CARB requires that air districts provide a Board Resolution, which officially recognizes the South Coast AQMD's receipt of the CAPP funding and that, authorizes the South Coast AQMD to implement incentive programs, including Carl Moyer, Proposition 1B-Goods Movement Program, and projects approved in Community Air Reduction Programs, using CAPP funds.

Per the grant agreement, the revenue will support incentive projects that reduce emissions and improve public health in communities with high burdens of cumulative pollutant exposure consistent with the requirements of AB 617, AB 1550 and SB 535. SB 535 and AB 1550 require at least 70-80 percent of the funds to go towards emission reduction projects that directly benefit disadvantaged and low-income communities. Projects that may be eligible for this funding include those submitted under the Carl Moyer and Proposition 1B-Goods Movement Programs, projects consistent with Community Air Protection Incentives Guidelines, and other incentive projects and programs in approved Community Emissions Reduction Plans.

Proposal

These actions are to adopt the attached Resolution recognizing up to $98,799,787 from CARB into the Community Air Protection AB 134 Fund (77) and reimburse the General Fund up to 6.25% of the CAPP grant amount from the Community Air Protection AB 134 Fund (77) for the administrative costs incurred for implementation of the CAPP grant.

Benefits to South Coast AQMD

The implementation of incentive projects funded by the Year 5 CAPP funds will reduce emissions of criteria and toxic air pollutants in communities with high burdens of cumulative pollutant exposure. The CAPP incentive funds will be used for projects that meet or exceed the statewide targets specified by the CAPP incentives grant agreement.

The funds will be used for projects that reduce emissions beyond what is required by existing regulations, and these reductions will continue throughout the life of the projects, resulting in long-term emission reductions and public health benefits.

Resource Impacts

South Coast AQMD will receive up to $98,799,787 from CARB for FY 2021-22 CAPP (Year 5) CAPP incentive funds, which will be recognized into the Community Air Protection AB 134 Fund (77). Administrative costs will not exceed 6.25 percent.

Attachment

Resolution

RESOLUTION NO. 22-

A Resolution of the South Coast Air Quality Management District Governing Board Recognizing FY 2021-22 Community Air Protection Incentive Funds

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

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

WHEREAS, the Governing Board has adopted several programs to reduce emissions from on-road and off-road vehicles, as well as emissions from other equipment, including infrastructure from the Carl Moyer Program, the Proposition 1B-Goods Movement Program, and projects included in approved Community Emissions Reduction Programs; and

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

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

THEREFORE, BE IT RESOLVED that the Governing Board of the South Coast AQMD, State of California, in regular session assembled on September 2, 2022, does hereby authorize the Executive Officer to accept the terms and conditions of the FY 2021-22 (Year 5) Community Air Protection Program (CAPP) grant award and hereby recognizes up to $98,799,787 from CARB to administer and implement the Year 5 CAPP.

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

_____ _____

Date Faye Thomas, Clerk of the Boards

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 9

PROPOSAL: Recognize Revenue, Transfer Funds and Execute Contract with San Bernardino County, Acting on Behalf of Arrowhead Regional Medical Center for Deployment of Zero Emission Mobile Clinics

SYNOPSIS: Arrowhead Regional Medical Center (ARMC) operates two mobile pediatric asthma clinics referred to as Breathmobiles. In June 2022, U.S EPA awarded $500,000 to the South Coast AQMD under the Clean Air Technology Initiative to help replace an existing older gasoline powered Breathmobile with a new zero emission platform. San Bernardino County is supporting the development of a new third mobile clinic and has requested additional support in making this a zero emission clinical platform also. These actions are to: 1) recognize revenue up to $500,000 from U.S. EPA into the Advanced Technology, Outreach and Education Fund (17); 2) transfer $500,000 from the Clean Fuels Program Fund (31) as cost-share into the Advanced Technology, Outreach, and Education Fund (17); and 3) execute a contract with San Bernardino County acting on behalf of ARMC for the purchase of two zero emission mobile clinics in an amount not to exceed $1,000,000 from the Advanced Technology, Outreach, and Education Fund (17).

COMMITTEE: Technology, August 19, 2022; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize revenue up to $500,000 from U.S. EPA into the Advanced Technology, Outreach and Education Fund (17);
2. Transfer $500,000 from the Clean Fuels Program Fund (31) as cost-share into the Advanced Technology, Outreach and Education Fund (17); and
3. Execute a contract with San Bernardino County, acting on behalf of Arrowhead Regional Medical Center, for the purchase of two zero emission mobile clinics in an amount not to exceed $1,000,000 from the Advanced Technology, Outreach and Education Fund (17).

Wayne Nastri
Executive Officer

AK: MW:TL: DC

Background
ARMC currently operates two mobile clinics using Class 6 gasoline-powered Recreational Vehicles (RVs). ARMC is a 456-bed university-affiliated teaching hospital operated by San Bernardino County. The RV clinical platforms referred to as Breathmobiles provide pediatric asthma management at no cost to school children residing within low-income communities within San Bernardino County's that experience high asthma-related hospitalizations. The two Breathmobiles routinely travel to 40 different school sites throughout San Bernardino County and during school hours clinical staff meet with school children and children from the surrounding areas. Seventy five percent of the children participating in the program have their asthma symptoms under control by the third follow up visit.

Proposal
The proposed project will allow ARMC to operate two new zero emission mobile clinics. One of the new clinics will replace an existing 2006 model year gasoline powered Breathmobile. The other will be a third mobile clinic that ARMC will use to provide service in the Fifth District of San Bernadino County, which includes the Rialto, Bloomington, Colton, San Bernardino City, Muscoy, and Devore areas. Both zero emission mobile clinics will have at least a 100-mile range and provide the clinics with over 5 hours of electrical power each. Eliminating the need to use a gasoline generator will benefit the sensitive receptors visiting the mobile clinics and reduce noise at the school sites. Both new mobile clinics are expected to be deployed by the end of 2024 and ARMC will upgrade its existing vehicle charging infrastructure to support the clinics. The development of zero emission mobile clinics provides transferable technology for other zero emission mobile clinic applications.

The total cost of the proposed project is $2.2 million. ARMC will replace the 2006 Breathmobile using the U.S. EPA Clean Air Technology Initiative (CATI) funds of $500,000 and San Bernardino County will contribute $500,000 towards the purchase of the additional clinic. Staff is proposing $250,000 towards each vehicle using funds transferred into the Advanced Technology, Outreach and Education Fund (17) from the Clean Fuels Program Fund (31) for a total amount not to exceed $500,000. ARMC will be contributing $700,000 of in-kind support, covering staffing costs for the two mobile clinics and supporting the charging infrastructure for a total project cost of $2.2 million.

Proposed Partners	**Mobile Clinic #1 (replacement)**	**Mobile Clinic #2**
U.S. EPA (CATI)	$500,000	$0
South Coast AQMD	$250,000	$250,000
San Bernardino County	$0	$500,000
ARMC (in-Kind)	$350,000	$350,000
Total Project Cost	**$2,200,000**	

Sole Source Justification
Section VIII.B.3 of the Procurement Policy and Procedure identifies four provisions by which sole source awards may be justified when contracts are funded in whole or in part with federal funds. This award is made under provision B.3.c: The awarding federal agency authorizes noncompetition proposals. U.S. EPA deemed the proposed award to ARMC to be a sub-award and does not require a competitive solicitation. This award is also being made under provision B.2.d.(1): Projects involving cost sharing by multiple sponsors. This $2.2 million project is being cost shared by U.S. EPA, San Bernardino County, South Coast AQMD with in-kind support from ARMC.

Benefits to South Coast AQMD
The existing Breathmobile travels over 5,100 miles/year and uses a gasoline-powered generator at the school sites for 4-5 hours a day. Each year the vehicle and generator consume over 1,000 gallons of gasoline. Furthermore, ARMC, with the assistance of South Coast AQMD and San Bernardino County, will purchase an additional zero emission mobile clinic to expand their clinal fleet in lieu of purchasing a gasoline-powered mobile clinic. Both new proposed clinical vehicles will provide zero emission miles during transit and power the clinics without using a generator. Combined, the two new zero emission mobile clinics will prevent an additional 0.14 tons of NOx, 0.14 tons of hydrocarbons along with 4.8 tons of CO emissions annually.

Resource Impacts
Sufficient funds are available for transfer into the Advanced Technology, Outreach, and Education Fund (17) from the Clean Fuels Program Fund (31), which was established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 10

PROPOSAL: Approve Amendments to the MOU with Teamsters Local 911 and to Administrative Code Provisions for Non-Represented Employees Regarding Employer Contributions for Health Insurance Premiums

SYNOPSIS: South Coast AQMD management and Teamsters Local 911, representing the Office Clerical & Maintenance (OCM) and Technical & Enforcement (T&E) bargaining units, have reached an agreement to address health insurance premium increases effective January 1, 2023. The proposed MOU amendment provides for an additional $50 per month to be paid directly to health insurance providers on behalf of each employee. This action is to request Board approval of the MOU amendment. This action is also to approve an amendment to the South Coast AQMD Administrative Code for an additional payment of $50 per month to the health insurance providers on behalf of each non-represented employee. Sufficient funds are available in the FY 2022-23 Budget and will be requested in the FY 2023-24 Budget.

COMMITTEE: No Committee Review

RECOMMENDED ACTIONS:

1. Approve an amendment to Article 17, Section 3 in the 2022-2023 Teamsters MOU to provide an additional $50 per month to be paid directly to health insurance providers on behalf of each OCM and T&E employee, as shown in Attachment A; and
2. Approve an amendment to Section 115.3 (Insurance Contribution Amount) of South Coast AQMD's *Administrative Code* to provide an additional $50 per month to be paid directly to health insurance providers on behalf of each non-represented employee, as shown in Attachment B.

Wayne Nastri
Executive Officer

AJO:mm

Background
The 2022-2023 Teamsters MOU contains a reopener clause for management and the bargaining unit representatives to meet-and-confer regarding potential health insurance premium increases effective January 1, 2023. South Coast AQMD's Administrative Code Section 115.3 sets forth provisions to provide employer contributions toward health insurance premium costs for non-represented employees.

Employee health insurance premiums for 2023 are set to increase by 9.3 percent across all medical insurance plans. Since joining the Public Risk Innovation, Solutions, and Management public agency insurance pool in 2018, the average overall premium rate increase is below 2 percent. Subject to Board approval, South Coast AQMD management and the Teamsters have reached an agreement to increase the amount of the payments made directly to the health insurance providers to offset a portion of the increased costs for employees. Similar payment increases are proposed for non-represented employees for partial offset purposes.

Proposal
The proposed amendment to the Teamsters MOU provides for a $50 per month per employee increase in the contribution towards health insurance premiums that are effective January 1, 2023. This action is also to approve, for non-represented employees, an additional $50 per month payment to the health insurance providers on behalf of each such employee to address 2023 insurance premium increases. These increased payments will be made directly to the health insurance providers and will begin in pay period 26 of 2022. There is no change in the monthly Benefits Cap for either group.

Resource Impacts
The cost for the proposed increased contributions towards health insurance premiums is $288,000 for calendar year 2023. Sufficient funds are available in this year's budget and ongoing costs will be requested in the FY 2023-24 Budget.

Attachments
Attachment A – Teamsters MOU Amendments
Attachment B – South Coast AQMD *Administrative Code* Amendments

ATTACHMENT A

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

MEMORANDUM OF UNDERSTANDING

TECHNICAL AND ENFORCEMENT AND OFFICE CLERICAL AND MAINTENANCE UNITS

January 1, 2022 – December 31, 2023

ARTICLE 17

GROUP INSURANCE
(Health, Dental, Life and Vision Insurance)

Section 3. South Coast AQMD shall pay an additional amount of ~~$385.00~~$435.00 per month on behalf of each bargaining unit member directly to the health insurance providers, resulting in a reduction of premiums paid by employees.

ATTACHMENT B

SOUTH COAST

AIR QUALITY MANAGEMENT DISTRICT

ADMINISTRATIVE CODE

Revised ~~January 7~~September 2, 2022

Section 115 - Group Insurance

Represented employees should consult Article 17, "Group Insurance," of their MOU.

Section 115.3 - Insurance Contribution Amount

Effective September 1, 2010, the maximum health insurance contribution amount for management and confidential employees is $2,060.84. South Coast AQMD shall also pay to the health insurance providers, on behalf of each management and confidential employee, an amount equal to the monthly premium increases for the health plan(s) selected by each employee, such that there is no change to the premium amount paid by the employee from the rates in effect prior to September 1, 2011, but not for premium increases effective January 1, 2013. Effective January 1, 2014, South Coast AQMD shall pay an additional amount of $100.00 per month directly to the health insurance providers on behalf of each management and confidential employee for these health insurance premium increases. For premiums effective January 1, 2016, South Coast AQMD shall pay an additional contribution of $100.00 per month directly to the health insurance providers on behalf of each management and confidential employee for health insurance premium increases. Effective January 1, 2017, South Coast AQMD shall pay an additional amount of $45.00 per month directly to the health insurance providers on behalf of each management and confidential employees for health insurance premium increases. For premiums effective January 1, 2023, South Coast AQMD shall pay an additional amount of $50.00 per month directly to the health insurance providers on behalf of each management and confidential employee for health insurance premium increases. These payments to the health insurance company do not increase the existing health benefit cap of $2,060.84.

Clean Transportation Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 11

PROPOSAL: Issue Request for Information and Approve Award as Approved by MSRC

SYNOPSIS: The MSRC approved a Request for Information for zero emission goods movement infrastructure as part of their FYs 2021-24 Work Program. Additionally, the MSRC approved an award to provide special bus service to Dodger Stadium in 2023 and 2024. At this time, the MSRC seeks Board approval of the contract award and to release the solicitation as part of the FYs 2021-24 Work Program.

COMMITTEE: Mobile Source Air Pollution Reduction Review, August 18, 2022; Recommended for Approval

RECOMMENDED ACTIONS:

1. Approved contract award to Los Angeles County Metropolitan Transportation Authority (Metro) in an amount not to exceed $1,200,248 to provide special bus service to Dodger Stadium in 2023 and 2024, under the Major Event Center Transportation Program as part of the FYs 2021-24 Work Program, as described in this letter;
2. Authorize the Board Chair (or by the Board Chair's designation, the Executive Officer) to execute the contract under the FYs 2021-24 Work Program, as described above and in this letter; and
3. Issue a Request for Information for Publicly Accessible Goods Movement Zero Emission Infrastructure, as part of approval of the FYs 2021-24 Work Program, with a targeted funding level of up to $50,000,000, as described in this letter and in the attached.

Larry McCallon
Chair, MSRC

MMM:NB:CR

Background

In September 1990, Assembly Bill 2766 was signed into law (Health & Safety Code Sections 44220-44247) authorizing 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 South Coast AQMD be placed into an account to be allocated pursuant to a work program developed and adopted by the MSRC and approved by the Board.

Proposals

At its August 18, 2022 meeting, the MSRC considered recommendations from the MSRC Technical Advisory Committee (MSRC-TAC) and approved the following:

FYs 2021-24 Major Event Center Transportation Program

As part of its FYs 2021-24 Work Program, the MSRC allocated $3,000,000 for event center transportation programs and released Program Announcement #PA2022-04. The Program Announcement solicits applications from qualifying major event centers and/or transportation providers to provide transportation service for venues not currently served by sufficient transportation service. Applicants are eligible to propose a maximum of two consecutive event seasons and are obligated to continue performing service for an additional two consecutive event seasons. The MSRC considered recommendations concerning an application submitted by Metro. Metro requested the MSRC to consider an award of $1,200,248 to provide express bus service to Dodger Stadium for the 2023 and 2024 baseball seasons. For the 2023 season, service would be provided for two preseason games, 82 regular season games, two special events, and up to ten post-season games. The 2024 season would have approximately 82 regular season games, two special events, and up to ten post-season games. Service would begin at least 90 minutes prior to game/event start time and would utilize "near-zero" CNG buses. Metro and the Los Angeles Dodgers are committed to provide at least $1,808,500 in co-funding contributions. The MSRC approved a contract award to Metro in an amount not to exceed $1,200,248 as part of the FYs 2021-24 Work Program for the Dodger Stadium Express bus service.

FYs 2021-24 Publicly Accessible Goods Movement Zero Emission Infrastructure

The MSRC also approved the release of a Request for Information (RFI) RFI2023-01 under the FYs 2021-24 Work Program. The RFI, with a targeted funding amount of up to $50,000,000, seeks the submittal of information packages which identify the respondent's potential role and available resources to partner with the MSRC to develop publicly accessible zero emission vehicle charging or fueling infrastructure. The RFI has a clear focus on goods movement, but it is also the MSRC's intention that the infrastructure would be accessible to all compatible zero emission vehicles and vehicle uses. Information packages may be submitted at any time from September 2 to November 30, 2022. Based on information submitted in response to the RFI, the MSRC

may issue an RFP, or the MSRC may select one or more respondents and enter into discussions and/or negotiations and may make awards as a result of the RFI.

Outreach

In accordance with South Coast AQMD's Procurement Policy and Procedure, public notices advertising the Publicly Accessible Goods Movement Zero Emission Infrastructure RFI will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press Enterprise to leverage the most cost-effective method of outreach to the South Coast Basin. In addition, the RFI will be advertised in the Desert Sun newspaper for expanded outreach in the Coachella Valley. Public notices advertising the Major Event Center Transportation Program were likewise published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, Riverside County Press Enterprise, and Desert Sun newspapers.

Additionally, potential bidders may be and past bidders may have been notified utilizing South Coast AQMD's own electronic listing of certified minority vendors. Notice of the RFI will be and notice of the past solicitation were emailed to the diverse spectrum of Legislative Caucuses and chambers of commerce and business associations and placed on South Coast AQMD's website (http://www.aqmd.gov) where it can be viewed by making the selection "Grants and Bids." Further, the RFI will be and the past solicitations posted on the MSRC's website at http://www.cleantransportationfunding.org and electronic notifications will be and past electronic notifications were sent to those subscribing to this website's notification service.

At this time, the MSRC requests the South Coast AQMD Board approve the contract award and the release of the RFI as part of approval of the FYs 2021-24 AB 2766 Discretionary Fund Work Program as outlined above. The MSRC further requests authority to adjust the funds allocated to each project specified in this Board letter by up to five percent of the project's recommended funding. The Board has granted this authority to the MSRC for all past Work Programs.

Resource Impacts

The South Coast AQMD acts as fiscal administrator for the AB 2766 Discretionary Fund Program (Health & Safety Code Section 44243). Money received for this program is recorded in a special revenue fund (Fund 23) and the contracts specified herein will be drawn from this fund.

Attachment

Request for Information RFI2023-01 – Publicly Accessible Goods Movement Zero Emission Infrastructure

Clean Transportation Funding from the MSRC

Request for Information

For

Publicly Accessible Goods Movement Zero-Emission Infrastructure

Seeking Partnerships to Increase Zero-Emission Fueling Access in the South Coast Region

RFI 2023-01

September 2, 2022

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

SECTION 1: INTRODUCTION

California is taking unprecedented steps to reduce toxic and climate change air pollution emitted from transportation sources. The Governor's Executive Order, N-79-20, set an ambitious timetable for the transition of all transportation sectors to zero-emissions where feasible. Notably, the governor's Executive Order requires all drayage trucks to be 100% zero-emission by year 2035. The California Air Resources Board, in response to the Governor's directive, has advanced new Rules, specifically the Advanced Clean Truck Rule, and the currently under development Advanced Clean Fleet Rule, that are key to ensuring the State's zero-emission goals are met for medium and heavy-duty trucks.

Locally, the San Pedro Bay Ports are implementing their Clean Air Action Plan (CAAP), whose goal is a 100% zero-emission drayage truck fleet by year 2035. This measure alone accounts for approximately 20,000 heavy-duty trucks operating within the South Coast region. State laws and local mandates will result in tens of thousands of medium and heavy-duty trucks transitioning from conventional fuels to zero-emission fuels – battery electric and hydrogen fuel cell – over the next decade. While there is significant regulatory emphasis on the vehicles that perform goods movement, equal emphasis needs to be placed on development of a robust network of accessible electric vehicle charging and hydrogen refueling infrastructure, without which a zero-emissions goods movement strategy is operationally infeasible.

It is expected that larger commercial trucking companies will have access to state incentive programs to offset a portion of the cost of installing electric charging, and potentially H_2 refueling, onsite at their fleet yard. *However, it is important to recognize that a significant portion of the trucks that perform goods movement in the South Coast region do not domicile at a commercial yard or other established home base, including between 28% - 50% of heavy-duty port drayage trucks.*

To enable the transition to zero-emission goods movement, especially for fleets and independent operators who do not domicile at a commercial yard, it is essential that **publicly accessible**[1] electric vehicle charging (EVSE) and hydrogen (H_2) fueling infrastructure be made available. If the 2035 goal is to be met, the time to begin the planning and construction of essential infrastructure is now.

This Request for Information (RFI) is intended to serve as a Call to Action on the issue of Publicly Accessible EVSE and H_2 Refueling Infrastructure. As discussed below, the MSRC is seeking willing partners to help facilitate investment in publicly accessible infrastructure to support an equitable transition of goods movement trucks to zero-emissions. A key objective is the identification of locations where the MSRC could make **Clean Transportation Funding™** investments in publicly accessible infrastructure.

[1] "Publicly accessible" is defined as a facility where truck fueling and/or charging is available at least part of the day for public access.

SECTION 2: OVERVIEW OF THIS REQUEST FOR INFORMATION

The purpose of this RFI is to seek information and identify potential partners who can assist the MSRC in deploying publicly accessible EVSE and H_2 infrastructure within the South Coast AQMD region. The MSRC will use the information obtained through this RFI to better understand the current state of the industry, including but not limited to interest levels, technologies, costs, business cases, and schedule requirements unique to installing and operating infrastructure to support the deployment of zero-emissions trucks.

In preparing to release this RFI, the MSRC has conducted outreach to stakeholders who share a common interest in the near-term deployment of publicly accessible zero-emission infrastructure. Multiple stakeholders have expressed their support for MSRC investment in infrastructure to support zero-emission trucks operating in proximity to the ports, along high-volume freight corridors such as the Interstate 710 Freeway, as well as the expansive network of warehouse, distribution, and logistics facilities throughout the entire South Coast region.

The Role of the MSRC

The MSRC is aware of efforts underway by the ports, California Energy Commission, non-profit organizations, and business enterprises to identify opportunities to develop zero-emission infrastructure. The potential role of the MSRC in facilitating and supporting these ongoing efforts is straightforward. **The MSRC has identified up to $50 million in Clean Transportation Funding™** to partner with stakeholders to make publicly accessible zero-emission infrastructure a reality, and accelerate the transition to zero-emission goods movement, especially for truck operators who do not domicile their trucks overnight at a commercial facility.

However, the MSRC is challenged in deploying its Clean Transportation Funding™ because the MSRC cannot acquire or own real property. Thus, a primary purpose of this RFI is to identify stakeholders who are property owners or those whose interest in a real property would allow construction of EVSE and/or H_2 refueling infrastructure. Importantly, the MSRC is interested in receiving relevant information from ALL STAKEHOLDERS who have a role in the accelerated development of zero-emission infrastructure, whether or not the stakeholder has an identified property.

Who Should Respond to this RFI?

All parties who have a stake in the transition of goods movement trucks to zero-emissions should consider submitting an Information Package under this RFI. This includes, but is not limited to:

- Property owners interested in working with the MSRC to build hydrogen fuel cell and/or battery electric truck EVSE infrastructure on their property. This could include, but is not limited to:
    - The Ports

  - Warehouse, distribution, & logistics facilities that could offer opportunity charging
  - Logistics real estate and supply chain logistics developers
  - Truck stops & truck service centers
  - Trucking companies that could offer daytime opportunity charging/refueling
  - Trucking companies that could provide overnight opportunity charging for fleets and independent owner-operators, particularly those without a home base for charging
  - Caltrans
  - Local governments, including cities, counties, public agencies, etc.
  - Owners of existing public access electric charging plazas/destination points, hydrogen refueling stations open to capacity expansion, or petroleum fueling stations open to redevelopment
  - Commercial real estate development companies and service agents
- Zero-Emission-related Business Enterprises, including:
  - Charging as a-Service (CaaS) providers
  - Trucking as a Service (TaaS) providers
  - EVSE & H_2 technology providers
- Engineering, architecture, construction, & infrastructure development firms
- Agencies seeking to leverage their available zero-emission infrastructure funding
  - County Transportation Commissions
  - State Agencies
  - Metropolitan Planning Organization (SCAG)
  - Local Governments
  - Nongovernmental organizations & non-profits

While the MSRC's focus is to serve trucks and operators whose primary vocation is goods movement, including but not limited to container drayage, commodity transport, and parcel delivery, it is also the MSRC's intention that EVSE and H_2 infrastructure would be accessible to all compatible zero-emission vehicles and vocations.

Interested parties are asked to submit an **Information Package** that identifies the respondent's potential role and available resources to partner with the MSRC to develop zero-emission infrastructure, with a goal to have infrastructure available for use by 2026. Details on the requested contents of an Information Package are included in Section 3 of this RFI, below.

Based on information submitted in response to this RFI, the MSRC may issue a Request for Proposals (RFP), or the MSRC may, at its discretion, select one or more RFI respondents and enter into discussions and/or negotiations, and may enter into agreements as a result of the RFI.

SECTION 3: HOW TO RESPOND TO THIS RFI – INFORMATION PACKAGE PREPARATION

The MSRC seeks the submittal of Information Packages from stakeholders who share the MSRC's goal of accelerating deployment of infrastructure to support zero-emissions goods movement. Of special interest to the MSRC is information on business models, operational plans, barriers, and high-level costs associated with publicly accessible electric charging and H_2 refueling infrastructure for medium and heavy-duty trucks.

While there are no strict requirements when submitting an Information Package under this RFI, the following guidelines and content suggestions are offered to assist respondents in preparing a response. Recommended elements of an Information Package include the following:

1. Transmittal Letter that identifies the name of the organization submitting the Information package, contact information, including but not limited to company website URL, telephone and e-mail address of the contact person(s) for technical and contractual matters, and any other relevant contact information.

2. An Overview of Your Organization & Role in Zero-Emission Truck Refueling Infrastructure. Please provide information on your agency or business enterprise, including a concise narrative describing the firm or agency's experience, products, business model, or service offerings as it relates to electric vehicle charging or H_2 station development or operations. Include, as appropriate, information regarding your firm's experience involving similar EVSE or H_2 developments, organization size, structure, financial capacity, etc.

3. Discussion of How the MSRC Can Potentially Partner with Your Organization to Implement Publicly Accessible Zero-Emission Infrastructure. The MSRC would like to understand how a potential partnership could advance the availability of zero-emission truck refueling in the South Coast region. Conceptual partnership ideas are welcome; if there is a specific project you would like to discuss with the MSRC, please provide information as described in the next paragraph.

4. Conceptual Project Description. If your organization has a specific project location or other near shovel ready concept that could benefit from a partnership with the MSRC, please provide a description of the proposed conceptual project. Please include the following elements to the extent applicable and feasible:

    a. Project Location: Information on the proposed project's location, ownership status, parcel size, exiting conditions, accessibility, existing environmental or remediation needs, and any other descriptive information as available. Notation of whether project is located in a Qualified Opportunity Zone.

b. Overview of Operational Model: Please provide an overview of your agency or firm's operational model, addressing the following topics to the extent known:

- Customer Base - Describe the targeted customer base, such as trucking fleets, independent owner operators, other users, and/or some combination thereof
- Charging and/or H2 Refueling Scenarios - Describe how the site will support overnight battery-electric truck charging, opportunity charging, or some mix of the two charging scenarios.
- Hours of Operation and Public Accessibility - Include general operating hours and the hours of public accessibility if the development is not exclusively public. Describe any restrictions on public access.
- Customer Service Model - Describe your firm's customer service model, such as how you plan to handle payments, reservations, etc.
- Ancillary Services - If applicable, describe any ancillary operations, such as ATMs, food sales, cell phone waiting areas, etc.
- Degree that proposed projects implement project priorities identified and recommended in regional planning blueprints and feasibility studies prepared by metropolitan planning agencies, joint power agencies, other local governments and private firms.
- Integration with electric grids, storage technologies, or hydrogen production/natural gas and hydrogen pipeline systems that could facilitate multiple revenue streams reflecting more holistic development projects.
- Anticipated new CEQA requirements and permits needed to complete construction and the status of obtaining approvals.
- Energy Management Strategies - If applicable and/or known, describe any operational load management strategies planned for use at the proposed site.

c. Site Design & Capital Improvements: To the best of your ability, describe the proposed capital improvements planned for the site. Include a conceptual design drawing, indicating the rough locations of charging units and/or H_2 refueling equipment, power supply equipment, and supportive services. If you are not proposing to develop the entire site, indicate the square-footage required. Additionally, please describe the following to the extent information is available:

- Number of charging units - Include the anticipated number of charging units, noting the number of units in overnight or opportunity configurations.
- Type of charging units - Identify the charging rate(s) and connector type(s).

- Energy storage: If applicable, describe any onsite energy storage or generation.
- Supportive services - Identify plans for supportive services, such as restrooms, offices, and/or car parking, if applicable, and their approximate site locations.

d. Conceptual Development Schedule: Provide a high-level development schedule, including the timeframe for permitting, construction and full operations.

e. Cost Estimate and Budget: To the extent feasible, please provide a cost estimate and cost breakdown for the charging/refueling-facility concept. The MSRC understands that these are preliminary costs and subject to change. Please identify the following:

- Estimated capital costs - Include all costs associated with the design and construction of a publicly accessible truck charging/refueling facility. Please list the assumptions used to derive the estimated capital costs.
- Estimated operations costs - Include costs such as energy, staffing, and maintenance. Please state the assumptions used in estimating operations costs and the minimum re-fueling or charging sales needed to cover operating costs.
- Expected commitment of private investment and source of funding.
- Grants or subsidies - Please describe any grants, subsidies, incentives, and/or public utility participation or incentives that are assumed in your budget.

f. Business Plan and Financial Projections: Provide a description of your business model, including proposed revenue-generating mechanisms and cost-recovery strategies. Indicate the level of financial assistance requested from the MSRC. If your business plan relies on additional grant funding, describe the agency or firm's plan for securing such funds. Qualitatively, describe the resources and actions needed to ensure the long-term viability of the charging/refueling facility.

g. Support for Disadvantaged Fleet Operators: Please discuss how your conceptual project or business plan supports the unique needs of smaller, disadvantaged trucking operators, including independent owner operators. Include information to the extent applicable on financing mechanism to support smaller operators, availability of overnight parking, or other support mechanisms that benefit disadvantaged trucking operators.

h. Anticipated Barriers: Identify any barriers – financial, regulatory, technical, etc. – that could preclude your agency or firm's ability to achieve these goals, and describe ways to overcome them.

5. Unique Project Attributes: Please highlight any elements of your organization structure, project concept, business model, or any other element that enhances a potential partnership with the MSRC.

SECTION 4: INFORMATION PACKAGE SUBMITTAL INSTRUCTIONS

The Information Package submittal period for this RFI closes on November 30, 2022, unless extended by the MSRC. Responses should be sent via e-mail to:

Cynthia Ravenstein
MSRC Contracts Administrator
Cynthia@CleanTransportationFunding.org

If you have any questions regarding this Request for Information, please contact Ray Gorski, MSRC Technical Advisor, at rgorski@aqmd.gov or by phone at (909) 396-2479.

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 12

REPORT: Legislative, Public Affairs and Media Report

SYNOPSIS: This report highlights the July 2022 outreach activities of the Legislative, Public Affairs and Media Office, which includes Major Events, Community Events/Public Meetings, Environmental Justice Update, Speakers Bureau/Visitor Services, Communications Center, Public Information Center, Small Business Assistance, Media Relations, and Outreach to Community Groups and Federal, State and Local Governments.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

DA:LTO:AL:bel:ar

BACKGROUND

This report summarizes the activities of the Legislative, Public Affairs and Media Office for July. The report includes Major Events Community Events/Public Meetings; Environmental Justice Update; AB 617; Speakers Bureau/Visitor Services; Communications Center; Public Information Center; Small Business Assistance; Media Relations; and Outreach to Community Groups and Governments.

MAJOR EVENTS (HOSTED AND SPONSORED)

Each year, staff engage in holding and sponsoring several major events throughout South Coast AQMD's four-county jurisdiction to promote, educate, and provide important information to the public regarding reducing air pollution, protecting public health, and improving air quality while minimizing economic impacts.

No major events were hosted or sponsored in July.

COMMUNITY EVENTS/PUBLIC MEETINGS

Staff engage with residents and stakeholders of diverse communities to provide information about the agency, incentive programs, and ways individuals can help reduce air pollution through events and meetings sponsored by South Coast AQMD or in partnership with others. Attendees typically receive the following information:

- Tips on reducing their exposure to smog and its health effects;
- Clean air technologies and their deployment;
- Invitations to or notices of conferences, seminars, workshops, and other public events;
- South Coast AQMD incentive programs;
- Funding/grants opportunities by South Coast AQMD and partner agencies;
- Ways to participate in South Coast AQMD's rules and policy development; and
- Assistance in resolving air pollution-related problems.

Staff attended and/or provided information and updates at the following July events and meetings:

San Gabriel Valley Council of Governments

On July 7, staff participated in a Special Transportation Committee Meeting to provide updates on the 2022 AQMP, smog/wildfire season air alerts, Carl Moyer, Prop 1B and the Clean Truck and Bus Vouchers program (HVIP).

San Gabriel Valley Legislative Reception

On July 12, staff attended an annual Legislative reception hosted by San Gabriel Valley Economic Partnership. Staff shared updates on the 2022 AQMP, Clean Air Awards nominations, Carl Moyer, Prop 1B and other programs.

Inland Empire Fire Safe Alliance

On July 13, staff provided updates at an Inland Empire Fire Safe Alliance meeting on smog and smoke advisories and other programs.

National Association for Industrial and Office Parks

On July 14, staff presented on the Warehouse Actions and Investments to Reduce Emissions Program and available funding programs such as Carl Moyer and HVIP.

Ascon Coordination Committee

On July 21, staff participated in a Ascon Coordination Committee meeting where the Department of Toxic Substances Control presented on review of technical documents on sitewide field investigations, analysis of potential technology and proposed plans for final clean-up phases.

San Fernando Valley Council of Governments
On July 21, staff participated in a virtual board meeting and presented updates on California HVIP Funding and the upcoming EJ Conference and Clean Air Awards.

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

Pacoima Community Initiative
On July 8, staff participated virtually in their monthly meeting. Updates were provided on community events and projects, including information on how to sign-up for the Clean Air Program for Elementary Students (CAPES) and Why Healthy Air Matters (WHAM) educational programs.

House of Representatives Committee on Natural Resources
On July 19, staff participated in a webinar on Natural Resources Committee Chair Raúl M. Grijalva (D-AZ) regarding H.R. 2021, the "Environmental Justice for All Act." Chairman Grijalva discussed a potential legislative timeline and actions for the bill which would fund small air quality grants for environmental justice communities among other provisions.

South Coast AQMD Lunch & Learn
On July 29, staff provided a virtual Lunch and Learn presentation on CAPES and WHAM to share program details, video highlights, and experiences from volunteers.

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

Salton Sea Management Committee Meeting
On July 6, staff participated in a virtual meeting to discuss updates and gather feedback on the Long-Range Plan. Community members expressed concerns about project concepts and incremental funding, sustainable water resources and project scoring.

U.S. Army Corps of Engineers (Corps) Public Meeting
On July 7, staff attended a virtual meeting to receive comments from community members and stakeholders on Salton Sea projects. The Corps released their Draft Environmental Assessment (EA) and proposed Letter of Permission procedures for the State of California's Salton Sea Management Plan Phase 1: 10-Year Plan.

U.S. EPA Guidelines for the Oil and Natural Gas Industry
On July 7, staff attended a webinar hosted by U.S. EPA on their proposed Oil and Natural Gas Industry Emissions Guidelines The purpose was to gather feedback on how to conduct meaningful engagement during the development process.

The Legacy LA Youth Development Corporation
On July 15, staff participated in a virtual meeting and shared grant information on the AB 617 Community Air Protection program. Discussions included building a coalition of stakeholders and partnerships, action plans integrating technical reports and community member recommendations.

South Los Angeles AB 617 Community Steering Committee Co-Lead Meeting
On July 27, staff met with co-leads, Physicians for Social Responsibility - Los Angeles, Strategic Concepts in Organizing and Policy Education, and Watts Clean Air & Energy Committee to discuss next steps, member engagement and outreach plans.

SPEAKERS BUREAU/VISITOR SERVICES
South Coast AQMD regularly receives requests for staff to speak on air quality-related issues from a wide variety of organizations, such as trade associations, chambers of commerce, community-based groups, schools, hospitals, and health-based organizations. South Coast AQMD also hosts visitors from around the world who meet with staff on a wide range of air quality issues.

There were no Speakers Bureau/Visitor Service requests in July.

COMMUNICATION CENTER STATISTICS
The Communication Center handles calls on South Coast AQMD's main line, 1-800-CUT-SMOG®, the Spanish line, and after-hours calls to those lines. Total calls received in the months of July are summarized below:

Calls to South Coast AQMD's Main Line and 1-800-CUT-SMOG®	2,008
Calls to South Coast AQMD's Spanish Line	51
Clean Air Connection	3
Total Calls	2,062

PUBLIC INFORMATION CENTER STATISTICS

The Public Information Center (PIC) handles phone calls for general information. The PIC did not take walk-in requests in July because of the COVID pandemic. Email advisories provided information on upcoming meetings and events, program announcements and alerts on time-sensitive issues. Information for the month of July is summarized below:

Calls Received by PIC	11
Calls to Automated System	174
Total Calls	185
Email Advisories Sent	32,926

SMALL BUSINESS ASSISTANCE

South Coast AQMD notifies local businesses of proposed regulations so they can participate in the agency's rule development process. South Coast AQMD works with other agencies and governments to identify efficient, cost-effective ways to reduce air pollution and shares that information broadly. Staff provides personalized assistance to small businesses both over the telephone and via virtual on-site consultation, as summarized below for July.

- Provided permit application assistance to 151 companies, and
- Processed 59 Air Quality Permit Checklists.

Types of businesses assisted:

Architecture Firms	Engineering Firms	Restaurants
Auto Body Shops	Gas Stations	Retail Facilities
Auto Repair Centers	Gasoline Dispensing Facilities	Telecommunication Center
Construction Firms	Manufacturing Facilities	Warehouses
Dry Cleaners		

MEDIA RELATIONS

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

Major Media Interactions	99
Press Releases	12
News Carousel	3

Major Media Topics:

- **Particulate Advisory:** Pitches were sent to media on the particulate advisory issued for 4th of July resulting in coverage from TV, radio and print media. Staff participated in follow-up interviews with KPCC/The LAist and the Los Angeles Times on health impacts of fireworks smoke.
- **Sterigenics:** Pitches were sent to media on NOV's issued to the Sterigenics facility in Ontario, resulting in coverage from television, radio and print media. Pitches were sent on the Sterigenics Order for Abatement, resulting in coverage from television, radio and print media.
- **Parter Sterilization Services:** Pitches were sent to media on EtO emissions from Parter Sterilization Plant resulting in coverage from television, radio and print media.
- **South Coast AQMD Education Programs:** Pitches were sent to media on the WHAM and CAPES program highlighting last year's achievements.
- **Hyperion Treatment Plant:** Pitches were sent to media on notices of violations issued to Hyperion, resulting in coverage from television, radio and print media. KNX submitted questions regarding the release. A written response was provided.
- **Supreme Court Ruling on U.S. EPA:** The Associated Press inquired about the Supreme Court recent ruling on U.S. EPA's ability to regulate coal fired power plants. Written responses were provided.
- **Health Effects of Wildfire Smoke and South Coast AQMD:** Staff participated in an interview with Univision on the health effects of wildfire smoke as part of a three-part segment.
- **CEQA:** The Desert Sun inquired about the CEQA policy development timeline, when it will take effect and the guidance on cumulative impacts, including those from warehouses. Written responses were provided.
- **2028 Olympics:** LA28 requested contact information for the Executive Officer to extend an event invite. Contact information was provided.
- **Request to Film at Diamond Bar Headquarters:** A Veloz film location scout requested information on the filming of South Coast AQMD's hydrogen fueling station. A follow-up was provided.
- **Documentary on Electric Vehicles:** A documentary filmmaker submitted questions regarding electric passenger vehicles and air quality impacts. The filmmaker was referred to CARB.
- **South Coast AQMD Spotlight Stories:** Reached out to KPAS (City of Pasadena), LA Channel 35, LA Channel 36, ICTV (City of Irvine) and Empire KVCR, regarding possible highlight pieces on South Coast AQMD issues. Working on potential stories on KPAS TV's "Arroyo Live" and Channel 35's "LA City View" programs.
- **Ports Indirect Source Rule (ISR):** The Los Angeles Times requested an update on the Ports ISR and the China Shipping lawsuit. A written response was provided.

- **Railyards and Federal Law:** KCET submitted a follow-up inquiry on the Railyard ISR and the South Coast AQMD's position on federal action. Written responses were provided.
- **Long Beach Water Department:** The Daily Breeze inquired on the Long Beach City Water Department case, on the Hearing Board calendar for July 21. A copy of the petition was provided, and the reporter was advised that the hearing was cancelled.
- **Prescribed Burns:** KCRW inquired about prescribed burns in San Bernardino and requested an interview on burn days and poor air quality. An interview is being arranged.
- **Torrance Refinery:** Bloomberg inquired if South Coast AQMD received recent variance petitions for the Torrance refinery. Written responses were provided.

Press Releases:

- **Violations Issued to Sterilization Facility in Ontario Following Ethylene Oxide Emissions – July 1, 2022 (English and Spanish)**: Informed residents of two NOVs issued to Sterigenics.
- **South Coast AQMD Issues Particulate Advisory Due to 4th of July Fireworks – July 2, 2022 (English and Spanish):** Informed residents of air quality conditions due to fireworks.
- **South Coast AQMD Seeks Order to Reduce Ethylene Oxide Emissions from a Sterilization Facility in Vernon, Protect Public Health – July 15, 2022 (English and Spanish):** Informed residents of South Coast AQMD's petition for Order of Abatement against Sterigenics.
- **South Coast AQMD's Air Quality Education Programs Reach More than 31,000 Students – July 20, 2022 (English and Spanish):** Informed residents of the newest updates for WHAM and CAPES.
- **Six Violations Issued to Hyperion Treatment Plant for Ongoing Odor Issues – July 21, 2022 (English and Spanish):** Informed residents of NOVs issued to Hyperion Treatment Plant.
- **South Coast AQMD Issues Violation to Parter Sterilization Services in Carson for Elevated Levels of Ethylene Oxide – July 29, 2022 (English and Spanish):** Informed residents of the NOV issued to Parter Sterilization Services.

Social Media Posts:

- **AQ Forecast (7/6):** 4,758 Twitter Impressions
- **AQ Forecast (7/10):** 2,102 Twitter Impressions
- **AQ Forecast (7/14):** 2,102 Twitter Impressions
- **AQ Forecast (7/25):** 4,564 impressions

News Carousel:

- **The Replace Your Ride Program is open for new applications – July 13, 2022:** Provided a link to the page.
- **CEMEX USA adds low-emission natural gas trucks to Southern California fleet – July 14, 2022:** Press release highlighting low-emission trucks with quote from South Coast AQMD.
- **Choose a Low-VOC Paint for your Summer Home Projects – July 27, 2022:** Provided a link to the South Coast AQMD's Green Painter's Guide page.

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

Outreach was conducted personally and virtually in July to communicate with elected officials or staff from the following cities:

Alhambra
Anaheim
Arcadia
Azusa
Baldwin Park
Beaumont
Big Bear Lake
Brea
Burbank
Carson
Claremont
Corona
Covina
Culver City
Dana Point
Diamond Bar
El Monte
El Segundo
Fullerton
Garden Grove
Glendale
Glendora
Hemet
Huntington Beach
Industry
Inglewood
Irvine
La Habra
La Verne
Lake Elsinore
Long Beach
Los Angeles
Malibu
Maywood
Menifee
Mission Viejo
Monrovia
Monterey Park
Moreno Valley
Murrieta
Newport Beach
Norco
Ontario
Pasadena
Placentia
Pomona
Redondo Beach
Rialto
Riverside
Rosemead
San Dimas
San Fernando
San Gabriel
San Jacinto
San Juan Capistrano
San Marino
San Pedro
Santa Clarita
Sierra Madre
South El Monte
South Pasadena
Temecula
Temple City
Vernon
Walnut
West Covina
Westminster
Yorba Linda
Yucaipa

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

- U.S. Senator Dianne Feinstein
- U.S. Senator Alex Padilla
- U.S. Representative Lucille Roybal-Allard
- U.S. Representative Nanette Barragán
- U.S. Representative Tony Cárdenas
- U.S. Representative Ted Lieu
- U.S. Representative Norma Torres
- Senator Ben Allen
- Senator Bob Archuleta
- Senator Steven Bradford
- Senator María Elena Durazo
- Senator Lena Gonzalez
- Senator Josh Newman
- Senator Anthony Portantino
- Assembly Speaker Anthony Rendon
- Assembly Member Cristina Garcia
- Assembly Member Eduardo Garcia
- Assembly Member Mike Gipson
- Assembly Member Chris Holden
- Assembly Member Tina McKinnor
- Assembly Member Al Muratsuchi
- Assembly Member Freddie Rodriguez
- Assembly Member Blanca Rubio
- Assembly Member Miguel Santiago

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

BizFed
CALSTART
Coachella Valley Association of Governments
Crestline Chamber of Commerce
Department of Toxic Substance Control
El Monte - South El Monte Chamber of Commerce
Foothill Transit
Inland Action
Inland Empire Fire Safe Alliance
Inland Valley Development Agency
Lake Arrowhead Chamber of Commerce
Los Angeles County Board of Supervisors
NAIOP, Commercial Real Estate Development Association
Omnitrans
Orange County Board of Supervisors
Orange County Council of Governments
Orange County Transportation Authority
Regional Chamber of Commerce - San Gabriel Valley
Riverside County Board of Supervisors

Running Springs Chamber of Commerce
San Bernardino Chamber of Commerce
San Bernardino County Board of Supervisors
San Bernardino County Transportation Authority
San Bernardino International Airport Authority
San Fernando Valley Council of Governments
San Gabriel Valley Council of Governments
San Gabriel Valley Economic Partnership
San Gabriel Valley Public Affairs Network
South Bay Cities Council of Governments
South Pasadena Chamber of Commerce
Southern California Association of Governments
Upper San Gabriel Valley Municipal Water District
Veloz
Western Riverside Council of Governments

In July, staff represented South Coast AQMD and/or provided updates or a presentation to the following community and educational groups and organizations:

Asia Pacific University of Technology & Innovation
Cal Poly Pomona
Citrus College
Clean Healthy Air, Clean Healthy Altadena
Coalition for Clean Air
Los Angeles Unified School District
Los Angeles County Economic Development Corporation
Mt. San Antonio College
Orange County United Way
Pasadena City College
Taking Responsibility and Control 91746 Neighborhood Watch
University of California, Riverside
Western University of Health Sciences

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 13

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the period of July 1 through July 31, 2022.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Cynthia Verdugo-Peralta
Hearing Board Chair

ft

Two summaries are attached: **July 2022 Hearing Board Cases,** and **Rules From Which Variances and Orders for Abatement Were Requested in 2022**. An index of South Coast AQMD Rules is also attached.

There were no appeals filed during the period of July 1 to July 31, 2022.

Report of July 2022 Hearing Board Cases

Case Name and Case No. (South Coast AQMD Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
1. Metropolitan Water District of Southern California Case No. 6191-3 (K. Roberts)	203(b)	Due to unforeseen SCE outage emergency ICE already at 172 hrs., was needed to prevent shut down of critical public service telecommunications infrastructure.	Not Opposed/Granted	Ex Parte EV granted commencing 7/1/22 and continuing for 30 days or until the IV hearing currently scheduled for 7/26/22, whichever comes first.	None.
2. Metropolitan Water District of Southern California Case No. 6191-3 (Consent Calendar)	203(b)	IV needed to continue utilization of emergency ICE to prevent shut down of critical public Service telecommunications infrastructure.	Not opposed/Granted	IV granted commencing 7/26/22 and continuing for 90 days or until the RV hearing currently scheduled for 8/31/22, whichever comes first.	NOx: 0.24 lbs/day CO: 0.22 lbs/day HC: 0.06 lbs/day
3. New NGC, Inc. Case No. 2060-8 (B. Tomasovic)	203(b) 2004(f)(1) 2012(c)((2)(A) 2012(c)(2)(C) 2012, App. A, Ch2, Sec. A.1.g 2012, Att. C, Sec B.1.a 3002(c)(1)	Unexpected failure of CEMS, despite recent, regular maintenance. Time needed to receive, install, and verify the operational status of replacement panel.	Not Opposed/Granted	Ex Parte EV granted commencing 7/5/22 and continuing for 30 days or until the SV hearing currently scheduled for 8/2/22, whichever comes first.	None
4. San Diego Gas & Electric Company Case No. 3607-13 (Consent Calendar)	203(b) 2004(f)(1) 2012(c)(2)(A) 2012(g)(1) 2012(i) 2012, App. A, Ch 2, Sec A.1, 3002(c)(1)	Due to RECLAIM sunset Petitioner cannot comply with emission limits by not having CEMS continuously connected to equipment during project period.	Not Opposed/Granted	Modification of Variance Conditions granted commencing 7/12/22 and continuing through 9/30/22.	None

Case Name and Case No. (South Coast AQMD Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
5. South Coast AQMD vs. County of San Bernardino Case No. 6174-1 (K. Roberts)	1196(d)(1) 1196(f)(8)9a), 1196(f)(10)	Stipulated Mod. O/A. Originally self-reported Fleet Rule 1196 non-compliant. Heavy-Duty Vehicle replacement schedule approval requested.	Stipulated/Modified	Mod. O/A issued commencing 7/722 and continuing through 1/31/24. The H	N/A
6. South Coast AQMD vs. Metropolitan Transportation Authority Case No. 5874-2 (Consent Calendar)	1196(d)(1)	Status/modification hearing regarding Fleet Rule 1196, for a Stipulated Modified Order for Abatement for heavy-duty vehicle replacement schedule.	Stipulated/Modified	Mod. O/A modified commencing 7/28/22 and continuing through 7/31/26. The Hearing Board shall retain jurisdiction over this matter until 7/31/26.	N/A
7. South Orange County Wastewater Authority Case No. 6222-1 (D. Hsu)	203(b) 1470	RV requested due to concerns of high fire danger, future power loss & restoration, resulting in possible raw sewage spillage.	Opposed/Denied	RV denied; Petitioner not in violation of, or imminently in violation of any South Coast AQMD rule.	N/A

Acronyms

CEMS: Continuous Emissions Monitoring System
CO: Carbon Monoxide
EV: Emergency Variance
HC: HydroCarbons
ICE: Internal Combustion Engines
IV: Interim Variance
Mod: Modification
N/A: Not Applicable
NOx: Oxides of Nitrogen
O/A: Order for Abatement
RV: Regular Variance
SCE: Southern California Edison
SV: Short Variance

Rules from which Variances and Orders for Abatement were Requested in 2022													
Rules	**Jan**	**Feb**	**Mar**	**April**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**Total Actions**
202(c)	1												1
203			1		1								2
203(b)	6	3	6	4	2	5	5						31
401(b)			2										2
402					1								1
403(d)(1)(A)		1	1		1								3
403(d)(2)		1	1		1								3
1		1	1		1								3
431.1						1							1
461.1						1							1
462(d)(1)		1											1
462(e)(1)(E)(i)(II)		1											1
1133.1(d)(3)		1	1		1								3
1133.1(d)(4)		1	1		1								3
1133.1(e)		1	1		1								3
1146.2(c)(2)						1							1
1147	1												1
1153.1	1												1
1179.1						1							1
1189(e)(1)						1							1
1196					1								1
1196(d)(1)							2						2
1196(f)(8)(a)							1						1
1196(f)(10)							1						1
1469.1(d)	1			1									2
1470					1	1	1						3
1470(c)(4)A)	1												1
2004(f)(1)	5		3	1	1	2	2						14
2011(c)(2)(A)	1												1
2011(c)(3)(A)	1												1
2011(e)(1)	1												1
2011(k)	1												1
2011, APP. A, Ch 2-A, Att. C	1												1

Rules from which Variances and Orders for Abatement were Requested in 2022													
Rules	**Jan**	**Feb**	**Mar**	**April**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**Total Actions**
2012(c)(2)(A)	1		2			1	2						6
2012(c)(2)(C)							1						1
2012(c)(3)(A)	1		1										2
2012(g)(1)	1		2			1	1						5
2012(i)			1			1	1						3
2012(m)	1												1
2012, APP. A, Ch 2, §A.1			1			1	1						3
2012, APP. A, Ch 2. A.16	1												1
2012, APP. A, Ch 2-A, Att. C	1												1
2012, Table 1			1										1
2012, APP. A, Ch 2, Table 2-A			1										1
2012, Att. C, Sec B.1.a							1						1
3002(c)(1)	5		5	1	1	2	2						16
H&S Code §41700					1								1
H&S Code §41701			2										2

SOUTH COAST AQMD RULES AND REGULATIONS INDEX
2022 HEARING BOARD CASES AS OF JULY 31, 2022

REGULATION II – PERMITS

Rule 202	Temporary Permit to Operate
Rule 203	Permit to Operate

REGULATION IV – PROHIBITIONS

Rule 402	Nuisance
Rule 403	Fugitive Dust
Rule 431.1	Sulfur Content of Gaseous Fuels
Rule 461.1	Gasoline Transfer and Dispensing for Mobile Fueling Operations
Rule 462	Organic Liquid Loading

REGULATION XI - TOXICS AND OTHER NON-CRITERIA POLLUTANTS

Rule 1133.1	Chipping & Grinding Activities
Rule 1146.2	Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters
Rule 1147	NOx Reductions from Miscellaneous Sources
Rule 1153.1	Emissions of Oxides of Nitrogen from Commercial Food Ovens
Rule 1179.1	Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities
Rule 1189	Emissions from Hydrogen Plant Process Vents
Rule 1196	Clean On-road Heavy-Duty Fleet Vehicles

REGULATION XIV - TOXICS AND OTHER NON-CRITERIA POLLUTANTS

Rule 1469.1	Spraying Operations Using Coatings Containing Chromium
Rule 1470	Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

REGULATION XX – REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

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

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 14

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This report summarizes monthly penalties and legal actions filed by the General Counsel's Office from June 1, 2022 through July 31, 2022. An Index of South Coast AQMD Rules is attached with the penalty report.

COMMITTEE: Stationary Source, August 19, 2022, Reviewed

RECOMMENDED ACTION:
Receive and file.

Bayron T. Gilchrist
General Counsel

BTG:ew

Civil Filings	Violations
1. Seyed Alireza Riazi dba Beltone Cleaners Los Angeles Superior Court – Small Claims Case No. 22IWSC00758; Filed 6.8.22 (GV) P69557, P69562 R. 1402 - Control of Toxic Air Contaminants from Existing Sources R. 1421 - Control of Perchloroethylene Emissions from Dry Cleaning Operations	2
	2 Violations

Attachments

- June and July 2022 Penalty Reports
- Index of South Coast AQMD Rules and Regulations

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

Settlement Penalty Report (06/01/2022 - 06/30/2022)

Total Penalties

Civil Settlement:	$226,500.00
MSPAP Settlement:	$14,383.00
Total Cash Settlements:	$240,883.00
Fiscal Year through 06/30/2022 Cash Total:	$4,875,192.01

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
Civil						
155055	BALI CONSTRUCTION INC	1403, 40 CFR 61.145	06/15/2022	SH	P72911, P72912, P72913, P72914, P72917	$8,000.00
191590	CALTRANS DISTRICT 7	1403, 40 CFR 61.145	06/28/2022	SH	P72957	$5,000.00
172250	CORONA FUELING & ELECTRIC, INC	1166, 461	06/15/2022	KCM	P66370, P70065, P70159	$1,800.00
185115	GRIFFITH COMPANY	1166, 221	06/15/2022	DH	P67482, P67489, P67493	$6,400.00
191220	JIMS FALLBROOK MARKET	222, 401, 402, H&S 41700	06/17/2022	SP	P67719, P67729, P74341, P74347	$4,300.00
149450	LOS ANGELES WORLD AIRPORT	461	06/15/2022	EC	P67720	$1,300.00
53555	OR. CO., WATER DIST	461	06/15/2022	JL	P69772	$1,200.00
140552	PERFORMANCE COMPOSITES, INC	3002(c)(1), 3004	06/15/2022	KCM	P65869	$1,500.00
191589	SECURITY PAVING COMPANY, INC.	1403, 40 CFR 61.145	06/15/2022	SH	P72955	$5,000.00
9720	STILES ANIMAL REMOVAL INC	402, H&S 41700	06/15/2022	SP	P65390	$6,000.00
800267	TRIUMPH PROCESSING, INC.	1469, 1469.1, 3002	06/15/2022	NS/WW	P64523, P65408, P65409, P66274, P66293	$186,000.00
Total Civil Settlements : $226,500.00						
MSPAP						
126527	A & R AUTOMOTIVE BODY	1171(c)(1)	06/16/2022	GC	P69117	$1,600.00
153912	A M OIL	461, H&S 41960	06/16/2022	GC	P68445	$765.00
172613	ALL & ONE AUTO CENTER AND DISMANTLING	1151	06/22/2022	GC	P69378	$675.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
176259	AT&T CELL TOWER	203(b)	06/16/2022	GC	P69377	$800.00
163454	BIXBY KNOLLS CLEANERS, LINH CAO	1421	06/16/2022	GC	P69523	$300.00
163505	BROADWAY OIL 176 INC	203(b)	06/16/2022	GC	P67243	$440.00
67762	COLTON CITY	461	06/16/2022	GC	P68714	$638.00
178529	DESERT HOT SPRINGS OIL CORP BAHMAN NATAN	461	06/16/2022	GC	P70153	$800.00
162614	DHARAM V. BHATIA	461(c)(3)(Q)	06/21/2022	GC	P69612, P69617	$600.00
170704	ELMESIRY, INC SM OIL	203, 461	06/17/2022	GC	P68437	$595.00
176582	FEDEX PACKAGE HANDLING SYSTEMS	203(a)	06/21/2022	GC	P69376	$800.00
190421	FIRST RC CORP	403	06/21/2022	GC	P68269	$1,920.00
182344	FRONTIER CALIF, INC SANTA MONICA TOLL	1415	06/21/2022	GC	P65082	$1,000.00
77937	FULLERTON CITY HALL	1146.2	06/21/2022	GC	P69757	$1,600.00
190268	GENESIS AUTO	203(a), 1151(e)(1)	06/21/2022	GC	P68072	$1,600.00
171711	UPLAND ROCK, INC	13 CCR 2459	06/15/2022	TCF	P68375	$250.00

Total MSPAP Settlements : $14,383.00

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

Settlement Penalty Report (07/01/2022 - 07/31/2022)

Total Penalties

Civil Settlement: $1,594,990.00

Total Cash Settlements: $1,594,990.00

Fiscal Year through 07/31/2022 Cash Total: $1,594,990.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
Civil						
16353	BELLFLOWER HI SCH	1403, 40 CFR 61.145	07/07/2022	EC	P65048	$5,100.00
800189	DISNEYLAND RESORT	2004	07/28/2022	SH	P66922	$2,500.00
180908	ECO SERVICES OPERATIONS CORP.	2004	07/29/2022	SH	P69364	$2,750.00
185689	ECOLOGY RECYCLING SERVICES, LLC	461(c)(3)(Q)	07/19/2022	KCM	P65868	$1,090.00
189600	HERBARIUM	203, 13 CCR 2456	07/21/2022	JL	P62769	$5,000.00
191190	JAMES TRUE VALUE HARDWARE	1143	07/29/2022	ND	P69059	$4,000.00
181667	TORRANCE REFINING COMPANY LLC	3002(c)(1)	07/22/2022	DH	P65616	$250,000.00
181667	TORRANCE REFINING COMPANY LLC	203, 221, 463, 1105.1, 1114, 1118, 1173, 1176, 2004, 2012, 3002	07/22/2022	DH	P65637, P67964, P67965, P68205, P68206, P74057, P74058	$1,322,800.00
143046	WAYNE PERRY INC	221(b), 1166	07/07/2022	KCM	P67421	$1,750.00
Total Civil Settlements: $1,594,990.00						

SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX

JUNE 2022 PENALTY REPORT

REGULATION II - PERMITS

Rule 203	Permit to Operate
Rule 221	Plans
Rule 222	Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II

REGULATION IV - PROHIBITIONS

Rule 401	Visible Emissions
Rule 402	Nuisance
Rule 403	Fugitive Dust
Rule 461	Gasoline Transfer and Dispensing

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1146.2	Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers
Rule 1151	Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations
Rule 1166	Volatile Organic Compound Emissions from Decontamination of Soil
Rule 1171	Solvent Cleaning Operations

REGULATION XIV - TOXICS

Rule 1403	Asbestos Emissions from Demolition/Renovation Activities
Rule 1415	Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems
Rule 1421	Control of Perchloroethylene Emissions from Dry Cleaning Operations
Rule 1469	Hexavalent Chromium Emissions from Chrome Plating and Chromic Acid Anodizing Operations
Rule 1469.1.	Spraying Operations Using Coatings Containing Chromium

REGULATION XXX - TITLE V PERMITS

Rule 3002	Requirements
Rule 3004	Permit Types and Content

CODE OF FEDERAL REGULATIONS

40 CFR 61.145	Standard for Demolition and Renovation

CALIFORNIA HEALTH AND SAFETY CODE

41700	Prohibited Discharges
41960	Certification of Gasoline Vapor Recovery System

CALIFORNIA CODE OF REGULATIONS

13 CCR 2459	Portable Equipment Notification

SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX

JULY 2022 PENALTY REPORT

REGULATION II - PERMITS

Rule 203	Permit to Operate
Rule 221	Plans

REGULATION IV - PROHIBITIONS

Rule 461	Gasoline Transfer and Dispensing
Rule 463	Storage of Organic Liquids

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1105.1	Reduction of PM and Ammonia Emissions from Fluid Catalytic Cracking Units
Rule 1114	Petroleum Refinery Coking Operations (MCS-01)
Rule 1118	Emissions from Refinery Flares
Rule 1143	Consumer Paint Thinners & Multi-Purpose Solvents
Rule 1166	Volatile Organic Compound Emissions from Decontamination of Soil
Rule 1173	Fugitive Emissions of Volatile Organic Compounds
Rule 1176	Sumps and Wastewater Separators

REGULATION XIV - TOXICS

Rule 1403	Asbestos Emissions from Demolition/Renovation Activities

REGULATION XX REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	Requirements
Rule 2012	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

REGULATION XXX - TITLE V PERMITS

Rule 3002	Requirements

CODE OF FEDERAL REGULATIONS

40 CFR 61.145	Standard for Demolition and Renovation

CALIFORNIA CODE OF REGULATIONS

13 CCR 2456	Portable Equipment Engine Requirements

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 15

REPORT: Lead Agency Projects and Environmental Documents Received

SYNOPSIS: This report provides a listing of CEQA documents received by South Coast AQMD between July 1, 2022 and July 31, 2022, and those projects for which South Coast AQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, August 19, 2022, Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

SR:MK:MM:SW:MC

CEQA Document Receipt and Review Logs (Attachments A and B) – Each month, South Coast AQMD receives numerous CEQA documents from other public agencies on projects that could adversely affect air quality. A listing of all documents received during the reporting period July 1, 2022 to July 31, 2022 is included in Attachment A. A list of active projects for which South Coast AQMD staff is continuing to evaluate or prepare comments for the June reporting period is included as Attachment B. A total of 46 CEQA documents were received during this reporting period and 13 comment letters were sent.

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

with potential air quality-related environmental justice concerns. The public may contact South Coast AQMD about projects of concern by the following means: in writing via fax, email, or standard letters; through telephone communication; and as part of oral comments at South Coast AQMD meetings or other meetings where South Coast AQMD staff is present. The attachments also identify, for each project, the dates of the public comment period and the public hearing date, if applicable. Interested parties should rely on the lead agencies themselves for definitive information regarding public comment periods and hearings as these dates are occasionally modified by the lead agency.

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

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

During the period of July 1, 2022 to July 31, 2022, South Coast AQMD received 46 CEQA documents. Of the 53 documents listed in Attachments A and B:

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

(The above statistics are from July 1, 2022 to July 31, 2022 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 South Coast AQMD's CEQA webpage at the following internet address: http://www.aqmd.gov/home/regulations/ceqa/commenting-agency.

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

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

Attachments

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

ATTACHMENT A*
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Goods Movement **LAC220719-01** Berths 187-191 (VOPAK) Liquid Bulk Terminal Wharf Improvements and Cement Terminal Project	The project consists of seismic and structural improvements to an existing wharf, resuming storage activities, and an issuance of a 30 year lease on 40.9 acres. The project is located near the northwest corner of Canal Street and Yacht Street within the Port of Los Angeles in the designated AB 617 Wilmington, Carson, West Long Beach community. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/LAC220719-01.pdf Comment Period: 7/7/2022 - 8/22/2022 Public Hearing: 7/20/2022	Notice of Preparation	City of Los Angeles Harbor Department	South Coast AQMD staff commented on 7/26/2022
Warehouse & Distribution Centers **RVC220712-06** OLC3 Ramona Expressway and Perris Boulevard Commercial Warehouse	The project consists of construction of a 774,419 square foot warehouse and 65,000 square feet of retail and restaurant uses on 36.3 acres. The project is located near the northeast corner of Perris Boulevard and Ramona Expressway. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220712-06.pdf Comment Period: 7/8/2022 - 8/8/2022 Public Hearing: 7/20/2022	Notice of Preparation	City of Perris	South Coast AQMD staff commented on 7/26/2022
Warehouse & Distribution Centers **RVC220726-06** The Orchard Logistics Center Project	The project consists of construction of a 610,000 square foot warehouse on 30.91 acres. The project is located at 38021 State Route 60 on the southeast corner of State Route 60 and Western Knolls Avenue. Reference RVC220628-04 and RVC220316-01 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/august/RVC220726-06.pdf Comment Period: 7/20/2022 - 8/18/2022 Public Hearing: 8/3/2022	Notice of Preparation	City of Beaumont	South Coast AQMD staff commented on 8/5/2022
Warehouse & Distribution Centers **RVC220726-08** Northern Gateway Commerce Centers II#	The project consists of construction of a 1,316,741 square foot warehouse on 70.04 acres. The project is located near the southeast corner of Ethane Road and Hulls Street. Reference RVC211201-01, RVC210819-18, and RVC210819-17 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/august/RVC220726-08.pdf Comment Period: 7/22/2022 - 8/22/2022 Public Hearing: 8/11/2022	Amended Notice of Preparation	City of Menifee	South Coast AQMD staff commented on 8/5/2022

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

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

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **RVC220728-01** Ramona-Indian Warehouse Project	The project consists of construction of a 232,575 square foot warehouse and a hotel with 125 rooms on 15 acres. The project is located on the northeast corner of Ramona Expressway and Indian Avenue. Reference RVC190625-05 Comment Period: 7/29/2022 - 8/29/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Perris	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **RVC220728-02** Beaumont Summit Station#	The project consists of construction of 2,557,465 square feet of warehouses, a 100,000 square foot hotel with 220 rooms, 50,000 square feet of commercial uses, 50,000 square feet of office uses, and 30.6 acres of open space on 188 acres. The project is located on the southeast corner of Interstate 10 and Cherry Valley Boulevard. Reference RVC220421-04, RVC211228-07, RVC210921-09, and RVC210825-01 Comment Period: N/A Public Hearing: N/A	Notice of Availability of a Final Environmental Impact Report	City of Beaumont	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **SBC220701-02** Duke Warehouse at Slover and Alder Project	The project consists of construction of a 259,481 square foot warehouse on 13.23 acres. The project is located on the southeast corner of Slover Avenue and Alder Avenue in the community of Bloomington. Reference SBC211223-05 Comment Period: 6/30/2022 - 8/22/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	County of San Bernardino	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **SBC220715-03** Durst Drive Warehouse	The project consists of construction of a 201,239 square foot warehouse on 9.4 acres. The project is located on the northeast corner of Cedar Avenue and Durst Drive. Comment Period: 7/13/2022 - 8/1/2022 Public Hearing: N/A	Mitigated Negative Declaration	City of Rialto	Document reviewed - No comments sent for this document received

- Project has potential environmental justice concerns due to the nature and/or location of the project.
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ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **SBC220715-05** NWC of 3rd Street and Central Avenue Warehouse Project	The project consists of construction of a 54,330 square foot warehouse on 3.01 acres. The project is located on the northwest corner of Third Street and Central Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220715-05.pdf Comment Period: 7/13/2022 - 8/1/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Highland	South Coast AQMD staff commented on 7/29/2022
Industrial and Commercial **LAC220715-02** TVC 2050 Project	The project consists of demolition of 495,860 square feet of existing structures, and construction of 1,874,000 square feet of commercial uses and 20,000 square feet of retail uses on 25 acres. The project is located on the southeast corner of West Beverly Boulevard and North Fairfax Avenue in the community of Wilshire. Reference LAC210706-06 Comment Period: 7/14/2022 - 8/29/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Los Angeles	Under review, may submit written comments
Industrial and Commercial **LAC220726-09** Crossings Campus (formerly Project Crossings)	The project consists of demolition of 105,047 square feet of existing buildings and construction of two office buildings totaling 536,000 square feet with subterranean parking on 4.46 acres. The project is located on the northeast corner of National Boulevard and Washington Boulevard. Reference LAC211104-01 Comment Period: 7/21/2022 - 9/6/2022 Public Hearing: 8/16/2022	Draft Environmental Impact Report	City of Culver City	Under review, may submit written comments
Industrial and Commercial **RVC220705-03** Conditional Use Permit No. 190059	The project consists of construction of an 18,070 square foot industrial building for cannabis manufacturing and distribution on 5.03 acres. The project is located near the southeast corner of Willow Creek Road and Red Mountain Road in the community of Rancho California. Comment Period: 7/1/2022 - 8/2/2022 Public Hearing: 8/3/2022	Notice of Intent to Adopt a Mitigated Negative Declaration	County of Riverside	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Industrial and Commercial **RVC220705-07** Pre-Application Review No. 220030 (PAR220030)#	The project consists of construction of 11 industrial buildings totaling 16,582,535 square feet on 489.46 acres. The project is located on the northeast corner of Interstate 15 and Temescal Canyon Road in the community of Temescal Canyon. Comment Period: 6/23/2022 - 6/30/2022 Public Hearing: 6/30/2022	Notice of Availability of a Draft Mitigated Negative Declaration	County of Riverside	Document reviewed - No comments sent for this document received
Industrial and Commercial **RVC220712-07** CUP 22-05189	The project consists of construction of an 18,347 square foot hydrogen station on 2.78 acres. The project is located near the northwest corner of Mapes Road and Goetz Road. Comment Period: 7/7/2022 - 7/28/2022 Public Hearing: N/A	Site Plan	City of Perris	Document reviewed - No comments sent for this document received
Waste and Water-related **LAC220726-01** OU2 Groundwater Containment Facility	The project consists of construction of a 48,515 square foot groundwater treatment facility and seven groundwater wells with a combined daily consumption of 14,595 gallons a day on 3.23 acres. The project is located at 10051 Santa Fe Springs Road on the southwest corner of Santa Fe Springs Road and McCann Drive. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/august/LAC220726-01.pdf Comment Period: 7/19/2022 - 8/17/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Santa Fe Springs	South Coast AQMD staff commented on 8/10/2022
Waste and Water-related **ORC20719-05** Anita Street Wet Well and Coastal Accessway Improvement Project	The project consists of construction of a groundwater well 25 feet in depth on 0.2 acres. The project is located near the southwest corner of Anita Street and Gaviota Drive. Comment Period: 7/18/2022 - 8/17/2022 Public Hearing: 9/21/2022	Mitigated Negative Declaration	City of Laguna Beach	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **RVC220726-11** EM-11 Transmission Pipeline and Pump Station Project	The project consists of construction of a turnout treatment facility, a water pump station with a capacity of 140 cubic feet per second, and 9.9 miles of water pipelines ranging from 54 inches to 72 inches in diameter. The project is located near the northwest corner of Auld Road and Washington Street in unincorporated areas of Riverside County between the cities of Murrieta and Hemet. Comment Period: 7/25/2022 - 8/23/2022 Public Hearing: N/A	Notice of Preparation	Eastern Municipal Water District	Document reviewed - No comments sent for this document received
Waste and Water-related **SBC220719-06** PK 1 Chino Town Square (Former Dryclean USA)	The project consists of installation of soil vapor extraction system to clean up soil contaminated with volatile organic compounds and a land use covenant to restrict future land uses to commercial uses on 7.41 acres. The project is located at 5483-B Philadelphia Street on the southeast corner of Philadelphia Street and Central Avenue in the City of Chino. Comment Period: 7/18/2022 - 8/17/2022 Public Hearing: N/A	Draft Removal Action Workplan	Department of Toxic Substances Control	Under review, may submit written comments
Waste and Water-related **SBC220726-05** City of Chino State Street Water Treatment Project	The project consists of construction of a groundwater treatment facility with the capacity of 4,000 gallons per minute, water pipelines, and improvements on 4.51 acres. The project is located at 10762 South Benson Avenue on the southwest corner of South Benson Avenue and West State Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/august/sbc220726-05-mnd-city-of-chin Comment Period: 7/15/2022 - 8/15/2022 Public Hearing: 9/20/2022	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Chino	South Coast AQMD staff commented on 8/10/2022
Transportation **LAC220705-04** Valley Boulevard and Del Mar Avenue Intersection Improvements	The project consists of construction of multiple roadway improvements to the Valley Boulevard and Del Mar Avenue intersection. Comment Period: 6/27/2022 - 7/29/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of San Gabriel	Document reviewed - No comments sent for this document received

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ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Transportation **ORC220705-05** I-5 Improvement Project from San Diego County Line to Avenida Pico	The project consists of construction of high occupancy toll lanes on a 3.4 mile segment of Interstate 5 (I-5). The project is located between the Interstate 5 and Avenida Pico interchange [12-ORA-5, Post Mile (PM) 3.4] in Orange County and Orange and San Diego county line (11-SD-5, PM 71.0). http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/ORC220705-05.pdf Comment Period: 6/30/2022 - 8/15/2022 Public Hearing: 7/28/2022	Notice of Preparation	California Department of Transportation	South Coast AQMD staff commented on 7/12/2022
Transportation **ORC220726-13** I-5 Managed Lanes Project (SR-55 to Orange County/Los Angeles County Line)	The project consists of improvements of existing high occupancy vehicle lanes. The project is located on Interstate 5 from Red Hill avenue (Post Mile [PM] 29.1) to Orange County Line (PM 0.5) and Los Angeles County Line (PM 0.0) to the City of La Mirada (PM 44.4) and traverses through cities of Tustin, Santa Ana, Orange, Anaheim, Fullerton, Buena Park, and La Mirada. Comment Period: 5/9/2022 - 6/8/2022 Public Hearing: 5/24/2022	Notice of Preparation (Received after close of comment period)	California Department of Transportation	Document reviewed - No comments sent for this document received
Institutional (schools, government, etc.) **LAC220715-01** Fire Station No. 9 Project at 4101 Long Beach Boulevard	The project consists of construction of a 12,780 square foot fire station on 0.4 acres. The project is located on the southwest corner of Long Beach Boulevard and East Randolph Place in the designated AB 617 Wilmington, Carson, West Long Beach community. Reference LAC220222-01 Comment Period: 7/15/2022 - 8/29/2022 Public Hearing: N/A	Notice of Preparation	City of Long Beach	Document reviewed - No comments sent for this document received
Retail **LAC220714-01** ENV-2021-9001: Sylmar Self Storage Building	The project consists of construction of a 130,094 square foot self storage facility on 87,337 square feet. The project is located at 12121 West Foothill Boulevard on the southeast corner of Foothill Boulevard and Carl Street in the community of Sunland-Tujunga- Lakeview Terrace-Shadow Hills–East La Tuna Canyon. Comment Period: 7/14/2022 - 8/15/2022 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent for this document received

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ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Retail **RVC220712-05** PAR No. 220039	The project consists of construction of a 21,700 square foot storage facility on 8.17 acres. The project is located on the northeast corner of El Sobrante Road and La Sierra Avenue in the community of Lake Matthews and Woodcrest. Comment Period: 6/30/2022 - 7/7/2022 Public Hearing: 7/7/2022	Site Plan (Received after close of comment period)	County of Riverside	Document reviewed - No comments sent for this document received
Retail **RVC220715-04** Conditional Use Permit No. 220019	The project consists of construction of 2,800 square feet of restaurant uses, a hotel with 24 rooms on one acre. The project is located near the southwest corner of Grand Avenue and Blackwell Road in the community of Elsinore. Comment Period: 7/8/2022 - 7/21/2022 Public Hearing: 7/21/2022	Site Plan	County of Riverside	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220701-01** Norwalk Entertainment District-Civic Center Specific Plan	The project consists of construction of 350 residential units and 110,000 square feet of commercial uses on 13.2 acres. The project is located on the southeast corner of Imperial Highway and Norwalk Boulevard. Reference LAC220208-07 Comment Period: 7/1/2022 - 8/15/2022 Public Hearing: 8/3/2022	Notice of Availability of a Draft Environmental Impact Report	City of Norwalk	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220705-01** Ocean Avenue Project	The project consists of demolition of 44,450 square feet of existing structures, and construction of a 122,400 square foot building with 120 hotel rooms and 100 residential units, 36,110 square feet of commercial uses, and 35,500 square feet of public amenities on 1.2 acres. The project is located on the northeast corner of Ocean Avenue and Santa Monica Boulevard. Reference LAC200519-01 and LAC190102-06 Comment Period: N/A Public Hearing: 7/14/2022	Notice of Availability of a Final Environmental Impact Report	City of Santa Monica	Document reviewed - No comments sent for this document received

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ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **LAC220705-08** Grand Estates Project	The project consists of construction of 12 residential units and 16 acres of open space on 27 acres. The project is located near the northeast corner of West Palm Drive and Grand Avenue. Comment Period: 6/30/2022 - 7/29/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Glendora	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220712-03** Norwalk Transit Village	The project consists of construction of 770 residential units, 23,500 square feet of commercial and civic uses, a hotel with 150 rooms, and 4.3 acres of open space on 32.3 acres. The project is located at 13200 Bloomfield Avenue on the northeast corner of Bloomfield Avenue and Dare Street. Comment Period: 7/8/2022 - 8/8/2022 Public Hearing: 7/21/2022	Notice of Preparation	City of Norwalk	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220726-02** Tentative Tract Map No. 82772	The project consists of subdivision of 2.12 acres for future development of five residential units. The project is located at 20836 Marcon Drive near the southwest corner of Marcon Drive and Gartel Drive. Comment Period: 7/21/2022 - 8/22/2022 Public Hearing: N/A	Site Plan	City of Walnut	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220726-07** 5420 Sunset	The project consists of demolition of 100,796 square feet of existing commercial uses, and construction of an 845,868 square foot building with 735 residential units and subterranean parking on 6.75 acres. The project is located on the southeast corner of Sunset Boulevard and Western Avenue in the community of Hollywood. Reference LAC210819-10 and LAC170628-02 Comment Period: N/A Public Hearing: 8/17/2022	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent for this document received

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ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **RVC220706-01** Xenia Apartments	The project consists of construction of 192 residential units totaling 476,164 square feet on 10.93 acres. The project is located on the southeast corner of Xenia Avenue and East Eighth Street. Reference RVC220301-08 Comment Period: 7/6/2022 - 7/14/2022 Public Hearing: 7/14/2022	Site Plan	City of Beaumont	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **RVC220719-03** Conditional Use Permit No. 03772R1	The project consists of construction of 1,440 square feet to be added to an existing 4,009 square foot senior living facility with 30 rooms on 0.39 acres. The project is located near the northwest corner of Rudell Road and East Ontario Avenue in the community of Temescal Canyon. Comment Period: 7/13/2022 - 7/21/2022 Public Hearing: 7/21/2022	Site Plan	County of Riverside	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **RVC220726-03** Wood and Lurin Planned Residential Development Project	The project consists of construction of 96 residential units and 61,909 square feet of recreational uses on 18.92 acres. The project is located on the southeast corner of Krameria Avenue and Wood Road. Comment Period: 7/19/2022 - 8/18/2022 Public Hearing: 8/3/2022	Notice of Preparation	City of Riverside	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **RVC220726-10** PAR220032	The project consists of subdivision of five acres into four parcels for future development of residential uses. The project is located on the southwest corner of Avenue D and Birch Street in the community of Lake Mathews and Woodcrest. Comment Period: 7/20/2022 - 7/28/2022 Public Hearing: 7/28/2022	Site Plan	County of Riverside	Document reviewed - No comments sent for this document received

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ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **SBC220705-06** Rose Glen Specific Plan Residential Project	The project consists of construction of 64 residential units and 8,904 square feet of open space on 4.84 acres. The project is located at 1400 East Arrow Highway near the southwest corner of East Arrow Highway and Grove Avenue. Comment Period: 7/5/2022 - 8/4/2022 Public Hearing: 8/24/2022	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Upland	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **SBC220712-04** Downtown San Bernardino Specific Plan	The project consists of construction of 14,194 residential units and 11,780,515 square feet of commercial and retail uses on 621 acres. The project is located on the southeast corner of Interstate 215 and Eight Street in the designated AB 617 San Bernardino, Muscoy community. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220712-04.pdf Comment Period: 7/13/2022 - 8/11/2022 Public Hearing: 7/25/2022	Notice of Preparation	City of San Bernardino	South Coast AQMD staff commented on 7/26/2022
General Land Use (residential, etc.) **SBC220715-06** City Center Project	The project consists of construction of 131 residential units and 10,550 square feet of restaurant uses on 3.03 acres. The project is located on the northwest corner of Eureka Street and Brookside Avenue. Comment Period: 7/13/2022 - 8/12/2022 Public Hearing: 8/23/2022	Notice of Availability of a Sustainable Communities Environment Assessment	City of Redlands	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **SBC220719-02** The Grand Project	The project consists of construction of 146 residential units, 22,948 square feet of recreational uses, and subterranean parking on 1.49 acres. The project is located on the northeast corner of Eureka Boulevard and Redlands Boulevard. Comment Period: 7/14/2022 - 8/12/2022 Public Hearing: 8/23/2022	Notice of Availability of a Sustainable Communities Environment Assessment	City of Redlands	Document reviewed - No comments sent for this document received

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ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **SBC220719-04** Yucaipa Valley Wine Country Specific Plan	The project consists of construction of 1,091 residential units, agriculture uses and restore riparian habitat on 1,093.6 acres. The project is located on the northeast corner of Oak Glen Road and Cherry Croft Drive. Comment Period: 7/14/2022 - 8/15/2022 Public Hearing: 7/27/2022	Notice of Preparation	City of Yucaipa	Document reviewed - No comments sent for this document received
Plans and Regulations **LAC220726-12** Burbank Housing Element and Safety Element Update	The project consists of updates to the City's General Plan Housing Element to assess housing needs, densities, and development standards with a planning horizon of 2029. The project encompasses 17.1 square miles and is bounded by City of Los Angeles to the north, east, and west and State Route 134 to the south. Reference LAC220201-06 and LAC210325-01 Comment Period: 7/22/2022 - 9/6/2022 Public Hearing: 8/22/2022	Notice of Availability of a Recirculated Draft Environmental Impact Report	City of Burbank	Document reviewed - No comments sent for this document received
Plans and Regulations **ORC220705-02** City of Huntington Beach 2021-2029 Housing Element Updated Implementation Program	The project consists of updates to the City's General Plan Housing Element to assess housing needs, densities, and development standards with a planning horizon of 2029. The project encompasses 28 square miles and is bounded by unincorporated areas of Orange County to the north, cities of Westminster, Fountain Valley, and Costa Mesa to the east, City of Newport Beach to the south, and the Pacific Ocean to the west. Reference ORC210805-06 Comment Period: 6/29/2022 - 8/15/2022 Public Hearing: N/A	Notice of Availability of a Draft Subsequent Environmental Impact Report	City of Huntington Beach	Document reviewed - No comments sent for this document received
Plans and Regulations **RVC220712-01** Winchester Community Plan (GPA No. 1207)	The project consists of development of land use designations, community design guidelines, and zoning consistency program to identify and guide future land use growth opportunities in residential, commercial, mixed use, industrial, agricultural, and open space uses on 23,153 acres. The project is bounded by Stetson Road and Double Butt to the north, Diamond Valley Lake and City of Hemet to the east, Scott Road to the south, and Briggs Road to the west in the unincorporated areas of Riverside County between the cities of Menifee and Hemet. Reference RVC190418-05 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220712-01.pdf Comment Period: 7/5/2022 - 8/19/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	County of Riverside	South Coast AQMD staff commented on 7/26/2022

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Plans and Regulations **RVC220712-02** City of Corona General Plan Housing Element Rezoning Program Update	The project consists of updates to the City's General Plan Housing Element to assess housing needs, densities, and development standards with a planning horizon of 2029. The project encompasses 39.55 square miles and is bounded by City of Norco to the north, community of El Cerrito to the east, community of Arcilla to the south, and City of Chino Hills to the west. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220712-02.pdf Comment Period: 7/1/2022 - 8/1/2022 Public Hearing: N/A	Notice of Preparation	City of Corona	South Coast AQMD staff commented on 7/26/2022
Plans and Regulations **SBC220726-04** Redlands General Plan Transit Villages District and Specific Plan	The project consists of development of design guidelines and standards to guide future transportation, conservation, and infrastructure development with a planning horizon of 2035. The project encompasses 1.48 square miles and is bounded by Sylvan Boulevard to the north, Olive Avenue to the east, Alabama Street to the south, and Colton Avenue to the west. Reference SBC210901-08 Comment Period: 7/21/2022 - 9/6/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Redlands	Under review, may submit written comments

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

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

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **RVC220621-08** Plot Plan PEN21-0079 (PEN20-0162, PEN20-0163)	The project consists of construction of a 164,187 square foot warehouse on 8.2 acres. The project is located on the northeast corner of Alessandro Boulevard and Day Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220621-08.pdf Comment Period: 6/16/2022 - 7/6/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Moreno Valley	South Coast AQMD staff commented on 7/5/2022
Warehouse & Distribution Centers **SBC220602-01** Speedway Commerce Center II Specific Plan#	The project consists of construction of 6,600,000 square feet of warehouses, 261,360 square feet of commercial uses, 82.5 acres of parking uses, 33.7 acres of roadways and infrastructure, and 9.4 acres of open space on 433 acres. The project is located on the southwest corner of Whittram Avenue and Cherry Avenue in the City of Fontana. Reference SBC211221-02 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220602-01.pdf?sfvrsn= Comment Period: 6/1/2022 - 7/18/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	County of San Bernardino	South Coast AQMD staff commented on 7/15/2022
Warehouse & Distribution Centers **SBC220621-09** Airport Gateway Specific Plan#	The project consists of construction of 10,597,178 square feet of business park uses, a 75,000 square foot hotel with 150 rooms, 7,802,541 square feet of warehouse uses, 142,792 square feet of commercial uses, and 209.65 acres of road improvements on 679 acres. The project is located on the northeast corner of Interstate 10 and Tippecanoe Avenue in the cities of San Bernardino and Highland. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220621-09.pdf Comment Period: 6/16/2022 - 7/18/2022 Public Hearing: 7/7/2022	Notice of Preparation	Inland Valley Development Agency	South Coast AQMD staff commented on 7/1/2022
Warehouse & Distribution Centers **SBC220628-01** Fontana Corporate Center	The project consists of construction of two warehouses totaling 355,370 square feet on 18.5 acres. The project is located at 13592 Slover Avenue near the northwest corner of Slover Avenue and Mulberry Avenue. Reference SBC210817-07 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/august/SBC220628-01.pdf Comment Period: 6/27/2022 - 8/11/2022 Public Hearing: 7/19/2022	Notice of Availability of a Draft Environmental Impact Report	City of Fontana	South Coast AQMD staff commented on 8/5/2022
Waste and Water-related **LAC220628-12** The Arroyo Site	The project consists of development of cleanup actions to excavate, dispose off site, and remediate soil contaminated with volatile organic compounds and installation of a soil vapor extraction system on three acres. The project is located on the southeast corner of South Magnolia Avenue and West Evergreen Avenue in the City of Monrovia. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/LAC220628-12.pdf Comment Period: 6/21/2022 - 7/22/2022 Public Hearing: N/A	Draft Removal Action Workplan	Department of Toxic Substances Control	South Coast AQMD staff commented on 7/12/2022

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

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

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

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **ORC220628-13** Former Diesel Logistics	The project consists of installation of a vapor and dual phase extraction system to remediate soil vapor and groundwater contaminated with trichloroethylene and tetrachloroethylene on 1.24 acres. The project is located at 1331 East Warner Avenue on the northeast corner of East Warner Avenue and South Hathaway Street in the City of Santa Ana. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/ORC220628-13.pdf Comment Period: 7/7/2022 - 8/8/2022 Public Hearing: N/A	Draft Interim Removal Action Workplan	Department of Toxic Substances Control	South Coast AQMD staff commented on 7/12/2022
General Land Use (residential, etc.) **SBC220601-02** Shady View Residential Project	The project consists of removal of three existing aboveground oil storage tanks, and construction of 159 residential units, one aboveground 250 oil barrel capacity storage tank, two 500 oil barrel capacity storage tanks, and 80.8 acres of open space on 130 acres. The project is located near the southeast corner of Via La Cresta Road and Coyote Street. Reference SBC210701-03 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220601-02.pdf Comment Period: 5/27/2022 - 7/11/2022 Public Hearing: 6/21/2022	Notice of Availability of a Draft Environmental Impact Report	City of Chino Hills	South Coast AQMD staff commented on 7/7/2022

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

ATTACHMENT C
ACTIVE SOUTH COAST AQMD LEAD AGENCY
PROJECTS THROUGH JULY 31, 2022

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
Quemetco is proposing to modify existing South Coast AQMD permits to allow the facility to recycle more batteries and to eliminate the existing daily idle time of the furnaces. The proposed project will increase the rotary feed drying furnace feed rate limit from 600 to 750 tons per day and increase the amount of total coke material allowed to be processed. In addition, the project will allow the use of petroleum coke in lieu of or in addition to calcined coke, and remove one existing emergency diesel-fueled internal combustion engine (ICE) and install two new emergency natural gas-fueled ICEs.	Quemetco	Environmental Impact Report (EIR)	The Draft EIR was released for a 124-day public review and comment period from October 14, 2021 to February 15, 2022 and approximately 200 comment letters were received. Staff held two community meetings, on November 10, 2021 and February 9, 2022, which presented an overview of the proposed project, the CEQA process, detailed analysis of the potentially significant environmental topic areas, and the existing regulatory safeguards. Written comments submitted relative to the Draft EIR and oral comments made at the community meetings, along with responses will be included in the Final EIR which is currently being prepared by the consultant.	Trinity Consultants
Sunshine Canyon Landfill is proposing to modify its South Coast AQMD permits for its active landfill gas collection and control system to accommodate the increased collection of landfill gas. The proposed project will: 1) install two new low emission flares with two additional 300-horsepower electric blowers; and 2) increase the landfill gas flow limit of the existing flares.	Sunshine Canyon Landfill	Subsequent Environmental Impact Report (SEIR)	South Coast AQMD staff reviewed and provided comments on the preliminary air quality analysis, health risk assessment (HRA), and Preliminary Draft SEIR which are to be addressed by the consultant.	SCS Engineers

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 16

REPORT: Rule and Control Measure Forecast

SYNOPSIS: This report highlights South Coast AQMD rulemaking activities and public hearings scheduled for 2022.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

SLR:MK:IM:AK:ZS

2022 MASTER CALENDAR

The 2022 Master Calendar provides a list of proposed or proposed amended rules for each month, with a brief description, and a notation in the third column indicating if the rulemaking is for the 2016 AQMP, Toxics, AB 617 (for BARCT) or measures identified in a Community Emission Reduction Plan (CERP), or Other. Rulemaking efforts that are noted for implementation of the 2016 AQMP, Toxics, and AB 617 are either statutorily required and/or are needed to address a public health concern. Projected emission reductions will be determined during rulemaking.

Staff continues to move forward with rulemaking, recognizing stakeholders' resource limitations due to COVID-19. To maintain social distancing while integrating public participation in the rulemaking process, staff is connecting with stakeholders using tele- and videoconferencing. Also, staff has increased the review time for working group materials to allow stakeholders additional time to prepare for meetings.

The following symbols next to the rule number indicate if the rulemaking will be a potentially significant hearing, will reduce criteria pollutants, or is part of the RECLAIM transition. Symbols have been added to indicate the following:

* *This rulemaking may have a substantial number of public comments.*

[+] *This rulemaking will reduce criteria air contaminants and assist toward attainment of ambient air quality standards.*

[#] *This rulemaking is part of the transition of RECLAIM to a command-and-control regulatory structure.*

The following table provides a list of changes since the previous Rule Forecast Report.

1178	**Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities**
Proposed Amended Rule 1178 is being moved from December 2022 to First Quarter of 2023 to allow staff additional time to evaluate cost-effectiveness.	
1405	**Control of Ethylene Oxide and Chlorofluorocarbon Emissions from Sterilization or Fumigation Processes**
Proposed Amended Rule 1405 is being moved from 2022 TBD to First Quarter of 2023. Proposed amendments are needed to address ethylene oxide emissions from sterilization of medical equipment.	

2022 MASTER CALENDAR

Month November	Title and Description	Type of Rulemaking
1148.2	**Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers** Proposed Amended Rule 1148.2 will evaluate the applicability of well activities, improve notifications of well working activities, and address other issues. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other/ AB 617 CERP
1168	**Adhesive and Sealant Applications** Proposed Amended Rule 1168 will address VOC limits for certain applications. Other amendments may also be needed to improve the clarity. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1460	**Control of Particulate Emissions from Metal Recycling and Shredding Operations** Proposed Rule 1460 will establish housekeeping and best management practices to minimize fugitive particulate emissions from metal cutting and shredding operations. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
December	**Title and Description**	**Type of Rulemaking**
1153.1	**Emissions of Oxides of Nitrogen from Commercial Food Ovens** Proposed Amended Rule 1153.1 will establish NOx BARCT limits and expand the applicability to RECLAIM and former RECLAIM facilities. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB 617 BARCT
1159.1	**Control of NOx Emissions from Nitric Acid Tanks** Proposed Rule 1159.1 will establish requirements to reduce NOx emissions from nitric acid units that will apply to RECLAIM, former RECLAIM, and non-RECLAIM facilities. *Kalam Cheung 909.396.3281; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB 617 BARCT

* *Potentially significant hearing*

[+] *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

[#] *Part of the transition of RECLAIM to a command-and-control regulatory structure*

TENTATIVE 2023 CALENDAR

Month 1st Quarter	Title and Description	Type of Rulemaking
Reg III including 304 304.1 304.2	**Fee Rules** **Equipment, Materials, and Ambient Air Analyses** **Analyses Fees** **Fees for Operations Supportive of Emissions Analyses** Proposed Amended Rules 304, 304.1, and Proposed Rule 304.2 will seek to recover costs incurred by South Coast AQMD from operators responsible for large incidents requiring South Coast AQMD response, along with Regulation III revisions based on the results of a comprehensive fee study. *Kalam Cheung 909.396.3281; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1135	**Emissions of Oxides of Nitrogen from Electricity Generating Facilities** Proposed Amended Rule 1135 will modify provisions for electricity generating units at Santa Catalina Island to reflect a revised BARCT assessment. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB 617 BARCT
1146.2#	**Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters** Proposed Amended Rule 1146.2 will update the NOx emission limits to reflect BARCT. Other provisions may be added to facilitate the deployment of zero-emission units regulated under the proposed amended rule. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB 617 BARCT
1178	**Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities** Proposed Amended Rule 1178 will incorporate the use of more advanced early leak detection methods and improve leak detection and repair programs for storage tanks to further reduce VOC emissions. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 CERP
1426.1	**Hexavalent Chromium Emissions from Metal Finishing Operations** Proposed Rule 1426.1 will reduce hexavalent chromium emissions from heated chromium tanks used at facilities with metal finishing operations that are not subject to Rule 1469. *Kalam Cheung 909.396.3281; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics

* *Potentially significant hearing*

+ *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

Part of the transition of RECLAIM to a command-and-control regulatory structure

TENTATIVE 2023 CALENDAR *(Continued)*

Month 1st Quarter (Continued)	Title and Description	Type of Rulemaking
1405	**Control of Ethylene Oxide and Chlorofluorocarbon Emissions from Sterilization or Fumigation Processes** Amendments needed to address ethylene oxide emissions from sterilization of medical equipment. *Kalam Cheung 909.396.3281; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
2306	**New Intermodal Railyard Indirect Source Rule** Proposed Rule 2306 will establish requirements for new intermodal railyards to minimize emissions from indirect sources associated with new railyards. *Elaine Shen 909.396.2715; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB 617 CERP
Regulation XX*#	**RECLAIM** Proposed Amended Regulation XX will address the transition of RECLAIM facilities to a command-and-control regulatory structure. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
2nd Quarter	**Title and Description**	**Type of Rulemaking**
Regulation XIII*#	**New Source Review** Proposed Amended Regulation XIII will revise New Source Review provisions to address facilities that are transitioning from RECLAIM to a command-and-control regulatory structure and to address comments from U.S. EPA. Additional rules under Regulation XIII may be needed to address offsets and other provisions under Regulation XIII. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
2202*	**On-Road Motor Vehicle Mitigation Options** Proposed Amended Rule 2202 will streamline implementation for regulated entities, as well as reduce review and administration time for South Coast AQMD staff. Concepts may include program components to facilitate achieving average vehicle ridership targets. *Vicki White 909.396.3436; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
Rule 1110.2 Rule 1110.3	**Emissions from Gaseous- and Liquid-Fueled Engines** **Emissions from Linear Generators** Proposed Amended Rule 1110.2 will remove requirements from linear generators and Proposed Rule 1110.3 will establish emission standards and requirements for linear generators. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other

* *Potentially significant hearing*

+ *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

Part of the transition of RECLAIM to a command-and-control regulatory structure

TENTATIVE 2023 CALENDAR *(Continued)*

Month 3rd Quarter	Title and Description	Type of Rulemaking
1151	**Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations** Proposed Amended Rule 1151 will provide clarifications of current requirements and amend provisions to address implementation issues. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706 Socio: Elaine Shen 909.396.2715*	Other
1180.1	**Fenceline and Community Monitoring** Proposed Rule 1180.1 will establish fenceline and community monitoring requirements for non-petroleum refineries and facilities that are not currently included in Rule 1180 – Refinery Fenceline and Community Air Monitoring. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1445*	**Control of Toxic Emissions from Laser Arc Cutting** Proposed Rule 1445 will establish requirements to reduce hexavalent chromium and other metal toxic air contaminant particulate emissions from laser arc cutting. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
2304	**Marine Port Indirect Source Rule** Proposed Rule 2304 will establish requirements to reduce emissions from indirect sources related to marine ports. *Elaine Shen 909 396. 2715; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB617 CERP

* *Potentially significant hearing*

[+] *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

[#] *Part of the transition of RECLAIM to a command-and-control regulatory structure*

2022 To-Be-Determined

2022	Title and Description	Type of Rulemaking
102	**Definition of Terms** Proposed amendments may be needed to update and add definitions, and potentially modify exemptions. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
103	**Definition of Geographical Areas** Proposed amendments are needed to update geographic areas to be consistent with state and federal references to those geographic areas. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
209	**Transfer and Voiding of Permits** Proposed amendments may be needed to clarify requirements for change of ownership and permits and the assessment of associated fees. *Kalam Cheung 909.396.3281; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
219	**Equipment Not Requiring a Written Permit Pursuant to Regulation II** Proposed Amendments may be needed to address issues raised by U.S. EPA for approval in the State Implementation Plan or to identify sources that are currently exempt from permitting. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
222	**Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II** Proposed Amendments may be needed to require certain equipment that is currently not permitted to register the equipment to gather information and emissions data. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
223	**Emission Reduction Permits for Large Confined Animal Facilities** Proposed Amended Rule 223 will seek additional ammonia emission reductions from large confined animal facilities by lowering the applicability threshold. Proposed amendments will implement BCM-04 in the 2016 AQMP. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
317	**Clean Air Act Non-Attainment Fees** Proposed amendments may be needed to modify CAA Section 185 fees for non-attainment. *Elaine Shen 909.396.2715; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other

* *Potentially significant hearing*

[+] *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

[#] *Part of the transition of RECLAIM to a command-and-control regulatory structure*

2022 To-Be-Determined *(Continued)*

2022	Title and Description	Type of Rulemaking
403.1	**Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources** Proposed Amended Rule 403.1 would clarify existing requirements for dust control and remove outdated provisions contained in supporting documents for Rule 403.1. *TBD; CEQA; Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
407[#]	**Liquid and Gaseous Air Contaminants** Proposed Amended Rule 407 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT
410	**Odors from Transfer Stations and Material Recovery Facilities** Proposed Amended Rule 410 will clarify existing provisions. Additional provisions may be needed to address activities associated with diversion of food waste to transfer stations or material recovery facilities. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
425	**Odors from Cannabis Processing** Proposed Rule 425 will establish requirements for control of odors from cannabis processing. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
430	**Breakdown Provisions** Amendments to Rule 430 will need to be amended to remove exemptions for facilities that exit the RECLAIM program and update references to CEMS rules. Other amendments may be needed to address current policies from U.S. EPA regarding startup, shutdown, and malfunction requirements. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	RECLAIM Other
431.1[#]	**Sulfur Content of Gaseous Fuels** Proposed Amended Rule 431.1 will assess exemptions, including RECLAIM, and update other provisions, if needed. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT/ AB 617 CERP
431.2[#]	**Sulfur Content of Liquid Fuels** Proposed Amended Rule 431.2 will assess exemptions, including RECLAIM, and update other provisions, if needed. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT/ AB 617 CERP

* *Potentially significant hearing*

[+] *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

[#] *Part of the transition of RECLAIM to a command-and-control regulatory structure*

2022 To-Be-Determined *(Continued)*

2022	Title and Description	Type of Rulemaking
431.3[#]	**Sulfur Content of Fossil Fuels** Proposed Amended Rule 431.3 will assess exemptions, including RECLAIM, and update other provisions, if needed. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT/ AB 617 CERP
442.1 1107 1124 1136 1145 1171	**Usage of Solvent** **Coating of Metal Parts and Products** **Aerospace Assembly and Component Manufacturing Operations** **Wood Products Coatings** **Plastic, Rubber, Leather, and Glass Coatings** **Solvent Cleaning Operations** Proposed amendments will prohibit the sale, distribution, and application of materials that do not meet the VOC limits specified in Regulation XI rules and possible provisions to prohibit circumvention of VOC limits. Other provisions may be needed to address exempt compounds. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
444	**Open Burning** Amendments may be needed to clarify existing provisions. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
445[*]	**Wood Burning Devices** Proposed Amended Rule 445 will address additional U.S. EPA requirements for Best Available Control Measures and potentially address ozone contingency measure requirements for the Coachella Valley. Amendments may be needed to revise the penalty structure for violations on No Burn Days during the wood burning season. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
462	**Organic Liquid Loading** Proposed Amended Rule 462 will incorporate the use of advanced techniques to detect fugitive emissions and Facility Vapor Leak. Other amendments may be needed to streamline implementation and add clarity. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
463	**Organic Liquid Storage** Proposed Amended Rule 463 will address the current test method and improve the effectiveness, enforceability, and clarity of the rule. Proposed amendments may also be needed to ensure consistency with Rule 1178. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other

* *Potentially significant hearing*

[+] *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

[#] *Part of the transition of RECLAIM to a command-and-control regulatory structure*

2022 To-Be-Determined *(Continued)*

2022	Title and Description	Type of Rulemaking
468[#]	**Sulfur Recovery Units** Proposed Amended Rule 468 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT
469[#]	**Sulfuric Acid Units** Proposed Amended Rule 469 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT
1100	**Implementation Schedule for NOx Facilities** Proposed Amended Rule 1100 will establish the implementation schedule for Rule 1147 equipment at NOx RECLAIM and former NOx RECLAIM facilities. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	
1101[#]	**Secondary Lead Smelters/Sulfur Oxides** Proposed Amended Rule 1101 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT
1105[#]	**Fluid Catalytic Cracking Units Sox** Proposed Amended Rule 1105 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT/ AB 617 CERP
1110.2*[+#]	**Emissions from Gaseous- and Liquid-Fueled Engines** Proposed amendments will address use of emergency standby engines at essential public services for Public Safety Power Shutoff programs. Proposed amendments may also be needed to incorporate possible comments by U.S. EPA for approval into the SIP and address monitoring provisions for new engines. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB 617 BARCT

* *Potentially significant hearing*

[+] *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

[#] *Part of the transition of RECLAIM to a command-and-control regulatory structure*

2022 To-Be-Determined *(Continued)*

2022	Title and Description	Type of Rulemaking
1111.1	**Zero-Emission Residential Furnaces** Proposed Rule 1111.1 may include provisions to encourage zero emission residential furnaces that goes beyond Rule 1111 for gas-fired furnaces. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
1113	**Architectural Coatings** Proposed amendments may be needed to address delisted compounds and other amendments to improve clarity and to remove obsolete provisions. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1118*	**Control of Emissions from Refinery Flares** Proposed Amended Rule 1118 will incorporate revisions to further reduce flaring at refineries, provisions for clean service flares, and facility thresholds. Other amendments to improve clarity and to remove obsolete provisions. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB 617 CERP
1119#	**Petroleum Coke Calcining Operations – Oxides of Sulfur** Proposed Amended Rule 1119 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AB 617 BARCT/ AB 617 CERP
1121*	**Control of Nitrogen Oxides from Residential Type, Natural-Gas-Fired Water Heaters** Proposed amendments may be needed to further reduce NOx emissions from water heaters. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
1121.1	**Zero Emission Residential Water Heaters** Proposed Rule 1121.1 may include provisions to encourage zero emission water heaters that goes beyond Rule 1121 for gas-fired water heaters. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
1133.3	**Emission Reductions from Greenwaste Composting Operations** Proposed Amended Rule 1133.3 will seek additional VOCs and ammonia emission reductions from greenwaste and foodwaste composting. Proposed amendments will implement BCM-10 in the 2016 AQMP. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP

* *Potentially significant hearing*

[+] *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

[#] *Part of the transition of RECLAIM to a command-and-control regulatory structure*

2022 To-Be-Determined *(Continued)*

2022	Title and Description	Type of Rulemaking
1138	**Control of Emissions from Restaurant Operations** Proposed Amended Rule 1138 will further reduce emissions from char boilers. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
1142	**Marine Tank Vessel Operations** Proposed Amended Rule 1142 will address VOC and hydrogen sulfide emissions from marine tank vessel operations, applicability, noticing requirements, and provide clarifications. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1146	**Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters** Proposed amendments to Rule 1146 may be needed to incorporate comments from U.S. EPA. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1146.1[#]	**Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters** Proposed amendments to Rule 1146.1 may be needed to clarify provisions for industry-specific categories and to incorporate comments from U.S. EPA. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1148.1*	**Oil and Gas Production Wells** Proposed Amendments to Rule 1148.1 may be needed to further reduce emissions from operations, implement early leak detection, odor minimization plans, and enhanced emissions and chemical reporting from oil and drilling sites. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other/ AB 617 CERP
1165	**Control of Emissions from Incinerators** Proposed Rule 1165 will establish emission standards, source testing, and monitoring, recordkeeping, and reporting requirements for incinerators. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP
1166	**Volatile Organic Compound Emissions from Decontamination of Soil** Proposed Amended Rule 1166 will update requirements, specifically concerning notifications and usage of mitigation plans (site specific versus various locations). *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other

* *Potentially significant hearing*

[+] *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

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2022 To-Be-Determined *(Continued)*

2022	Title and Description	Type of Rulemaking
1171	**Solvent Cleaning Operations** Proposed Amendments to Rule 1171 may be needed to address certain exempt chemicals and compliance issues. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706 Socio: Elaine Shen 909.396.2715*	Other
1173	**Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants** Proposed Amended Rule 1173 will further reduce emissions from petroleum and chemical plants by requiring early leak detection approaches. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other/ AB 617 CERP
1176	**VOC Emissions from Wastewater Systems** Proposed Amended Rule 1176 will clarify the applicability of the rule to include bulk terminals under definition of "Industrial Facilities," and streamline and clarify provisions. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other/ AB 617 CERP
1180	**Refinery Fenceline and Community Air Monitoring** Amendments to Rule 1180 may be needed to provide additional clarity and if Proposed Rule 1180.1 is adopted, provisions may be needed to provide additional clarity. *Heather Farr 909.396.3672; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1403*	**Asbestos Emissions from Demolition/Renovation Activities** Proposed Amended Rule 1403 will enhance implementation, improve rule enforceability, update provisions, notifications, exemptions, and align provisions with the applicable U.S. EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) and other state and local requirements as necessary. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1404	**Hexavalent Chromium Emissions from Cooling Towers** Amendments may be needed to provide additional clarifications regarding use of process water that is associated with sources that have the potential to contain chromium in cooling towers and address VOC emissions. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics AQMP

* *Potentially significant hearing*

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2022 To-Be-Determined *(Continued)*

2022	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** Proposed Amended Rules 1415 and 1415.1 will align requirements with the proposed CARB Refrigerant Management Program and U.S. EPA's Significant New Alternatives Policy Rule provisions relative to prohibitions on specific hydrofluorocarbons. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Other
1420	**Emissions Standard for Lead** Proposed Amended Rule 1420 will update requirements to address arsenic emissions to close a regulatory gap between Rule 1420 and Rule 1407 - Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Ferrous Metal Melting Operations. Other provisions may be needed to address storage and handling requirements, and revise closure requirements. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1420.1	**Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities** Proposed Amendments are needed to update applicable test methods and provide clarifications regarding submittal of a source-test protocol. Additional amendments may be needed to address monitoring and post closure requirements. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1420.2	**Emission Standards for Lead from Metal Melting Facilities** Proposed Amended Rule 1420.2 will update requirements to address arsenic emissions to close a regulatory gap between Rule 1420 and Rule 1407 - Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Ferrous Metal Melting Operations. Additional amendments may be needed to address monitoring and post closure requirements. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1435*	**Control of Emissions from Metal Heat Treating Processes** Proposed Rule 1435 will establish requirements to reduce point source and fugitive toxic air contaminants including hexavalent chromium emissions from heat treating processes. Proposed Rule 1435 will also include monitoring, reporting, and recordkeeping requirements. *Kalam Cheung 909.396.3281; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics/ AB 617 CERP

* *Potentially significant hearing*

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2022 To-Be-Determined *(Continued)*

2022	Title and Description	Type of Rulemaking
1450*	**Control of Methylene Chloride Emissions** Proposed Rule 1450 will reduce methylene chloride emissions from furniture stripping and establish monitoring, reporting, and recordkeeping requirements. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1455	**Control of Hexavalent Chromium Emissions from Torch Cutting and Welding** Proposed Rule 1455 will establish requirements to reduce hexavalent chromium emissions from torch cutting and welding of chromium alloys. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1466.1	**Control of Particulate Emissions from Demolition of Buildings** Proposed Rule 1466.1 will establish requirements to minimize PM emissions during the demolition of buildings that housed equipment and processes with metal toxic air contaminants and pollution control equipment. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1469	**Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations** Amendments to Rule 1469 may be needed to address potential changes with the CARB's Hexavalent Chromium Airborne Toxic Control Measure for Chrome Plating and Chromic Acid Anodizing Operations. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1470	**Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines** Proposed Amended Rule 1470 will include provisions to further reduce diesel particulate emissions from stationary diesel-fueled internal combustion engines. *TBD; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics
1472	**Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines** Proposed Amended Rule 1472 will remove provisions that are no longer applicable, update and streamline provisions to reflect the 2015 Health Risk Assessment Guidelines and assess the need for Compliance Plans. *Michael Morris 909.396.3282; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	Toxics

* *Potentially significant hearing*

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2022 To-Be-Determined *(Continued)*

2022	Title and Description	Type of Rulemaking
2306.1	**Existing Intermodal Railyard Indirect Source Rule** Proposed Rule 2306.1 will establish requirements for existing intermodal railyards to minimize emissions from indirect sources associated with these facilities. *Elaine Shen 909.396.2715; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ AB 617 CERP
Regulation XXIII*+	**Facility-Based Mobile Sources** Proposed rules within Regulation XXIII would reduce emissions from indirect sources (e.g., mobile sources that visit facilities). *Elaine Shen 909.396.2715; CEQA: Michael Krause 909.396.2706; Socio: Elaine Shen 909.396.2715*	AQMP/ Toxics/ AB 617 CERP
Regulation II, III, IV, XIV, XI, XIX, XXIII, XXIV, XXX and XXXV	Various rule amendments may be needed to meet the requirements of state and federal laws, implement OEHHA's 2015 revised risk assessment guidance, changes from OEHHA to new or revised toxic air contaminants or their risk values, address variance issues, emission limits, technology-forcing emission limits, conflicts with other agency requirements, to abate a substantial endangerment to public health, additional reductions to meet SIP short-term measure commitments, to address issues raised by U.S. EPA or CARB for the SIP, compliance issues that are raised by the Hearing Board, or regulatory amendments needed as a result of the COVID-19 pandemic. Amendments to existing rules may be needed to address use of materials that contain chemicals of concern. The associated rule development or amendments include, but are not limited to, South Coast AQMD existing, or new rules to implement the 2012 or 2016 AQMP measures, and if adopted, 2022 AQMP measures. This includes measures in the 2016 AQMP to reduce toxic air contaminants or reduce exposure to air toxics from stationary, mobile, and area sources. Rule adoption or amendments may include updates to provide consistency with CARB Statewide Air Toxic Control Measures, or U.S. EPA's National Emission Standards for Hazardous Air Pollutants. Rule adoption or amendments may be needed to implement AB 617 including but not limited to BARCT rules, Community Emission Reduction Plans prepared pursuant to AB 617, or new or amended rules to abate a public health issue identified through emissions testing or ambient monitoring.	Other/ AQMP/ Toxics/ AB 617 BARCT/ AB 617 CERP

* *Potentially significant hearing*

+ *Reduce criteria air contaminants and assist toward attainment of ambient air quality standards*

Part of the transition of RECLAIM to a command-and-control regulatory structure

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 17

PROPOSAL: Report of RFQs/RFPs Scheduled for Release in September

SYNOPSIS: This report summarizes the RFQs/RFPs for budgeted services over $100,000 scheduled to be released for advertisement for the month of September.

COMMITTEE: Administrative, August 12, 2022, Reviewed

RECOMMENDED ACTION:
Approve the release of RFQs/RFPs for the month of September.

Wayne Nastri
Executive Officer

SJ:gp

Background
In January 2020 the Board approved a revised Procurement Policy and Procedure. Under the revised policy, RFQs/RFPs for budgeted items over $100,000 that follow the Procurement Policy and Procedure would no longer be required to obtain individual Board approval. However, a monthly report of all RFQs/RFPs over $100,000 is included as part of the Board agenda package and the Board may, if desired, take individual action on any item. The attached report provides the title and synopsis of the RFQ/RFP, the budgeted funds available, and the name of the Deputy Executive Officer/Assistant Deputy Executive Officer responsible for that item. Further detail including closing dates, contact information, and detailed proposal criteria will be available online at http://www.aqmd.gov/grants-bids following Board approval on September 2, 2022.

Outreach
In accordance with South Coast AQMD's Procurement Policy and Procedure, a public notice advertising the RFQs/RFPs and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside

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

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

Proposal Evaluation
Proposals received will be evaluated by applicable diverse panels of technically qualified individuals familiar with the subject matter of the project or equipment and may include outside public sector or academic community expertise.

Attachment
Report of RFQs/RFPs Scheduled for Release in September 2022

September 2, 2022 Board Meeting
Report on RFQs/RFPs Scheduled for Release on September 2, 2022

(For detailed information visit South Coast AQMD's website at http://www.aqmd.gov/nav/grants-bids following Board approval on September 2, 2022)

SPECIAL TECHNICAL EXPERTISE

RFQ #Q2023-01	Issue RFQ for Qualifications to Establish List of Prequalified Vendors for Exterior Building Cleaning and Interior and Exterior Window Washing South Coast AQMD's Diamond Bar Headquarters consists of four interconnected buildings. This action is to issue an RFQ to establish a list of prequalified vendors for a three-year period to provide exterior building cleaning and interior and exterior window washing. Funds for this service are included in the FY 2022-23 Budget and will be requested in subsequent fiscal years.	Olvera/2309
RFP #P2023-02	Issue RFP to Audit AB 2766 Fee Revenue Recipients for Fiscal Years 2019-20 and 2020-21. AB 2766 requires any agency that received fee revenues subvened to the South Coast AQMD from the Department of Motor Vehicles to be audited once every two years. This action is to issue an RFP for an independent Certified Public Accountant to conduct the audits for Fiscal Years 2019-20 and 2020-21. Funds for this expense are included in the Fiscal Year 2022-23 Budget.	Jain/2804

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 18

REPORT: FY 2021-22 Contract Activity

SYNOPSIS: This report lists the number of contracts let during FY 2021-22, the respective dollar amounts, award type and the authorized contract signatory for South Coast AQMD. This report includes the data provided in the March 4, 2022 report covering contract activity for the first six months of FY 2021-22.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

SJ:DH:gp

Background
The Board's Procurement Policy and Procedures requires staff to provide semi-annual reports to the Board on contract activity. This report is for the period of July 1, 2021-June 30, 2022. It includes the data provided in the March 4, 2022 report that covered contract activity for the first six months (July 1, 2021-December 31, 2021). This report identifies five categories of contract awards:

1. **New Awards** – new contracts for professional services and research projects;
2. **Other** – air monitoring station leases, Board Assistant agreements, or miscellaneous lease agreements that generate revenue, e.g., lease of South Coast AQMD office space;
3. **Sponsorships** – contracts funding public events and technical conferences which provide air quality related benefits;
4. **Modifications** – amendments to existing contracts usually reflecting changes in the project scope and/or schedule and associated cost increase, as applicable; and
5. **Terminated Contracts** – Partial/No Work Performed – modifications to contracts to reflect termination of a portion or all the work which result in de-obligation of contract funding.

The report further specifies under New Awards, which contracts were awarded competitively, and which were awarded on a sole source basis. Within the first four categories, the level of approval (Board or Executive Officer) is indicated.

Summary
The total value of all contracts and contract modifications for this period (FY 2021-22) was $212,125,767.76, with 263 contracts and contract modifications totaling $208,787,059.47 (98 percent) approved by the Board and 318 contracts and contract modifications totaling $3,338,708.29 (2 percent) approved by the Executive Officer. This does not include modifications for termination with partial or no work completed. Table 1 is a summary of the 615 contracts and modifications (including terminations and the associated amount of de-obligated funding) issued during this period.

Table 1: Contracts, Modifications and Amounts (including terminations)

CONTRACT CATEGORY	NUMBER	AMOUNT
NEW AWARDS	261	$190,504,889.67
OTHER	41	$1,115,399.38
SPONSORSHIPS	26	$272,150.00
MODIFICATIONS	253	$20,233,328.71
TERMINATIONS	34	-$4,412,808.88
TOTAL	**615**	**$207,712,958.88**

Of the total value for New Awards of $138,107,846.06 (72 percent) was awarded through the competitive process. As shown in Table 2, contracts totaling $3,338,708.29 were approved by the Executive Officer.

Table 2: Contracts Approved by Executive Officer

CONTRACT DESCRIPTION	CONTRACT AMOUNT
Board Member Assistant contracts and contract modifications, as approved by the Board's Administrative Committee	**$973,387.84**
Technical consulting	**$582,935.92**
Contract modifications for extensions of time or additional budgeted services from previously approved vendors	**$1,128,144.88**
Sponsorships in advanced technologies and community and business outreach	**$272,150.00**
Miscellaneous services including the lease of alternative fuel vehicles, software subscriptions, memberships, and air monitoring station licenses	**$258,258.60**
Venue related services to support clean air outreach events including AB617 meetings	**$123,831.05**
Total	**$3,338,708.29**

Attachment
Contract Activity Report for the period July 1, 2021 through June 30, 2022.

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
I. NEW AWARDS							
Competitive - Board Approved							
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20296	31	DEPLOY ZERO EMISSION ELECTRIC DELIVERY TRUCKS	DAIMLER TRUCKS NORTH AMERICA LLC	$4,010,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C20307	35	COACHELLA VALLEY REGIONAL PM10 STREET SWEEPING PROGRAM	COACHELLA VALLEY ASSOC OF GOVERNMENTS	$220,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20318	77	REPLACEMENT OF 7 OFF-ROAD EQUIPMENT	ECOLOGY RECYCLING SERVICES, LLC	$233,398.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21029	81	PROP 1B TRUCK REPLACEMENT PROGRAM	I-SARANG USA INC	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21041	77	REPLACE 1 ON-ROAD EQUIPMENT	NERY ALVAREZ	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21085		REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL - OPERATE ONLY	TORONADO SPORTFISHING	$0.00	1
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21177	77	CONSTRUCT & OPERATE 1 NEW BATTERY CHARGING STATION	RALPHS GROCERY COMPANY	$2,647,050.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21200	77	REPLACEMENT OF 5 OFF-ROAD EQUIPMENT	TUDOR RANCH INC	$372,315.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21208	77	REPOWER OF 1 OFF-ROAD CARGO HANDLING EQUIPMENT	FENIX MARINE SERVICES LTD	$295,435.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21210	32	REPLACE 1 DUAL-ENGINE OFF-ROAD EQUIPMENT	TGI EQUIPMENT CORPORATION	$135,333.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21217	77	REPLACEMENT OF 4 OFF-ROAD CARGO HANDLING EQUIPMENT	TOTAL TERMINALS INTERNATIONAL, LLC	$2,528,855.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21218	77	REPOWER 4 OFF-ROAD CARGO HANDLING EQUIPMENT	UNITED TERMINAL LEASING LLC	$1,064,389.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21225	32	REPOWER OF 1 DUAL-ENGINE OFF-ROAD EQUIPMENT	DIX LEASING CORP	$598,886.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21228	77	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	PACIFIC AGGREGATES INC	$74,586.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21235	27	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	GREG ANDERSON	$73,903.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21241	77	REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	MARTIN VARGAS	$261,850.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21243	77	REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	JUNIOR ENTERPRISES, LLC	$220,829.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21246	32	2-FOR-1 REPLACEMENT OF 2 OFF-ROAD ENGINES WITH 1 OFF-ROAD ENGINE ANDREPLACEMENT OF 2 OFF-ROAD ENGINES WITH 2 OFF-ROAD ENGINES	NATIONAL PAVING COMPANY, INC.	$124,999.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21249	32	CONSTRUCTION AND OPERATION OF ONE NEW RENEWABLE NATURAL GAS FUELING STATION	AMERICAN NATURAL GAS, LLC	$765,423.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21251	27	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	FUKUSHIMA FISHING LLC	$168,561.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21255	27	ZERO EMISSION REFUSE TRUCK DEMONSTRATION	TRANSPORTATION POWER, INC.	$2,250,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21257	27	2-FOR-1 REPLACEMENT OF OFF-ROAD EQUIPMENT	FASTRACK RENTALS, INC.	$289,730.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21258	32	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	MICHAEL DE HOOG DAIRY, LP	$183,928.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21261	77	REPLACE 2 OFF-ROAD EQUIPMENT	RANCHO POLO LLC	$236,748.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21263	77	REPOWER 2 MAIN ENGINES AND 1 AUXILIARY ENGINE ON 1 MARINE VESSEL	AMERICAN MARINE CORPORATION	$852,800.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21264	77	CONSTRUCT & OPERATE 1 NEW BATTERY CHARGING STATION	OMNITRANS	$336,218.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21267	27	REPOWER OF 2 MAIN ENGINES AND 1 MARINE VESSEL	MJ SPORT FISHING LLC	$236,800.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21270	77	REPLACE 3 OFF-ROAD EQUIPMENT	JOSE LUIS TORRES MEDINA	$373,696.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21271	32	2-FOR-1 REPLACEMENT OF 1 OFF-ROAD EQUIPMENT AND REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	EMERALD ACRES LLC	$3,475,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21274	32	REPLACEMENT OF 2 OFF-ROAD EQUIPMENT	ORGANIC DEPOT LLC	$2,321,913.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21275	27,32	REPLACE 2 OFF-ROAD ENGINES WITH 1 OFF-ROAD EQUIPMENT	GALLEANO ENTERPRISES INC	$55,560.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21276	77	REPOWER 3 MAIN ENGINES ON 1 MARINE VESSEL	GROUNDTACKLE HOLDINGS, LLC	$370,646.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21279	77	REPLACE 2 OFF-ROAD EQUIPMENT	LA QUINTA DATE GROWERS, L.P.	$305,888.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21284	79	REPLACEMENT OF 1 ON-ROAD DRAYAGE TRUCK	ARETE LOGISTICS CORP	$85,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21289	77	REPOWER 3 MAIN ENGINES OF 1 MARINE VESSEL	SO CAL SHIP SERVICES	$364,593.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21290	77	REPLACEMENT OF 16 OFF-ROAD EQUIPMENT	EPC LANDSCAPING, LLC	$1,865,568.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21291	27	REPOWER 3 MAIN ENGINES ON 2 MARINE VESSELS	SOUTHWEST MARINE RESOURCES, LLC	$349,477.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21292	32	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	CANYON PACIFIC EQUIPMENT, LLC	$277,692.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21295	77	REPLACE 2 OFF-ROAD EQUIPMENT	BRITO RANCHES LP	$260,521.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21296	77	REPLACE 2 OFF-ROAD EQUIPMENT	LONG LIFE FARMS INC.	$246,502.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21297	77	REPLACE 2 OFF-ROAD EQUIPMENT	JAMIE V SANCHEZ	$149,551.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21300	77	REPLACE 4 OFF-ROAD EQUIPMENT	HADLEY DATE GARDENS, INC	$281,408.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21301	77	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	AUGELLO ENTERPRISES LLC	$264,800.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21304	77	REPOWER 2 MAIN ENGINES OF A MARINE VESSEL	CAYWIND ENTERPRISES, INC	$141,630.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21305	32	REPOWER OF 2 OFF-ROAD EQUIPMENT	P. RILEY ENTERPRISES, INC.	$316,184.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21307	32	REPLACE 2 OFF-ROAD EQUIPMENT	TINA MCMINN EQUIPMENT RENTALS, INC.	$3,098,928.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21308	32	REPLACE 1 AND REPOWER 1 OFF-ROAD EQUIPMENT	TONY R CRISALLI, INC	$336,926.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21309	77	REPOWER 1 MAIN ENGINE AND 2 AUXILIARY ENGINES OF A MARINE VESSEL	F/V PAC HORIZON, INC	$339,200.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21311	77	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	MICHAEL A NEIL	$116,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21314	79	REPLACE 1 DRAYAGE TRUCK - VW PROGRAM	JASON KWON	$85,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21315	79	REPLACE 1 ON-ROAD DRAYAGE TRUCK	HYEONG CHEOL JEON	$85,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21318	79	REPLACE 1 ON-ROAD DRAYAGE TRUCK	MORTIMER & WALLACE INC	$85,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21319	27	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	BURTON RAPPOPORT	$149,600.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21320	79	REPLACEMENT OF 1 ON-ROAD DRAYAGE TRUCK	PUNG SEOB ON	$85,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21323	79	REPLACE 17 ON-ROAD DRAYAGE TRUCKS	USA WASTE OF CALIFORNIA INC	$775,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21324	32	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	CLARK & SONS, INC.	$531,762.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21328	77	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	US WATER TAXI, INC.	$190,400.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21337	79	REPLACEMENT OF 2 ON-ROAD DRAYAGE TRUCKS	NGL LOGISTICS LLC	$170,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21340	32	CONSTRUCTION AND OPERATION OF 1 NEW RENEWABLE GAS FILLING STATIONS	CITY OF BEAUMONT	$599,491.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21341	27	REPOWER 2 MAIN ENGINES AND 2 AUXILIARY ENGINES OF A MARINE VESSEL	MADRUGADOR INC	$400,880.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21343	79	REPLACEMENT OF 1 DRAYAGE TRUCK	ALLEN CHUL HYON	$85,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21346	79	REPLACE 1 ON-ROAD WASTE HAULER	KING BUSINESS SERVICES INC	$73,094.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21348	79	REPLACE 4 ON-ROAD WASTE HAULERS	UNIVERSAL WASTE SYSTEMS, INC.	$323,032.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21349	27,32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	AVALON MOORING & DIVING SERVICE, INC.	$154,238.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21350	79	REPLACEMENT OF 3 ON-ROAD DRAYAGE TRUCKS	PACIFIC GREEN TRUCKING INC	$255,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21353	32,77	CONSTRUCTION AND OPERATION OF 2 NEW RENEWABLE GAS FILLING STATIONS	UNITED PARCEL SERVICE, INC	$3,775,987.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21356	79	REPLACE 4 ON-ROAD DRAYAGE TRUCKS	PREMIUM TRANSPORTATION SERVICES, INC.	$340,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21361	77	REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	LARSEN LAND AND CATTLE CO LLC	$438,881.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21363	77	REPOWER 1 MAINE ENGINE OF A MARINE VESSEL	VICTORY SPORTFISHING CO, INC.	$150,400.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21367		OPERATION ONLY OF REPOWERED AGRICULTURAL EQUIPMENT	BAGDASARIAN FARMS LLC	$0.00	1
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21370		OPERATION ONLY OF REPOWERED OFF-ROAD EQUIPMENT	RICHARD LOPEZ CONSTRUCTION INC	$0.00	1
27	INFORMATION MANAGEMENT	C21380	01	CYBERSECURITY ASSESSMENT	SECURANCE LLC	$71,796.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21381	77	REPOWER 2 MAIN ENGINES OF A MARINE VESSEL	FIGHTING IRISH DANA POINT LLC	$684,558.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21383	81	REPLACE 1 DIESEL TRUCK WITH LOW NOX CNG	ALLIED BROS TRANSPORT INC	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21384	81	HEAVY DUTY TRUCK REPLACEMENT, DIESEL TO LOW NOX CNG	HUMBERTO PALOMINO	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21387		OPERATION ONLY OF REPOWERED OFF-ROAD EQUIPMENT	PEED EQUIPMENT COMPANY	$0.00	1
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21388	32	REPLACE 2-FOR-1 DUAL-ENGINE OFF-ROAD EQUIPMENT	PEED EQUIPMENT COMPANY	$1,024,099.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21389	32	CONSTRUCTION AND OPERATION OF 1 NEW RENEWABLE NATURAL GAS FILLING STATION	ARROW SERVICES INC	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22027	77	EXPAND/OPERATE 1 EXISTING RENEWABLE NATURAL GAS FILLING STATION	COACHELLA VALLEY UNIFIED SCHOOL DISTRICT	$1,229,114.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22028	32	CONSTRUCTION AND OPERATION OF 1 NEW RENEWABLE NATURAL GAS FILLING STATION	ANAHEIM UNION HIGH SCHOOL DISTRICT	$482,150.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22030	32,77	TECHNICAL ASSISTANCE, IMPLEMENTATION, AND OUTREACH SUPPORT FOR THE CARL MOYER PROGRAM	CORA CONSULTING GROUP LLC	$130,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22034	32,77	TECHNICAL ASSISTANCE, IMPLEMENTATION AND OUTREACH SUPPORT FOR THE CARL MOYER PROGRAM	TETRA TECH INC	$210,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22038	79	REPLACE 5 ON-ROAD CLASS 8 TRUCKS	LOS ANGELES COUNTY SANITATION DISTRICTS	$1,000,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22039	32/77	REPLACE 4 ON-ROAD EQUIPMENT	USA WASTE OF CALIFORNIA INC	$162,053.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22045	80	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	JDF VENTURES LLC	$112,968.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22046	80	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	OC OCEAN ADVENTURE, INC.	$222,400.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22047	80	REPOWER OF 1 MAIN ENGINE ON 1 MARINE VESSEL	TRAVIS EDWARD VAUGHAN	$149,656.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22048	80	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	REWARD SPORTFISHING INC	$225,525.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22051	79	REPLACEMENT OF 1 ON-ROAD CLASS 8 WASTE HAULER	CITY OF SANTA CRUZ	$189,690.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22053	80	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	HEIDI M PITKIN	$228,508.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22054	80	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	MARINA DEL REY SPORTFISHING, LLC	$104,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22055	79	VM MITIGATION TRUCK REPLACEMENT PROGRAM	TRI-MODAL DISTRIBUTION SERVICES INC	$400,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22056	79	REPLACE 13 ON-ROAD CLASS 8 FREIGHT TRUCKS	RALPHS GROCERY COMPANY	$2,600,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22057	79	REPLACEMENT OF 7 ON-ROAD CLASS 8 FREIGHT TRUCKS	SCHNEIDER NATIONAL CARRIERS INC	$1,400,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22058	79	REPLACE 2 ON-ROAD WASTE HAULERS	WASTE CONNECTIONS OF CALIFORNIA INC	$400,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22059	79	REPLACE 5 ON-ROAD CLASS 8 DUMP TRUCKS	RRM PROPERTIES, LTD	$1,000,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22060	79	REPLACEMENT OF 12 ON-ROAD CLASS 8 TRUCKS	DEPENDABLE HIGHWAY EXPRESS, INC.	$2,400,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22064	80	REPLACE 2 MAIN ENGINES ON 1 MARINE VESSEL	SAN CLEMENTE SPORTFISHING, INC	$864,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22065	80	REPLACEMENT OF 2 MAIN AND 1 AUXILIARY ENGINES ON 1 MARINE VESSEL	BEAR FLAG DISTRIBUTION	$236,679.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22066	79	REPLACEMENT OF 2 ON-ROAD CLASS 8 WASTE HAULERS	MONTEREY CITY DISPOSAL SERVICE INC	$400,000.00	
08	LEGAL	C22067	01	LEGAL ASSISTANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)	BEST BEST & KRIEGER	$30,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22071	81	PROP 1B VEHICLE REPLACEMENT PROGRAM	CEMEX CONSTRUCTION MATERIAL PACIFIC, LLC	$3,000,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22072	77	CONSTRUCTION AND OPERATION OF 1 NEW BATTERY CHARGING/SOLAR STATION	C&M METALS, INC	$800,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22074		OPERATION ONLY OF 1 REPOWERED MARINE VESSEL	FOSS MARITIME COMPANY	$0.00	1
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22080	79	REPLACEMENT OF 12 ON-ROAD CLASS 8 FREIGHT TRUCKS	ESTES EXPRESS LINES	$2,400,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22090	85	DEVELOP A REAL-TIME AIR MONITORING NETWORK AND SYMPTOM INCIDENT REPORTING SYSTEM IN PORTER RANCH & THE COMMUNITIES SURROUNDING THE SO CAL GAS CO. ALISO CANYON GAS STORAGE FACILITY	ARGOS SCIENTIFIC, INC	$2,343,750.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22096	31	TECH ASSISTANCE WITH HD VEHICLE EMISSION TESTING	AEE SOLUTIONS LLC	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22097	79	REPLACEMENT OF 14 ON-ROAD CLASS 8 FREIGHT TRUCKS	SYSCO HOLDINGS LLC	$2,700,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22099	32,77	TECHNICAL ASSISTANCE FOR IMPLEMENTATION AND OUTREACH SUPPORT FOR THE CARL MOYER PROGRAM	GREEN PARADIGM CONSULTING, INC	$60,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22110	32,27	REPLACEMENT OF 20 ON-ROAD VEHICLES	WASTE MANAGEMENT COLLECTION & RECYCLING	$988,836.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22138	01	LEGISLATIVE REPRESENTATION IN WASHINGTON DC	KADESH & ASSOCIATES, LLC	$226,392.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22139	01	LEGISLATIVE REPRESENTATION IN WASHINGTON DC	CARMEN GROUP, INC	$222,090.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22140	01	LEGISLATIVE REPRESENTATION IN WASHINGTON DC	CASSIDY & ASSOCIATES, INC	$216,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22145	17	BATTERY ELECTRIC YARD TRACTOR	SSA TERMINALS LLC	$1,072,500.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22156		OPERATION ONLY OF 2 REPOWERED MARINE VESSELS	THE JANKOVICH COMPANY LLC	$0.00	1
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22159	81	REPLACING 5 CLASS 8 DIESEL TRUCKS WITH 5 LOW NOX CLASS 8 TRUCKS	CALPORTLAND COMPANY	$500,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22163	32	REPLACE 1 OFF-ROAD EQUIPMENT	BECKCO, INC	$209,766.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22165	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	KISSEL BOAT DESIGN LLC	$224,800.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22166	32	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	MATTEO CANDELA	$91,128.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22167	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	MAMBO MARINE LLC	$307,200.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22168	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	TD TRADITION LLC	$168,800.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22169	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	NATIVE SUN SPORTFISHING INC	$323,600.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22171	32	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	STEVE ZIMMER GENERAL ENGINEERING CONTRAC	$125,126.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22172	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	CALIFORNIA SCIENCE CENTER FOUNDATION	$163,922.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22173	32,77	REPOWER 6 MAIN ENGINES ON 2 MARINE VESSELS	GROUNDTACKLE HOLDINGS, LLC	$824,214.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22175	32	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	REDONDO SPECIAL LLC	$110,400.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22176	32	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	JOSE CESENA	$86,400.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22179	32	REPOWER OF 2 MAIN ENGINES ON 1 MARINE VESSEL	HARRY PROUTY	$1,072,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22180	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	CHRISTOPHER CASTRO	$207,200.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22181	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	FURY SEA ADVENTURES INC	$201,600.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22182	32	REPOWER 4 MAIN ENGINES ON 2 MARINE VESSELS	HARBOR DOCKSIDE, INC.	$590,800.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22183	32	REPLACE 5 DIESEL LOCOMOTIVES WITH 4 LOCOMOTIVES	CALIFORNIA STEEL INDUSTRIES, INC	$8,075,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22184	32	CONSTRUCT AND OPERATE PRIVATE BATTERY CHARGING UNITS AT 2 LOCATIONS	LOS ANGELES COUNTY SANITATION DISTRICTS	$281,118.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22187	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	J&M MARINE INVESTMENT LLC	$238,400.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22188	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	JAMES CVITANOVICH	$134,311.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C22194	01	JANITORIAL SERVICES AT THE SOUTH COAST AQMD HEADQUARTERS IN DIAMOND BAR	SANTA FE JANITORIAL MAINTENANCE SERVICES	$1,649,751.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22195	77	REPOWER OF 4 MAIN ENGINES OF 1 MARINE VESSEL	CATALINA CHANNEL EXPRESS, INC	$2,344,300.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22245	32	REPLACE 1 OFF-ROAD EQUIPMENT	ALCON COLORADO ENGINEERING, INC	$179,445.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22246	32	REPLACEMENT OF 2 OFF-ROAD EQUIPMENT	CALIFORNIA WASTE SERVICES LLC	$181,904.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22249	79	REPLACE 5 ON-ROAD CLASS 8 TRUCK	INTERMODAL EQUIPMENT LEASING INC	$425,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22251	79	REPLACE 2 ON-ROAD CLASS 8 FREIGHT TRUCKS	MATLOCK TRANSPORTATION INC	$93,174.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22253	32	REPOWER 1 MAIN ENGINE ON 1 MAIN VESSEL	AMERICAN MARINE CORPORATION	$30,215.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22254	32	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	GREGORY L WATSON	$118,400.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22257	32	REPOWER 1 MAIN ENGINE ON 1 MARINE VESSEL	J&T SPORTFISHING INC	$145,600.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22260	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	HANSON FISHERIES CORP	$389,600.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22273	31	TECHNICAL ASSISTANCE WITH ALTERNATIVE FUELS, EVS, CHARGING & FUELING INFRASTRUCTURE AND RENEWABLE ENERGY	GREEN PARADIGM CONSULTING, INC	$200,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22274	31	TECHNICAL ASSISTANCE WITH ALTERNATIVE FUELS & FUELING INFASTRUCTURE, EMISSIONS ANALYSIS & ON-ROAD SOURCES	GLADSTEIN, NEANDROSS AND ASSOCIATES, LLC	$300,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
27	INFORMATION MANAGEMENT	C22275	01	WIRELESS VOICE & DATA SERVICE	T-MOBILE	$569,586.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22281	81	PROP 1B REPLACEMENT PROGRAM	EL NICA TRUCKING INC	$200,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22293	32	REPLACEMENT OF 2 OFF-ROAD EQUIPMENT	MKP CONSTRUCTION INC	$176,278.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22294	32	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	FE ZIMMER INC	$95,093.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22297	32	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	CALIFORNIA PAVING AND GRADING CO INC	$113,073.00	
49	SCIENCE & TECHNOLOGY ADVANCEMENT	C22306	32	REPLACEMENT OF 2 OFF-ROAD EQUIPMENT	SUNRISE MARSH LLC	$205,502.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22307	79	REPLACEMENT OF 1 ON-ROAD CLASS 8 DRAYAGE TRUCK	DAVID NGUYEN	$85,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22313	32	REPLACEMENT OF 1 OFF-ROAD AGRICULTURAL EQUIPMENT	REDWOOD PRODUCTS, INC.	$98,023.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22318	32	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	ROBERT K. JOHNSON	$80,832.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22319	32	REPLACEMENT OF 4 OFF-ROAD EQUIPMENT	RENTRAC INC	$3,963,222.00	
49	SCIENCE & TECHNOLOGY ADVANCEMENT	C22332	32	REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	BURNT VALLEY LAND & CATTLE, LLC	$297,836.00	
08	LEGAL	C22345	01	PROVIDE ADVICE AND COUNSEL	SHUTE MIHALY & WEINBERGER LLP	$225,000.00	
27	INFORMATION MANAGEMENT	C22350	01	TELECOMMUNICATION SERVICES	CENTURYLINK COMMUNICATIONS, LLC	$690,570.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22356	32	REPLACEMENT 1 OFF-ROAD EQUIPMENT	DESERT CUSTOM FARMING INC.	$80,561.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21273	80	REPLACE CNG FUEL TANKS ON 3 SCHOOL BUSES	LAKE ELSINORE UNIFIED SCHOOL DISTRICT	$60,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21321	80	REPLACE 2 CNG FUEL TANKS ON SCHOOL BUSES	DOWNEY UNIFIED SCHOOL DISTRICT	$40,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21322	80	REPLACE 2 CNG FUEL TANKS ON SCHOOL BUSES	DESERT SANDS UNIFIED SCHOOL DISTRICT	$40,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21364	80	REPLACE 6 CNG FUEL TANKS ON SCHOOL BUSES	CHINO VALLEY UNIFIED SCHOOL DISTRICT	$120,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21390	80	REPLACE 2 CNG TANKS ON SCHOOL BUSES	UPLAND UNIFIED SCHOOL DISTRICT	$40,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22043	80	REPLACE 5 CNG FUEL TANKS ON SCHOOL BUSES	FONTANA UNIFIED SCHOOL DISTRICT	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22083	80	REPLACE 4 CNG TANKS ON SCHOOL BUSES	CHAFFEY JOINT UNION HIGH SCHOOL DISTRICT	$80,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22092	80	REPLACE 1 CNG TANK ON A SCHOOL BUS	ABC UNIFIED SCHOOL DISTRICT	$20,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22117	80	REPLACE 3 CNG TANKS ON SCHOOL BUSES	HEMET UNIFIED SCHOOL DISTRICT	$60,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22189	80	REPLACE 6 CNG TANKS ON SCHOOL BUSES	NEWPORT MESA UNIFIED SCHOOL DISTRICT	$120,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22190	80	REPLACE 6 CNG TANKS ON SCHOOL BUSES	MORENO VALLEY UNIFIED SCHOOL DISTRICT	$120,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22196	80	PURCHASE 3 CNG SCHOOL BUSES AND ASSOCIATED INFRASTRUCTURE	ABC UNIFIED SCHOOL DISTRICT	$660,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22197	80	PURCHASE 2 ELECTRIC SCHOOL BUSES AND ASSOCIATED INFRASTRUCTURE	ANAHEIM ELEMENTARY SCHOOL DISTRICT	$780,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22198	80	PURCHASE 2 ELECTRIC SCHOOL BUSES AND ASSOCIATED INFRASTRUCTURE	ANAHEIM UNION HIGH SCHOOL DISTRICT	$780,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22200	80	PURCHASE 7 CNG SCHOOL BUSES AND ASSOCIATED INFRASTRUCTURE	BEAR VALLEY UNIFIED SCHOOL DISTRICT	$1,540,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22205	80	PURCHASE 5 CNG SCHOOL BUSES	CHAFFEY JOINT UNION HIGH SCHOOL DISTRICT	$1,025,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22214	80	PURCHASE 3 ELECTRIC SCHOOL BUSES WITH ASSOCIATED INFRASTRUCTURE	GARDEN GROVE UNIFIED SCHOOL DISTRICT	$1,170,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22217	80	REPLACE 7 CNG SCHOOL BUSES WITH ASSOCIATED INFRASTRUCTURE	HUNTINGTON BEACH UNION HIGH SCH DISTRICT	$1,540,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22224	80	PURCHASE 7 ELECTRIC SCHOOL BUSES AND ASSOCIATED INFRASTRUCTURE	MURRIETA VALLEY USD	$2,730,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22228	80	PURCHASE 4 CNG SCHOOL BUSES	OCEAN VIEW SCHOOL DISTRICT	$820,000,.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22231	80	PURCHASE 7 ELECTRIC SCHOOL BUSES AND ASSOCIATED INFRASTRUCTURE	PLACENTIA-YORBA LINDA UNIFIED SCH DIST	$2,730,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G22233	80	PURCHASE 3 CNG SCHOOL BUSES WITH ASSOCIATED INFRASTRUCTURE	RIM OF THE WORLD UNIFIED SCHOOL DISTRICT	$660,000.00	
44	MSRC	ML18148	23	INSTALLATION OF BICYCLE DETECTION SYSTEMS AT INTERSECTIONS ON ARROW HIGHWAY IN SAN DIMAS	CITY OF SAN DIMAS	$50,000.00	
44	MSRC	ML18179	23	IMPLEMENT SIGNAL COORDINATION AND TIMING IMPROVEMENTS	CITY OF RANCHO MIRAGE	$50,000.00	
44	MSRC	MS16127	23	IMPLEMENT TRANSIT STATION IMPROVEMENTS	LOS ANGELES COUNTY METROPOLITAN	$2,500,000.00	
44	MSRC	MS21007	23	DEPLOY 5 ZERO-EMISSION YEAR TRACTORS	PENSKE TRUCK LEASING CO LP	$1,000,000.00	
44	MSRC	MS21010	23	PROCURE DEPLOY 1 ZERO-EMISSION ELECTRIC OVERHEAD CRANE	MHX LLC	$569,275.00	
44	MSRC	MS21011	23	PROCURE AND DEPLOY UP TO 3 ZERO-EMISSION ELECTRIC YARD TRACTORS AND ASSOCIATED CHARGING INFRASTRUCTURE	RDS LOGISTICS GROUP	$808,500.00	
44	MSRC	MS21013	23	DEPLOY 40 ZERO EMISSION ELECTRIC CLASS 8 SEMI-TRACTORS AND ASSOCIATED CHARGING INFRASTRUCTURE	4 GEN LOGISTICS, LLC	$7,000,000.00	
44	MSRC	MS21014	23	DEPLOY 5 NEAR ZERO EMISSION TRUCKS	GREEN FLEET SYSTEMS, LLC	$500,000.00	
44	MSRC	MS21015	23	DEPLOY UP TO 15 NEAR-ZERO EMISSIONS SEMI-TRACTORS	PREMIUM TRANSPORTATION SERVICES, INC.	$1,500,000.00	
44	MSRC	MS21017	23	PROCURE AND DEPLOY UP TO 10 ZERO-EMISSION TRUCKS AND ASSOCIATED CHARGING INFRASTRUCTURE	MHX LLC	$1,900,000.00	
44	MSRC	MS21018	23	DEPLOY UP TO 23 NEAR ZERO EMISSION TRUCKS	PAC ANCHOR TRANSPORTATION, INC.	$2,300,000.00	
44	MSRC	MS21019	23	LEASE UP TO 14 ZERO-EMISSION TRUCKS AND PROVIDE ELECTRIC CHARGING INFRASTRACTURE	VOLVO FINANCIAL SERVICES	$3,930,270.00	
44	MSRC	MS21023	23	INSTALL EV CHARGING STATION	BNSF RAILWAY COMPANY	$1,313,100.00	
44	MSRC	MS21024	23	TECHNICAL ADVISOR SERVICES FOR THE MSRC	RAYMOND J GORSKI	$385,700.00	
					Subtotal	**$138,013,843.00**	

Competitive-Executive Officer Approved

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
26	PLANNING RULE DEV & AREA SOURCES	C22112	01	ASSIST THE EMISSION REDUCTION ESTIMATES ASSOCIATED WITH OCEANGOING VESSEL	ENERGY AND ENVIRONMENTAL RESEARCH	$10,000.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C22349	01	LEASE 2 HYUNDAI IONIQ 5 ELECTRIC VEHICLES	PUENTE HILLS HYUNDAI	$83,999.06	
					Subtotal	**$93,999.06**	
Sole Source - Board Approved							
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20048	84	INSTALLATION AND MAINTENANCE OF AIR FILTRATION SYSTEMS AT PUBLIC SCHOOLS IN EJ COMMUNITIES IN LOS ANGELES	IQAIR NORTH AMERICA, INC.	$6,745,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20169	31	DEVELOP AND DEMONSTRATE NEAR-ZERO AND ZERO-EMISSION VEHICLES AND EQUIPMENT	PORT OF LOS ANGELES	$1,000,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20199	31	DEVELOP A NEAR-ZERO NATURAL GAS AND PROPANE CONVERSION SYSTEM FOR ON-ROAD MEDIUM-DUTY VEHICLES	AGILITY FUEL SOLUTIONS LLC	$607,825.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21083	31	ASSESS EMISSIONS IMPACTS OF HYDROGEN-NATURAL GAS FUEL BLEND ON NATURAL GAS ENGINES	UNIVERSITY OF CALIFORNIA RIVERSIDE	$533,021.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21153	17	VOLVO SWITCH-ON PROJECT: DEVELOP AND DEPLOY 70 HEAVY-DUTY BATTERY-ELECTRIC VEHICLES	VOLVO GROUP NORTH AMERICA LLC	$21,460,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21169	31	EVALUATION OF VEHICLE MAINTENANCE COSTS BETWEEN NATURAL GAS AND DIESEL-FUELED ON-ROAD HEAVY-DUTY VEHICLES	WEST VIRGINIA UNIVERSITY RESEARCH CORP	$250,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21240	83	DEVELOP AND DEMONSTRATE CAPTURE AND CONTROL SYSTEM FOR OIL TANKERS PROJECT	STAX ENGINEERING INC	$10,500,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21266	31	DEVELOP MODEL FOR CONNECTED NETWORK OF MICROGRIDS	UNIVERSITY OF CALIFORNIA - IRVINE	$290,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21277	56	STREAMLINE INCOME VERIFICATION PROCESS FOR EFMP PROGRAM	VERI-TAX LLC	$60,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21313	17	DEPLOYMENT OF 5 ZERO-EMISSION FUEL CELL TRANSIT BUSES	SUNLINE TRANSIT AGENCY	$5,954,921.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21336	31	PARTICIPATE IN CALIFORNIA FUEL CELL PARTNERSHIP FOR CALENDAR YEAR 2021	FRONTIER ENERGY INC	$70,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21355	01	PLANNING, ORGANIZING, AND FACILITATING SOUTH COAST AQMD'S MLK AND CESAR CHAVEZ EVENTS	LEE ANDREWS GROUP INC	$450,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21372	31	CALIFORNIA HYDROGEN SYSTEMS ANALYSIS PROJECT	UNIVERSITY OF CALIFORNIA-DAVIS	$50,000.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C21382	01	SOUTH COAST AQMD PHOTOCOPIER SERVICE AGREEMENT	MRC SMART TECHNOLOGY SOLUTIONS	$802,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21386	31	CALIFORNIA HYDROGEN HEAVY-DUTY INFRASTRUCTURE RESEARCH CONSORTIUM H2@SCALE INITIATIVE	NATIONAL RENEWABLE ENERGY LAB	$25,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C21396	35	PEFORM TECHNICAL UPGRADES, INTEGRATE DATA FROM ADDITIONAL MONITORS AND MAINTAIN PUBLIC ALERT SYSTEM TO PROVIDE AUTOMATED ALERTS FOR H2S	SONOMA TECHNOLOGY INC	$29,300.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22042	75	INSTALL AND MAINTAIN AIR FILTRATION SYSTEMS IN SCHOOLS	IQAIR NORTH AMERICA, INC.	$191,093.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22084	31	DEVELOP AND DEMONSTRATE HYDROGEN FUEL CELL MEDIUM-DUTY BUSES	A-1 ALTERNATIVE FUEL SYSTEMS	$531,166.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22093	67	ADMINISTRATIVE PROJECT IMPLEMENTATION OF JETSI PILOT PROJECT-APPROPRIATION AS PER EMAIL FROM ROUPEN ON 3/15/22	GREEN PARADIGM CONSULTING, INC	$649,164.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22120	67	DEVELOP JETSI ZERO EMISSION VEHICLE WORKFORCE PLAN	LOS ANGELES CLEANTECH INCUBATOR	$155,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22131	31	CONDUCT CALIFORNIA INLAND PORT FEASIBILITY STUDY PHASE 2	FRESNO COUNCIL OF GOVERNMENTS	$37,500.00	
26	PLANNING RULE DEV & AREA SOURCES	C22136	01	COLLECT ENVIRONMENTAL AND DEMOGRAPHIC DATA FOR THE ENVIRONMENTAL HEALTHREPORT	HARC, INC	$6,600.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22150	69	INSTALLATION AND MAINTENANCE OF AIR FILTRATION SYSTEMS AT SELECTED SCHOOLS	IQAIR NORTH AMERICA, INC.	$830,438.64	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22262	31	STUDY OF FUEL CELL MICROGRIDS FOR BACKUP POWER AND TRANSIT	UNIVERSITY OF CALIFORNIA - IRVINE	$370,000.00	
43	SCIENCE & TECHNOLOGY ADVANCEMENT	C22370	01	PERFORMANCE EVALUATION OF ETHYLENE OXIDE MONITOR FOR MOBILE MONITORING APPLICATION	AERODYNE RESEARCH, INC	$70,000.00	
					Subtotal	**$51,668,028.64**	
Sole Source - Executive Officer Approved							
26	PLANNING RULE DEV & AREA SOURCES	C21369	01	ANALYSIS OF COST-PASS-THROUGH IN REFINERIES FOR PR 1109.1	ERICH MUEHLEGGER	$20,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
16	ADMINISTRATIVE & HUMAN RESOURCES	C21374	01	HUMAN RESOURCES CONSULTING SERVICES	SHAW HR CONSULTING, INC.	$10,000.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C21375	01	HEALTH INSURANCE BROKERAGE SERVICES	ALLIANT INSURANCE SERVICES INC	$76,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C21392	01	ART LICENSING AGREEMENT FOR A ONE-TIME USE LICENSE TO USE TRANSFORM CULTURE AND END INEQUALITY ARTWORK FOR BRANDING SOUTH COAST AQMD'S 7TH ANNUAL ENVIRONMENTAL JUSTICE CONFERENCE	FAVIANNA RODRIGUEZ	$2,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C21395	01	DERIVE MASS AND SPECIFIC EMISSION FACTORS OF NOx AT DIFFERENT PROPULSION ENGINE LOADS FROM ITS PROPRIETARY REMOTE SNIFFER MEASUREMENTS AT THE GREAT BELT BRIDGE	FLUXSENSE AB	$24,960.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C22029	01	WEST INLAND EMPIRE EMPLOYMENT RELATIONS CONSORTIUM MEMBERSHIP WITH PREMIUM LIEBERT LIBRARY SUBSCRIPTION	LIEBERT CASSIDY WHITMORE	$4,965.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22035	01	ART LICENSING WITH ARTIST THOMAS EVANS VIA REDOUBLE DIGITAL MARKETING FOR BRANDING OF THE SCAQMD 9TH ANNUAL DR. MARTIN LUTHER KING JR. DAY OF SERVICE PROGRAM	REDOUBLE DIGITAL MARKETING	$500.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22037	01	DEVELOP AB 617 PROGRAM FOR SOUTH CENTRAL COMMUNITY	PHYSICIANS FOR SOCIAL RESPONSIBILITY	$16,666.64	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22061	01	CO-LEAD FOR THE DEVELOPMENT AND IMPLEMENTATION OF THE AB 617 PROGRAM IN SOUTH LOS ANGELES	STRATEGIC CONCEPTS IN ORGANIZING &	$16,666.64	
26	PLANNING RULE DEV & AREA SOURCES	C22075	01	SOCIOECONOMIC IMPACT ASSESSMENT OF PROPOSED RULE 1109.1	KLEINHENZ ECONOMICS	$5,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C22076	01	PEER REVIEW OF PUBLIC HEALTH BENEFITS ESTIMATION FOR PROPOSED RULE 1109.1	INDUSTRIAL ECONOMICS INCORPORATED	$5,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22081	01	CO-LEAD FOR THE DEVELOPMENT AND IMPLEMENTATION OF THE AB 617 PROGRAM IN SOUTH LOS ANGELES	WATTS CLEAN AIR AND ENGERGY COMMITTEE	$16,666.64	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22087	01	FACILITATOR SERVICES FOR EAST COACHELLA VALLEY AB 617 MEETINGS	VMA COMMUNICATIONS, INC.	$32,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
35	LEGISLATIVE & PUBLIC AFFAIRS	C22095	01	VENUE, CATERING AND OTHER EXPENSES FOR SOUTH COAST AQMD'S 7TH ANNUAL ENVIRONMENTAL JUSTICE CONFERENCE	ONTARIO CONVENTION CENTER	$36,816.07	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22098	01	LICENSE AGREEMENT FOR USE AT EJ CONFERENCE	WHOVA, INC.	$2,899.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C22100	01	EMPLOYEE DE-ESCALATION TRAINING	CHUBB GLOBAL RISK ADVISORS	$4,940.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C22101	01	INVESTIGATIVE SERVICES	PUBLIC INTEREST INVESTIGATIONS INC	$20,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22102	01	FACILITATION SERVICES FOR AB 617 COMMUNITY	CASTILLO CONSULTING PARTNERS, LLC	$20,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C22103	01	DEVELOPMENT AND IMPLEMENTATION OF PROGRAMS ON THE HEALTH EFFECTS OF AIR POLLUTION AND CONDUCT DIFFICULT AND COMPLEX RESEARCH AND ANALYSIS OF HEALTH-RELATED AIR QUALITY PROBLEMS.	NICHOLE QUICK MD PC	$90,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22104	01	TELEPROMPTER FOR EJ CONFERENCE	VICTORIA M. MCCULLOUGH	$1,700.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22105	01	VENUE FOR 32ND ANNUAL CLEAN AIR AWARDS LUNCHEON	RIVERSIDE CONVENTION CENTER	$13,700.00	
26	PLANNING RULE DEV & AREA SOURCES	C22111	01	HEALTH EFFECTS SUPPORT FOR AQMP AND THE REVIEW OF THE HEAPF	KHADEEJA ABDULLAH	$13,700.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22115	01	2022 MARTIN LUTHER KING EVENT VENUE	CALIFORNIA SCIENCE CENTER FOUNDATION	$4,000.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C22116	01	TALKSPACE PLATFORM SERVICES	ALLIANT INSURANCE SERVICES INC	$36,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22118	01	LICENSE AGREEMENT FOR CESAR CHAVEZ ARTWORK	CESAR CAMPOS	$500.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22133	01	CAPITOL TRACK SUBSCRIPTION	WAVELENGTH AUTOMATION INC	$2,844.00	
04	FINANCE	C22141	01	PROVIDE INVESTMENT CONSULTING SERVICES - 1/1/22 TO 6/30/22	PFM ASSET MANAGEMENT LLC	$75,000.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C22148	01	COMMUNICATION AND LEADERSHIP TRAINING	LINDA BYARS SWINDLING	$28,000.00	

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
26	PLANNING RULE DEV & AREA SOURCES	C22152	01	PROVIDE ASSISTANCE WITH UPDATING HEALTH BENEFITS LITERATURE 2022 AQMP	INDUSTRIAL ECONOMICS INCORPORATED	$30,276.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22192	01	TELEPROMPTER SERVICES FOR 8TH ANNUAL CESAR CHAVEZ EVENT MARCH 26, 2022	EBON ENTERTAINMENT	$825.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22242	01	PROVIDE CATERING SERVICES FOR 2022 CESAR CHAVEZ EVENT	LEVY PREMIUM FOODSERVICE PARTNERSHIP	$12,644.98	
16	ADMINISTRATIVE & HUMAN RESOURCES	C22244	01	PROVIDE MENTORING SOFTWARE SUBSCRIPTION	MENTORCLIQ INC	$19,500.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22266	01	MARIACHI ENERTAINMENT FOR 2022 CESAR CHAVEZ EVENT	COLIBRI ENTERTAINMENT, INC	$1,750.00	
26	PLANNING RULE DEV & AREA SOURCES	C22270	01	ASSIST SCAQMD WITH SOCIOECONOMIC IMPACT ANALYSES	CENTER FOR CONTINUING STUDY-CA ECONOMY	$7,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22278	01	PROVIDE WHEEL CHAIR SERVICES AT THE 2022 CESAR CHAVEZ EVENT	CRCD ENTERPRISES	$1,495.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22348	01	VENUE AND CATERING SERVICES FOR THE 8TH ANNUAL EJ CONFERENCE	RIVERSIDE CONVENTION CENTER	$45,000.00	
03	EXECUTIVE OFFICE	C22421	01	PROVIDE CONSULTING SERVICES ON STATE AND FEDERAL STRATEGIES	BROADBENT CONSULTING GROUP, LLC	$30,000.00	
					Subtotal	**$729,014.97**	

II. OTHER

Board Assistant

Board Administrative Committee Review/Executive Officer Approved

02	GOVERNING BOARD	C22000	01	BOARD ASSISTANT SERVICES FOR VANESSA DELGADO	MARIA TERESA ACOSTA	$48,000.00	
02	GOVERNING BOARD	C22001	01	BOARD ASSISTANT SERVICES FOR VERONICA PADILLA-CAMPOS	AMY J WONG	$50,766.00	
02	GOVERNING BOARD	C22002	01	BOARD ASSISTANT SERVICES FOR MICHAEL CACCIOTTI	FRANK CARDENAS AND ASSOCIATES	$6,360.00	
02	GOVERNING BOARD	C22003	01	BOARD ASSISTANT SERVICES FOR GIDEON KRACOV	GENEVIEVE MICHELLE AMSALEM	$88,638.96	
02	GOVERNING BOARD	C22004	01	BOARD ASSISTANT SERVICES FOR LISA BARTLETT	JAMES DAVID DINWIDDIE III	$44,734.00	
02	GOVERNING BOARD	C22005	01	BOARD ASSISTANT SERVICES FOR MICHAEL CACCIOTTI	WILLIAM GLAZIER	$6,360.00	
02	GOVERNING BOARD	C22006	01	BOARD ASSISTANTSERVICES FOR BEN BENOIT	THOMAS ALAN GROSS	$12,000.00	
02	GOVERNING BOARD	C22007	01	BOARD ASSISTANT SERVICES FOR JOE BUSCAINO	JACOB LEE HAIK	$64,337.00	
02	GOVERNING BOARD	C22008	01	BOARD ASSISTANT SERVICES FOR V. MANUEL PEREZ	GUILLERMO GONZALEZ	$44,231.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
02	GOVERNING BOARD	C22009	01	BOARD ASSISTANT SERVICES FOR VANESSA DELGADO	SANDRA HERNANDEZ	$33,000.00	
02	GOVERNING BOARD	C22010	01	BOARD ASSISTANT SERVICED FOR CARLOS RODRIGUEZ	HOLDER STRATEGIC ADVISORS	$61,823.00	
02	GOVERNING BOARD	C22011	01	BOARD ASSISTANT SERVICES FOR LARRY MCCALLON	RONALD KETCHAM	$45,237.00	
02	GOVERNING BOARD	C22012	01	BOARD ASSISTANT SERVICES FOR MICHAEL CACCIOTTI	WILLIAM J KELLY	$9,642.00	
02	GOVERNING BOARD	C22013	01	BOARD ASSISTANT SERVICES FOR SHEILA KUEHL	LORAINE LUNDQUIST	$54,284.00	
02	GOVERNING BOARD	C22014	01	BOARD ASSISTANT SERVICES FOR REX RICHARDSON	CITY OF LONG BEACH	$48,252.00	
02	GOVERNING BOARD	C22015	01	BOARD ASSISTANT SERVICES FOR JANICE RUTHERFORD	DEBRA S MENDELSOHN	$32,975.00	
02	GOVERNING BOARD	C22016	01	BOARD ASSISTANT SERVICES FOR MICHAEL CACCIOTTI.	WESLEY REUTIMANN	$6,000.00	
02	GOVERNING BOARD	C22017	01	BOARD ASSISTANT SERVICES FOR VANESSA DELGADO	CRISTIAN RIESGO	$12,000.00	
02	GOVERNING BOARD	C22018	01	BD ASST SVCS FOR GIDEON KRACOV	ROSS BENJAMIN ZELEN	$14,400.00	
02	GOVERNING BOARD	C22019	01	BOARD ASSISTANT SERVICES FOR MICHAEL CACCIOTTI	TIMOTHY PHILLIP SANDOVAL	$9,780.00	
02	GOVERNING BOARD	C22020	01	BOARD ASSISTANT SERVICES FOR MICHAEL CACCIOTTI	SHO TAY	$6,240.00	
02	GOVERNING BOARD	C22021	01	BOARD ASSISTANT SERVICES FOR BEN BENOIT	RUTHANNE TAYLOR BERGER	$74,000.04	
02	GOVERNING BOARD	C22022	01	BOARD ASSISTANT SERVICES FOR JANICE RUTHERFORD	COUNTY OF SAN BERNARDINO	$34,377.00	
02	GOVERNING BOARD	C22023	01	BOARD ASSISTANT SERVICES FOR BEN BENOIT	TRICIA ALMIRON	$12,000.00	
02	GOVERNING BOARD	C22024	01	BOARD ASSISTANT SERVICES FOR MICHAEL CACCIOTTI	BENJAMIN S WONG	$14,928.00	
02	GOVERNING BOARD	C22025	01	BOARD ASSISTANT SERVICES FOR BEN BENOIT	CITY OF WILDOMAR	$20,871.96	
02	GOVERNING BOARD	C22062	01	BOARD ASSISTANT SERVICES FOR VANESSA DELGADO	ALISA COTA	$25,872.00	
02	GOVERNING BOARD	C22269	01	BOARD ASSISTANT SERVICES FOR ANDREW DO	CHRIS WANGSAPORN	$16,510.00	
02	GOVERNING BOARD	C22300	01	BOARD ASSISTANT SERVICES FOR JOE BUSCAINO	JACKSON GUZE	$9,271.42	
02	GOVERNING BOARD	C22301	01	BOARD ASSISTANT SERVICES FOR NITHYA RAMAN	JOSHUA JAMES NUNI	$9,158.13	
02	GOVERNING BOARD	C22320	01	BOARD ASSISTANT SERVICESS FOR GIDEON KRACOV	DESTINY RODRIGUEZ	$12,500.00	
					Subtotal	**$928,548.51**	

Board Assistant Modifications

Board Administrative Committee Review/Executive Officer Approved

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
02	GOVERNING BOARD	C22001	01	BOARD ASSISTANT SERVICES FOR VERONICA PADILLA-	AMY J WONG	$5,026.75	
02	GOVERNING BOARD	C22008	01	BOARD ASSISTANT SERVICES FOR V. MANUEL PEREZ	GUILLERMO GONZALEZ	$0.00	
02	GOVERNING BOARD	C22014	01	BOARD ASSISTANT SERVICES FOR REX RICHARDSON	CITY OF LONG BEACH	$5,026.65	
02	GOVERNING BOARD	C22018	01	BD ASST SVCS FOR GIDEON KRACOV	ROSS BENJAMIN ZELEN	$34,026.21	
02	GOVERNING BOARD	C22018	01	BD ASST SVCS FOR GIDEON KRACOV	ROSS BENJAMIN ZELEN	$759.72	
					Subtotal	**$44,839.33**	
Other -Executive Officer Approved							
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20194	01	POLE-MOUNTED FACILITIES LICENS	DEPARTMENT OF WATER & POWER	$40,224.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21394	01	AIR MONITORING LICENSE AGRMT	LOS ANGELES UNIFIED SCHOOL DISTRICT	$13,532.52	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22077	01	CITY OF LA AIR MONITORING STAT	CITY OF LOS ANGELES	$76,020.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22113	01	AIR MONITORING RUBIDOUX	SOUTHERN CALIFORNIA EDISON	$12,235.02	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22191	01	SIGNAL HILL AIR MONITORING STA	LOS ANGELES COUNTY FIRE DEPARTMENT	$0.00	1
					Subtotal	**$142,011.54**	
III. SPONSORSHIPS							
Sponsorships - Executive Officer Approved							
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21357	01	COSPONSOR ASILOMAR 2021 CONFERENCE TRANSPORTATION & ENERGY	UNIVERSITY OF CALIFORNIA-DAVIS	$30,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22031	01	REGALETTE'S CROWN AWARDS SCHOLARSHIP FUNDRAISER	REGALETTES, INC.	$10,000.00	
49	SCIENCE & TECHNOLOGY ADVANCEMENT	C22032	01	COSPONSOR THE 2021 SOUTHERN CALIFORNIA CHINESE-AMERICAN ENVIRONMENTAL PROTECTION ASSOCIATION 30-YEAR ANNIVERSARY AND ANNUAL CONVENTION	SOUTHERN CALIFORNIA CHINESE-AMERICAN	$1,500.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22033	01	CITY OF LONG BEACH 10TH ANNUAL JAZZ FESTIVAL SILVER SPONSORSHIP	CITY OF LONG BEACH	$10,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22044	01	CO-SPONSOR THE 2021 ACT EXPO	GLADSTEIN, NEANDROSS AND ASSOCIATES, LLC	$50,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22073	01	COSPONSOR ICEPAG 2021	UNIVERSITY OF CALIFORNIA - IRVINE	$7,500.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22085	01	COALITION FOR CLEAN AIR OCTOBER 6, 2021, CALIFORNIA CLEAN AIR DAY BRONZE LEVEL SPONSORSHIP	COALITION FOR CLEAN AIR	$10,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22089	01	SPONSOR AAAJ-LA 38TH ANNIVERSARY VIRTUAL GALA	ASIAN AMERICANS ADVANCING JUSTICE LA	$1,500.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22094	01	CARB SOUTHERN CALIFORNIA HEADQUARTERS GRAND OPENING AND DEDICATION CEREMONY	GREATER RIVERSIDE CHAMBERS OF COMMERCE	$5,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22106	01	SPONSORSHIP FOR THE IGASP CONFERENCE HELD AT UCI, JUNE 15, 2022	UNIVERSITY OF CALIFORNIA - IRVINE	$5,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22119	01	SPONSORSHIP FOR LATINA PUBLIC SERVICE ACADEMY	THE LATINA PUBLIC SERVICE ACADEMY	$1,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22124	01	SPONSORSHIP FOR 2022 FIGHT FOR AIR CLIMB	AMERICAN LUNG ASSOCIATION	$10,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22128	01	COSPONSOR 2022 PORTABLE EMISSIONS MEASUREMENT SYSTEMS CONFERENCE	UNIVERSITY OF CALIFORNIA RIVERSIDE	$10,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C22129	01	SPONSOR THE 10TH BIENNIAL MOBILE SOURCE AIR TOXICS (MSAT) WORKSHOP	COORDINATING RESEARCH COUNCIL INC	$5,000.00	
49	SCIENCE & TECHNOLOGY ADVANCEMENT	C22134	01	COSPONSOR THE CRC 31ST REAL WORLD EMISSIONS WORKSHOP	COORDINATING RESEARCH COUNCIL INC	$5,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22258	01	2022 TOAST TO CLEARING THE AIR SILVER SPONSORSHIP	COALITION FOR CLEAN AIR	$4,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22259	01	2022 MOBIUS EVENT SPONSORSHIP	EVENTSCAPE INTERNATIONAL, INC	$2,500.00	
49	SCIENCE & TECHNOLOGY ADVANCEMENT	C22282	01	COSPOSOR CE-CERT 30TH ANNIVERSARY	UNIVERSITY OF CALIFORNIA RIVERSIDE	$5,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22286	01	COSPONSOR 2022 ADVANCED CLEAN TRANSPORTATION (ACT) EXPO	GLADSTEIN, NEANDROSS AND ASSOCIATES, LLC	$50,000.00	
50	ENGINEERING & PERMITTING	C22287	01	SPONSORSHIP OF THE AWMA ANNUAL CONFERENCE & EXHIBITION ON JUNE 2022	AIR & WASTE MANAGEMENT ASSOCIATION	$5,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22288	01	COSPONSOR THE 2022 CALIFORNIA HYDROGEN LEADERSHIP SUMMIT	GLADSTEIN, NEANDROSS AND ASSOCIATES, LLC	$6,500.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22289	01	31ST ANNUAL GENERAL ASSEMBLY & LEADERSHIP ADDRESS	WRCOG SUPPORTING FOUNDATION	$7,000.00	

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
35	LEGISLATIVE & PUBLIC AFFAIRS	C22316	01	2022 I WEAR TURQUOISE CAMPAIGN	AMERICAN LUNG ASSOCIATION	$5,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22364	01	SPONSOR CHAMPIONS UNITE EVENT	AMERICAN LUNG ASSOCIATION	$20,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22384	01	CO-SPONSOR BIZFED'S 1ST ANNUAL "BUSINESS MAKES LA COUNTY WORK," EVENT	LOS ANGELES COUNTY BUSINESS FEDERATION	$2,650.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22388	01	COSPONSOR THE 2022 DRIVING MOBILITY 9	SUSTAIN SOCAL	$3,000.00	
					Subtotal	**$272,150.00**	
IV. MODIFICATIONS							
Board Approved							
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C12376	31	TECHNICAL ASSISTANCE FOR AIR POLLUTION FORMATION AND CONTROL, ADVANCED TRANSPORTATION TECHNOLOGIES AND SYSTEMS, EMISSIONS MEASUREMENTS AND ANALYSIS, ALTERNATIVE FUEL TECHNOLOGIES, SUSTAINABLE ENERGY SYSTEMS, AND OFF-ROAD VEHICLES AND EQUIPMENT	UNIVERSITY OF CALIFORNIA, RIVERSIDE	$75,000.00	
08	LEGAL	C12702	01	LEGAL ADVICE FOR LAWSUITS AND ADMINISTRATIVE PROCEEDINGS	SHUTE MIHALY & WEINBERGER LLP	$200,000.00	
08	LEGAL	C12702	01	LEGAL ADVICE FOR LAWSUITS AND ADMINISTRATIVE PROCEEDINGS	SHUTE MIHALY & WEINBERGER LLP	$100,000.00	
08	LEGAL	C14191	01	PROVIDE LEGAL SERVICES CONCERNING EXIDE BANKRUPTCY PROCEEDINGS	KTBS LAW LLP	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C15541	56	ENHANCED FLEET MODERNIZATION PROGRAM	FOUNDATION FOR CALIF COMMUNITY COLLEGES	$450,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C16056	80	REPLACE 10 AND PURCHASE 1 DIESEL LOCOMOTIVE	SO CALIFORNIA REGIONAL RAIL AUTHORITY	$9,000,000.00	
08	LEGAL	C16392	01	LEGAL ADVICE AND REPRESENTATION FOR SO CAL GAS LITIGATION	HALPERN MAY YBARRA GELBERG LLP	$15,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17225	67	DEVELOPMENT & DEMONSTRATIONOF UP TO 2 CLASS 8 BATTERY ELECTRIC DRAYAGE TRUCKS	VOLVO TECHNOLOGY OF AMERICA LLC	$1,254,491.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17310	76	BIOSOLIDS TO TRANSPORTATION FUEL-GRADE RENEWABLE NATURAL GAS (RNG) PRE-COMMERCIALIZATION OPTIMIZATION AND RESEARCH PROJECT	KORE INFRASTRUCTURE, LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17310	76	BIOSOLIDS TO TRANSPORTATION FUEL-GRADE RENEWABLE NATURAL GAS (RNG) PRE-COMMERCIALIZATION OPTIMIZATION AND RESEARCH PROJECT	KORE INFRASTRUCTURE, LLC	$0.00	6
08	LEGAL	C18114	01	PROVIDE ENVIRONMENTAL LAW SERVICES	WOODRUFF SPRADLIN & SMART	$200,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18194	31	DEVELOP AND DEMONSTRATE NEAR-ZERO EMISSION OPPOSED PISTON ENGINE	CALSTART, INC	$1,114,500.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18240	56	PROVIDE TECHNICAL ASSISTANCE TO THE ENHANCED FLEET MODERNIZATION PROGRAM	GREEN PARADIGM CONSULTING, INC	$450,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18240	56	PROVIDE TECHNICAL ASSISTANCE TO THE ENHANCED FLEET MODERNIZATION PROGRAM	GREEN PARADIGM CONSULTING, INC	$200,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18252	01	OPTICAL TENT FOR REFINERY EMISSIONS MONITORING AND EARLY WARNING OF ACCIDENTAL RELEASES	UNIVERSITY OF CALIFORNIA-LOS ANGELES	$200,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18286	17	PROVIDE LAWN AND GARDEN EQUIPMENT FOR INCENTIVE EXCHANGE PROGRAM	PACIFIC STIHL	$191,050.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19025	17	COMMERCIAL ELECTRIC LAWN & GARDEN EQUIPMENT INCENTIVE & EXCHANGE PROGRAM IN EJ AREAS	GENERAC POWER SYSTEMS, INC	$124,002.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19025	17	COMMERCIAL ELECTRIC LAWN & GARDEN EQUIPMENT INCENTIVE & EXCHANGE PROGRAM IN EJ AREAS	GENERAC POWER SYSTEMS, INC	$59,520.83	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19025	17	COMMERCIAL ELECTRIC LAWN & GARDEN EQUIPMENT INCENTIVE & EXCHANGE PROGRAM IN EJ AREAS	GENERAC POWER SYSTEMS, INC	$18,704.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19078	67	TECHNICAL ASSISTANCE WITH ALT FUELS, EVS, CHARGING AND FUELING INFRASTRUCTURE AND RENEWABLE ENERGY	GREEN PARADIGM CONSULTING, INC	$141,255.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19078	67	TECHNICAL ASSISTANCE WITH ALT FUELS, EVS, CHARGING AND FUELING INFRASTRUCTURE AND RENEWABLE ENERGY	GREEN PARADIGM CONSULTING, INC	$14,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
16	ADMINISTRATIVE & HUMAN RESOURCES	C19189	01	SECURITY GUARD SERVICES AT SCAQMD DIAMOND BAR HEADQUARTERS	CONTACT SECURITY INC.	$356,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19278	67	DEVELOP AND DEMONSTRATE ZE TRUCKS, FREIGHT HANDLING EQUIPMENT, EV INFRASTRUCTURE AND RENEWABLE ENERGY	VOLVO TECHNOLOGY OF AMERICA LLC	$1,096,963.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19322	01	PROVIDE TECHNICAL SUPPORT FOR THE SCAQMD UPPER AIR METEOROLOGICAL MONITORING NETWORK	SONOMA TECHNOLOGY INC	$60,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20085	31	TECHNICAL ASSISTANCE FOR DEPLOYMENT AND DEMONSTRATION OF INFRASTRUCTURE AND MOBILE SOURCE APPLICATIONS	CALSTART, INC	$100,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C20307	35,36	COACHELLA VALLEY REGIONAL PM10 STREET SWEEPING PROGRAM	COACHELLA VALLEY ASSOC OF GOVERNMENTS	$930,000.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C21088	01	EMPLOYMENT AND LABOR RELATIONS LEGAL SERVICES	ATKINSON, ANDELSON, LOYA, RUUD & ROMO	$25,000.00	
16	ADMINISTRATIVE & HUMAN RESOURCES	C21089	01	EMPLOYEE AND LABOR RELATIONS LEGAL SERVICES	LIEBERT CASSIDY WHITMORE	$75,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C21171	01	LEGISLATIVE REPRESENTATION IN SACRAMENTO - FUNDING FOR JANUARY 2021 THROUGH JUNE 2021	CALIFORNIA ADVISORS LLC	$142,080.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C21172	01	LEGISLATIVE REPRESENTATION IN SACRAMENTO - FUNDING FOR 1/01/2021 THROUGH 6/30/2021	JOE A GONSALVES & SON	$143,000.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C21173	01	LEGISLATIVE REPRESENTATION IN SACRAMENTO - FUNDING FOR JANUARY 1, 2021 THROUGH JUNE 30, 2021	QUINTANA, WATTS & HARTMANN LLC	$180,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21246	32	2-FOR-1 REPLACEMENT OF 2 OFF-ROAD ENGINES WITH 1 OFF-ROAD ENGINE ANDREPLACEMENT OF 2 OFF-ROAD ENGINES WITH 2 OFF-ROAD ENGINES	NATIONAL PAVING COMPANY, INC.	$14,618.00	
27	INFORMATION MANAGEMENT	C21331	01	SHORT, LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE ANDSUPPORT SERVICES	AGREEYA SOLUTIONS, INC	$490,000.00	
27	INFORMATION MANAGEMENT	C21331	01	SHORT, LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE ANDSUPPORT SERVICES	AGREEYA SOLUTIONS, INC	$90,000.00	
27	INFORMATION MANAGEMENT	C21332	01	SHORT/LONG - TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES	PRELUDE SYSTEMS, INC.	$60,500.00	
27	INFORMATION MANAGEMENT	C21332	01	SHORT/LONG - TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES	PRELUDE SYSTEMS, INC.	$209,600.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
27	INFORMATION MANAGEMENT	C21333	01	SHORT AND LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES	SIERRA CYBERNETICS INC	$232,500.00	
27	INFORMATION MANAGEMENT	C21333	01	SHORT AND LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES	SIERRA CYBERNETICS INC	$302,400.00	
27	INFORMATION MANAGEMENT	C21335	01	SHORT- LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES AS APPROVED BY THE SCAQMD GOVERNING BOARD ON 4/2/21	VARSUN ETECHNOLOGIES GROUP, INC	$39,000.00	
27	INFORMATION MANAGEMENT	C21335	01	SHORT- LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES AS APPROVED BY THE SCAQMD GOVERNING BOARD ON 4/2/21	VARSUN ETECHNOLOGIES GROUP, INC	$651,000.00	
44	MSRC	ML18146	23	PROCURE 5 LIGHT-DUTY ZEVS AND INSTALL 2 EV CHARGING STATIONS	CITY OF SOUTH GATE	$0.00	11
					Subtotal	**$19,105,183.83**	
Executive Officer Approved							
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C04106	01	AZUSA AMS	CONRAD DIAZ	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C08210	01	TECHNICAL ASSISTANCE ON MOVILE SOURCE CONTROL MEASURES AND FUTURE CONSULTATION ON TAO ACTIVITIES	SAWYER ASSOCIATES	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C09353	32	REPOWER 1 GRADER, 5 REFUSE COMPACTORS, AND 3 DOZERS	LOS ANGELES COUNTY SANITATION DISTRICTS	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C13261	32	REPOWER 3 MAIN AND 1 AUXILIARY ENGINE ON 2 MARINE VESSELS	MARINE TECH ENGINEERING INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C14092	32	REPOWER OF 4 OFF-ROAD VEHICLES	UTILITY EQUIPMENT LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C14121	32	REPOWER OF TWO MAIN ENGINES OF ONE MARINE VESSEL	SOUTHWEST MARINE RESOURCES, LLC	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C15026	01	PROVIDE OCCUPATIONAL HEALTH SERVICES	UNIVERSITY OF CALIFORNIA - IRVINE	$15,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C15366	31	LICENSE AGMT FOR HYD FUELING	ENGINEERING, PROCUREMENT & CONSTRUCTION	$0.00	6
27	INFORMATION MANAGEMENT	C15468	01	SHORT AND LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES	VARSUN ETECHNOLOGIES GROUP, INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C15511	01	ONTARIO TUFFSHED AIR MONITORING STATION	TUFF SHED INC.	$79,637.16	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C15557	32	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	STEVE F SUMMERS	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C15611	31	INSTALLATION OF ONTARIO RENEWABLE HYDROGEN FUELING STATION	ONTARIO CNG STATION INC.	$0.00	6
08	LEGAL	C16042	01	PROVIDE LEGAL SERVICES IN CONNECTION WITH DEVELOPING AND IMPLEMENTING LEGAL STRATEGY FOR RECLAIM RULE	ARNOLD & PORTER KAYE SCHOLER LLP	$0.00	6
08	LEGAL	C16063	01	SPECIALIZED LEGAL SERVICES	HOGAN LOVELLS US LLP	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C16167	32	REPOWER OF 3 OFF-ROAD VEHICLES	A & I ROCK CO., INC.	$0.00	6
26	PLANNING RULE DEV & AREA SOURCES	C16359	01	TECHNICAL SUPPORT FOR SCAQMD MEASUREMENTS RELATED TO THE COACHELLA VALLEY	TECHNICAL AND BUSINESS SYSTEMS	$0.00	6
08	LEGAL	C16392	01	LEGAL ADVICE AND REPRESENTATION FOR SO CAL GAS LITIGATION	HALPERN MAY YBARRA GELBERG LLP	$75,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17059	31	DEVELOP AND DEMONSTRATE FUEL CELL EXTENDED RANGE POWERTRAIN FOR PARCEL DELIVERY TRUCKS	CALSTART, INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17114	01	APPLICATION OF NEXT GENERATION AIR MONITORING METHODS TO CHARACTERIZE HAZARDOUS AIR POLLUTANT EMISSIONS FROM REFINERIES AND ASSESS POTENTIAL IMPACTS TO SURROUNDING COMMUNITIES	FLUXSENSE AB	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17225	67	DEVELOPMENT & DEMONSTRATIONOF UP TO 2 CLASS 8 BATTERY ELECTRIC DRAYAGE TRUCKS	VOLVO TECHNOLOGY OF AMERICA LLC	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17225	67	DEVELOPMENT & DEMONSTRATIONOF UP TO 2 CLASS 8 BATTERY ELECTRIC DRAYAGE TRUCKS	VOLVO TECHNOLOGY OF AMERICA LLC	$0.00	6
08	LEGAL	C17273	01	PUBLIC/GOVERNMENTAL LEGAL SERVICES	JONES & MAYER	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17286	31	IN-USE EMISSIONS TESTING & FUEL USAGE PROFILE OF ON-ROAD HEAVY-DUTY VEHICLES	UNIVERSITY OF CALIFORNIA RIVERSIDE	$0.00	6

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C17353	31	DEVELOP AND DEMONSTRATE MEDIUM-HEAVY DUTY (CLASS 5-7) PLUG-IN HYBRD ELECTRIC VEHICLES FOR WORK TRUCK APPLICATIONS	ODYNE SYSTEMS, LLC	$0.00	6
08	LEGAL	C17407	01	LEGAL ADVICE REGARDING THE CALIFORNIA COASTAL ACT AND RELATED MATTERS AS WELL AS REPRESENTATION OF THE SCAQMD BEFORE THE CALIFORNIA COASTAL COMMISSION	GAINES & STACEY, LLP	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C18035	01	COUNSEL: LIABILITY LITIGATION	DUNBAR & ASSOCIATES, A PROFESSIONAL LAW	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18070	81	PROP 1B TRUCK REPLACEMENT PROGRAM	SUPERIOR READY MIX CONCRETE, L.P.	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C18085	01	INSURANCE BROKERAGE SERVICES	ALLIANT INSURANCE SERVICES INC	$50,980.00	
08	LEGAL	C18114	01	PROVIDE ENVIRONMENTAL LAW SERVICES	WOODRUFF SPRADLIN & SMART	$100,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18129	31	VERSATILE PLUG-IN AUXILIARY POWER SYSTEM DEMONSTRATION	EPRI	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18144	68	DEVELOP AN INTEGRATED AIR MONITORING PROGRAM, A PUBLIC WEBSITE, AND A NOTIFICATION SYSTEM FOR THE COMMUNITY OF TORRANCE	SONOMA TECHNOLOGY INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18160	33	DEVELOP AND DEMONSTRATE ELECTRIC SCHOOL BUSES WITH VEHICLE-TO-GRID CAPABILITY	BLUE BIRD BODY COMPANY	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18193	02	EMERGING ENERGY EFFICIENT TECHNOLOGY DEMONSTRATIONS AT SCAQMD HEADQUARTERS	WILLDAN LIGHTING & ELECTRIC OF CALIFORNI	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18193	02	EMERGING ENERGY EFFICIENT TECHNOLOGY DEMONSTRATIONS AT SCAQMD HEADQUARTERS	WILLDAN LIGHTING & ELECTRIC OF CALIFORNI	$0.00	6
26	PLANNING RULE DEV & AREA SOURCES	C18196	01	PROVIDE POINT SOURCE MODELING ASSISTANCE IN PERMITTING BACKLOG	CASTLE ENVIRONMENTAL CONSULTING, LLC	$24,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18228	75	INSTALLATION AND MAINTENANCE OF HIGH-EFFICIENCY AIR FILTRATION SYSTEMS AT ELIGIBLE SCHOOLS IN ENVIRONMENTAL JUSTICE OR OTHER TARGET COMMUNITIES	IQAIR NORTH AMERICA, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18232	31	ELECTRIC TOP-HANDLER DEVELOPMENT, INTEGRATION AND DEMONSTRATION	HYSTER-YALE NEDERLAND B.V.	$0.00	6
27	INFORMATION MANAGEMENT	C18247	01	SHORT AND LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES	SIERRA CYBERNETICS INC	$0.00	6

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
26	PLANNING RULE DEV & AREA SOURCES	C18260	27	RULE 1111 CONSUMER REBATE PROGRAM FOR COMPLIANT NATURAL GAS-FIRED FAN-TYPE CENTRAL FURNACES	ELECTRIC & GAS INDUSTRIES ASSOCIATION	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18286	17	PROVIDE LAWN AND GARDEN EQUIPMENT FOR INCENTIVE EXCHANGE PROGRAM	PACIFIC STIHL	$0.00	6
27	INFORMATION MANAGEMENT	C18288	01	SHORT- AND LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES	VARSUN ETECHNOLOGIES GROUP, INC	$0.00	6
27	INFORMATION MANAGEMENT	C18292	01	SHORT- AND LONG-TERM SYSTEMS DEVELOPMENT, MAINTENANCE AND SUPPORT SERVICES	PRELUDE SYSTEMS, INC.	$0.00	6
08	LEGAL	C18303	01	ONLINE LEGAL RESEARCH/ELECTRONIC LEGAL SERVICES FOR FY 18-19	THOMSON REUTERS - WEST PYMT CTR	$72,444.00	
08	LEGAL	C18303	01	ONLINE LEGAL RESEARCH/ELECTRONIC LEGAL SERVICES FOR FY 18-19	THOMSON REUTERS - WEST PYMT CTR	$68,992.92	
08	LEGAL	C18305	01	ACCESS TO ON-LINE LEGAL RESEARCH LIBRARIES AND PRINT PUBLICATIONS - FY18/19	THOMSON REUTERS - WEST PYMT CTR	$87,588.20	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19025	17	COMMERCIAL ELECTRIC LAWN & GARDEN EQUIPMENT INCENTIVE & EXCHANGE PROGRAM IN EJ AREAS	GENERAC POWER SYSTEMS, INC	$8,125.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19026	17	SUPPLY COMMERICIAL ELECTRIC LAWN & GARDEN EQUIPMENT FOR INCENTIVE & EXCHANGE PROGRAM	HUSQVARNA PROFESSIONAL PRODUCTS INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19026	17	SUPPLY COMMERICIAL ELECTRIC LAWN & GARDEN EQUIPMENT FOR INCENTIVE & EXCHANGE PROGRAM	HUSQVARNA PROFESSIONAL PRODUCTS INC	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C19046	01	DESIGN, ENGINEERING AND BIDDING DOCUMENTS FOR REPLACEMENT OF LIEBERT AIR CONDITIONING UNITS	GOSS ENGINEERING, INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19145	80	TECHNICAL ASSISTANCE AND IMPLEMENTATION FOR THE CARL MOYER PROGRAM	GREEN PARADIGM CONSULTING, INC	$0.00	6
08	LEGAL	C19158	01	CONSULTING EXPERT ON MODIFIED HYDROFLUORIC ACID (MHF)	PETROTECH CONSULTANTS LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19166	31	REPLACEMENT OF 29 DIESEL AND GASOLINE POWERED AIRPORT SHUTTLE BUSES	PHOENIX CARS, LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19227	01	TECHNICAL ASSISTANCE WITH ALTERNATIVE FUELS AND FUELING INFRASTRUCTURE, EMISSIONS ANALYSIS AND ON-ROAD SOURCES	GLADSTEIN, NEANDROSS AND ASSOCIATES, LLC	$50,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19227	31	TECHNICAL ASSISTANCE WITH ALTERNATIVE FUELS AND FUELING INFRASTRUCTURE, EMISSIONS ANALYSIS AND ON-ROAD SOURCES	GLADSTEIN, NEANDROSS AND ASSOCIATES, LLC	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C19237	01	PROVIDE JANITORIAL SERVICES AT DIAMOND BAR HEADQUARTERS - 3/1/19 - 6/30/19	SANTA FE BUILDING MAINTENANCE	$0.00	
08	LEGAL	C19269	01	FPPC DOCUMENT MANAGEMENT SERVICES - FY18-19	NETFILE, INC.	$15,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19290	67	DATA COLLECTION, ANALYSIS AND REPORT FOR CARB'S ZANZEFF PROJECT	UNIVERSITY OF CALIFORNIA RIVERSIDE	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19312	01	TECHNICAL EXPERTISE FOR LABORATORY - NEEDED FOR THE ANALYSIS OF ASBESTOS IN BUILDING MATERIAL AND ANALYSIS OF FALLOUT MATERIAL, IN SUPPORT OF RULE 1403	SANDRA L ESSNER	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19313	31	CONSTRUCT AND OPERATE RENEWABLE HYDROGEN REFUELING STATION	EQUILON ENTERPRISES LLC	$0.00	6
26	PLANNING RULE DEV & AREA SOURCES	C19317	27	DEVELOP NEXT GENERATION ULTRA LOW NOX FORCE AIR FURNACE	LANTEC PRODUCTS, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19322	01	PROVIDE TECHNICAL SUPPORT FOR THE SCAQMD UPPER AIR METEOROLOGICAL MONITORING NETWORK	SONOMA TECHNOLOGY INC	$0.00	6
26	PLANNING RULE DEV & AREA SOURCES	C19335	01	PACIFIC RIM INITIATIVE FOR MARITIME EMISSION REDUCTIONS: COLLABORATION WITH CHINESE PORT CITIES	FUNG RESEARCH LIMITED	$0.00	6
08	LEGAL	C19340	01	EVALUATION AND REPORT OF SCAQMD OFFICE OF COMPLIANCE AND ENFORCEMENT	SERVE TO LEAD GROUP INC	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C19396	01	WORKER'S COMPENSATION CLAIMS THIRD-PARTY ADMINISTRATOR FY 19-20 FUNDING	ADMINSURE, INC	$72,540.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19450	77	REPLACEMENT OF 2 ON-ROAD EQUIPMENT	TRICON TRANSPORTATION, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19470	32	REPOWER 9 OFF-ROAD EQUIPMENT	SUKUT CONSTRUCTION, INC.	$0.00	11
16	ADMINISTRATIVE & HUMAN RESOURCES	C20003	01	TREE TRIMMING AND PLANT CARE SERVICES FY 19-20 FUNDING	GOTHIC LANDSCAPE MAINTENANCE DIVISION	$29,750.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20033	31	SUSTAINABLE TERMINALS ACCELERATING REGIONAL TRANSPORTATION (START) PHASE I	PORT OF LONG BEACH	$0.00	6

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20061	54	MARKET ACC. PROG (MAP)	CLEAN ENERGY	$0.00	6
26	PLANNING RULE DEV & AREA SOURCES	C20078	01	SOUTH COAST AQMD PARTNERSHIP WITH CANSAC-CEFA	DESERT RESEARCH INSTITUTE	$10,000.00	
08	LEGAL	C20081	01	PROVIDE LEGAL ADVICE FOR STATE CONTROLLER AUDIT	PROSKAUER ROSE LLP	$55,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20086	80	TECHNICAL ASSISTANCE AND IMPLEMENTATION OF THE CARL MOYER PROGRAM INCLUDING THE SCHOOL BUS PROGRAM	CALSTART, INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20109	27	ZERO-EMISSION BATTERY-POWERED TRANSPORT REFRIGERATION UNITS	ADVANCED ENERGY MACHINES LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20119	01	DEVELOP AND VALIDATE CALIBRATION PROCEDURES FOR AQY SENSORS	AEROQUAL INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20137	01	AIR MONITORING STATION LICENSE AGREEMENT	LEEWARD BAY MARINA	$6,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20158	31	ONBOARD NOX AND PM MEASUREMENT METHOD	UNIVERSITY OF CALIFORNIA RIVERSIDE	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20163	01	TECHNICAL ASSISTANCE WITH IMPLEMENTATION AND OUTREACH SUPPORT FOR CALIFORNIA VW MITIGATION TRUST FUND - TASK ORDER NO. 1	GLADSTEIN, NEANDROSS AND ASSOCIATES, LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20193	75	INSTALLATION AND MAINTENANCE OF AIR FILTRATION SYSTEMS AT SCHOOLS	IQAIR NORTH AMERICA, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20199	31	DEVELOP A NEAR-ZERO NATURAL GAS AND PROPANE CONVERSION SYSTEM FOR ON-ROAD MEDIUM-DUTY VEHICLES	AGILITY FUEL SOLUTIONS LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20199	31	DEVELOP A NEAR-ZERO NATURAL GAS AND PROPANE CONVERSION SYSTEM FOR ON-ROAD MEDIUM-DUTY VEHICLES	AGILITY FUEL SOLUTIONS LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20203	77	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	MARVO HOLSTEINS	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20242	77	REPOWER 2 MAIN ENGINES AND 1 AUXILIARY ENGINE OF A MARINE VESSEL	GREGORY J. KUGLIS	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20261	32,80	REPLACEMENT OF 4 OFF-ROAD EQUIPMENT	GH DAIRY	$0.00	11

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20263	77	REPOWER 1 MAIN ENGINE OF A MARINE VESSEL	GIOI TRAN	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20265	31	TECHNICAL ASSISTANCE WITH HEAVY-DUTY VEHICLE EMISSIONS TESTING, ANALYSES AND ENGINE DEVELOPMENT & APPLICATIONS	EASTERN RESEARCH GROUP, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20272	77	REPOWER 8 MAIN ENGINES ON 4 MARINE VESSELS	HARBOR BREEZE CORP	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20272	77	REPOWER 8 MAIN ENGINES ON 4 MARINE VESSELS	HARBOR BREEZE CORP	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20278	77	REPOWER 5 MAIN AND 2 AUXILIARY ENGINES OF 2 MARINE VESSELS	AMERICAN MARINE CORPORATION	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20281	77	REPOWER 2 MAIN ENGINES ON 1 MARINE VESSEL	DOUGLAS E WOOLLEY	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20292	77	REPOWER 2 MAIN ENGINES OF A MARINE VESSEL	WYATT STAEHLING	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20297	77	REPOWER 4 OFF-ROAD EQUIPMENT	FENIX MARINE SERVICES LTD	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20297	77	REPOWER 4 OFF-ROAD EQUIPMENT	FENIX MARINE SERVICES LTD	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20302	77,32	REPLACEMENT OF 8 OFF-ROAD EQUIPMENT	LUCKY FARMS, LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20308	32	REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	JORGE FUENTES TRUCKING	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20316	31	NATURAL GAS ENGINE AND VEHICLES RESEARCH AND DEVELOPMENT - PLUG-IN HYBRID CNG DRAYAGE TRUCK "PHET"	US HYBRID CORPORATION	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C20337	01	HARASSMENT PREVENTION TRAINING	KANTOLA TRAINING SOLUTIONS	$9,136.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21040	54	APPROVED DEALRSHIP MAP PROGRAM	INLAND KENWORTH (US) INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21046	54	APPROVED DEALERSHIP MAP PROGRAM	TEC OF CALIFORNIA, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21049	75	INSTALL AIR FILTRATON SYSTEMS IN SCHOOLS	IQAIR NORTH AMERICA, INC.	$0.00	6

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21050	75	INSTALL AIR FILTRATION SYSTEMS IN SCHOOLS	IQAIR NORTH AMERICA, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21067	81	PROP 1B TRUCK REPLACMENT PROGRAM	NGL LOGISTICS LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21074	77	REPLACE 4 ON-ROAD EQUIPMENT	KARGO TRANSPORTATION INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21080	80	REPLACEMENT OF 7 OFF-ROAD EQUIPMENT	C.A. RASMUSSEN, INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21081	32	REPLACE 2 OFF-ROAD EQUIPMENT	UNIVERSITY OF CALIFORNIA RIVERSIDE	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C21089	01	EMPLOYEE AND LABOR RELATIONS LEGAL SERVICES	LIEBERT CASSIDY WHITMORE	$75,000.00	
08	LEGAL	C21090	01	OUTSIDE COUNSEL - CONFLICT OF INTEREST	OLSON REMCHO LLP	$15,000.00	
17	CLERK OF THE BOARDS	C21094	01	LEGAL REPRESENTATION FOR THE HEARING BOARD FY 20/21	STRUMWASSER & WOOCHER LLP	$11,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21103	31	INVESTIGATIVE STUDY OF E15 GASOLINE FUEL EFFECTS	UNIVERSITY OF CALIFORNIA RIVERSIDE	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21116	81	PROP 1B TRUCK REPLACEMENT PROGRAM	STS LOGISTICS INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21124	81	PROP 1B HEAVY DUTY TRUCK REPLACEMENT	YANXIU LI	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21140	31	APPROVED DEALERSHIP TTDP PROGRAM	INLAND KENWORTH (US) INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21142	31	APPROVED DEALERSHIP TTDP PROGRAM	TEC OF CALIFORNIA, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21157	81	PROP 1B TRUCK REPLACEMENT PROGRAM	PACIFICA TRUCKS, LLC	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C21161	01	LEGAL SERVICES FOR IMMIGRATION, DIVERSITY AND LABOR & EMPLOYMENT SERVICES	FISHER & PHILLIPS, LLP	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21182	81	PROP 1B TRUCK REPLACEMENT PROGRAM	AIR FAYRE CA INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21186	77	REPLACEMENT OF ONE OFF-ROAD EQUIPMENT.	MILLER MILLING COMPANY LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21199	77	REPLACE 2 OFF-ROAD EQUIPMENT	WEST COAST TURF	$0.00	6

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21200	77	REPLACEMENT OF 5 OFF-ROAD EQUIPMENT	TUDOR RANCH INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21208	77	REPOWER OF 1 OFF-ROAD CARGO HANDLING EQUIPMENT	FENIX MARINE SERVICES LTD	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21217	77	REPLACEMENT OF 4 OFF-ROAD CARGO HANDLING EQUIPMENT	TOTAL TERMINALS INTERNATIONAL, LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21219	77	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	NORTH SHORE GREENHOUSES INC	$0.00	6
26	PLANNING RULE DEV & AREA SOURCES	C21222	01	INVESTIGATING OGV NOX EMISSIONS USING AIRBORNE MEASUREMENT DATA	EXPLICIT APS	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21252	27	REPOWER 1 MAIN ENGINE OF 1 MARINE VESSEL	FREELANCE SPORTFISHING, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21260	01	TECHNICAL ASSISTANCE WITH INCENTIVE AND RESEARCH & DEVELOPMENT PROGRAMS	FREDRICK MINASSIAN	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21276	77	REPOWER 3 MAIN ENGINES ON 1 MARINE VESSEL	GROUNDTACKLE HOLDINGS, LLC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21287	80,32	REPOWER 17 AND REPLACE 1 OFF-ROAD EQUIPMENT	COBURN EQUIPMENT	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21294	77	REPLACEMENT OF 24 OFF-ROAD EQUIPMENT	COCOPAH NURSERIES INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21304	77	REPOWER 2 MAIN ENGINES OF A MARINE VESSEL	CAYWIND ENTERPRISES, INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21309	77	REPOWER 1 MAIN ENGINE AND 2 AUXILIARY ENGINES OF A MARINE VESSEL	F/V PAC HORIZON, INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21311	77	REPOWER 1 MAIN ENGINE OF A MARINE VESSEL	MICHAEL A NEIL	$0.00	6
04	FINANCE	C21317	01	AB 2766 FEE REVENUE RECIPIENTS AUDIT FOR FISCAL YEARS 2017-2018 & 2018-2019	BCA WATSON RICE, LLP	$0.00	6
04	FINANCE	C21317		AB 2766 FEE REVENUE RECIPIENTS AUDIT FOR FISCAL YEARS 2017-2018 & 2018-2019	BCA WATSON RICE, LLP	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21328	77	REPOWER 2 MAIN ENGINES OF A MARINE VESSEL	US WATER TAXI, INC.	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C21330	01	EMPLOYEE SEARCH AND RECRUITMENT SERVICES	CPS HR CONSULTING	$10,000.00	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21337	79	REPLACEMENT OF 2 ON-ROAD DRAYAGE TRUCKS	NGL LOGISTICS LLC	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21338	77	REPOWER 2 MAINE ENGINES OF A MARINE VESSEL	STRATABAND INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21341	27	REPOWER 2 MAIN ENGINES AND 2 AUXILIARY ENGINES OF A MARINE VESSEL	MADRUGADOR INC	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21343	79	REPLACEMENT OF 1 DRAYAGE TRUCK	ALLEN CHUL HYON	$0.00	6
35	LEGISLATIVE & PUBLIC AFFAIRS	C21351	01	DR. WILLAM A. BURKE LEGACY MURAL	GEORGE YEPES	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21356	79	REPLACE 4 ON-ROAD DRAYAGE TRUCKS	PREMIUM TRANSPORTATION SERVICES, INC.	$0.00	6
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21381	77	REPOWER 2 MAIN ENGINES OF A MARINE VESSEL	FIGHTING IRISH DANA POINT LLC	$34,872.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21394		AIR MONITORING LICENSE AGRMT	LOS ANGELES UNIFIED SCHOOL DISTRICT	$27,097.56	
26	PLANNING RULE DEV & AREA SOURCES	C21395	01	DERIVE MASS AND SPECIFIC EMISSION FACTORS OF NOx AT DIFFERENT PROPULSION ENGINE LOADS FROM ITS PROPRIETARY REMOTE SNIFFER MEASUREMENTS AT THE GREAT BELT BRIDGE	FLUXSENSE AB	$0.00	6
26	PLANNING RULE DEV & AREA SOURCES	C21396	01	PEFORM TECHNICAL UPGRADES, INTEGRATE DATA FROM ADDITIONAL MONITORS AND MAINTAIN PUBLIC ALERT SYSTEM TO PROVIDE AUTOMATED ALERTS FOR H2S	SONOMA TECHNOLOGY INC	$16,000.00	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22028	32	CONSTRUCTION AND OPERATION OF 1 NEW RENEWABLE NATURAL GAS FILLING STATION	ANAHEIM UNION HIGH SCHOOL DISTRICT	$0.00	6
35	LEGISLATIVE & PUBLIC AFFAIRS	C22037	01	DEVELOP AB 617 PROGRAM FOR SOUTH CENTRAL COMMUNITY	PHYSICIANS FOR SOCIAL RESPONSIBILITY	$5,555.44	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22054	80	REPOWER 1 MAIN ENGINE OF A MARINE VESSEL	MARINA DEL REY SPORTFISHING, LLC	$0.00	6
35	LEGISLATIVE & PUBLIC AFFAIRS	C22061	01	CO-LEAD FOR THE DEVELOPMENT AND IMPLEMENTATION OF THE AB 617 PROGRAM IN SOUTH LOS ANGELES	STRATEGIC CONCEPTS IN ORGANIZING &	$4,166.56	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22064	80	REPLACE 2 MAIN ENGINES OF MARINE VESSEL	SAN CLEMENTE SPORTFISHING, INC	$0.00	6

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C22065	80	REPLACEMENT OF 2 MAIN AND 1 AUXILIARY ENGINE OF A MARINE VESSEL	BEAR FLAG DISTRIBUTION	$0.00	6
35	LEGISLATIVE & PUBLIC AFFAIRS	C22081	01	CO-LEAD FOR THE DEVELOPMENT AND IMPLEMENTATION OF THE AB 617 PROGRAM IN SOUTH LOS ANGELES	WATTS CLEAN AIR AND ENGERGY COMMITTEE	$4,166.56	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22102	01	FACILITATION SERVICES FOR AB 617 COMMUNITY	CASTILLO CONSULTING PARTNERS, LLC	$20,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C22103	01	DEVELOPMENT AND IMPLEMENTATION OF PROGRAMS ON THE HEALTH EFFECTS OF AIR POLLUTION AND CONDUCT DIFFICULT AND COMPLEX RESEARCH AND ANALYSIS OF HEALTH-RELATED AIR QUALITY PROBLEMS.	NICHOLE QUICK MD PC	$0.00	6
26	PLANNING RULE DEV & AREA SOURCES	C22111	01	HEALTH EFFECTS SUPPORT FOR AQMP AND THE REVIEW OF THE HEAPF	KHADEEJA ABDULLAH	$0.00	6
16	ADMINISTRATIVE & HUMAN RESOURCES	C22148	01	COMMUNICATION AND LEADERSHIP TRAINING	LINDA BYARS SWINDLING	$10,000.00	
26	PLANNING RULE DEV & AREA SOURCES	C22152	01	PROVIDE ASSISTANCE WITH UPDATING HEALTH BENEFITS LITERATURE 2022 AQMP	INDUSTRIAL ECONOMICS INCORPORATED	$62,506.00	
35	LEGISLATIVE & PUBLIC AFFAIRS	C22242	01	PROVIDE CATERING SERVICES FOR 2022 CESAR CHAVEZ EVENT	LEVY PREMIUM FOODSERVICE PARTNERSHIP	$3,587.48	
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G18338	80	ALTERNATIVE FUEL SCHOOL BUS REPLACEMENT PROGRAM	ANAHEIM ELEMENTARY SCHOOL DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G20052	80	REPLACE 2 CNG TANKS ON SCHOOL BUSES	MENIFEE UNIFIED SCHOOL DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21086	80	LOWER EMISSION SCHOOL BUS TANK REPLACEMENT PROGRAM	MENIFEE UNION ELEMENTARY SCHOOL DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21125	80	LOWER EMISSION SCHOOL BUS TANK REPLACEMENT PROGRAM	WHITTIER UNION HIGH SCHOOL DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21188	80	LOWER EMISSION SCHOOL BUS TANK REPLACEMENT PROGRAM	HUNTINGTON BEACH UNION HIGH SCH DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21188	80	LOWER EMISSION SCHOOL BUS TANK REPLACEMENT PROGRAM	HUNTINGTON BEACH UNION HIGH SCH DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21212	80	REPLACE 2 CNG TANKS ON SCHOOL BUSES	ALTA LOMA SCHOOL DISTRICT	$0.00	11

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21280	80	REPLACE 5 CNG TANKS ON SCHOOL BUSES	GARDEN GROVE UNIFIED SCHOOL DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21321	80	REPLACE 2 CNG FUEL TANKS ON SCHOOL BUSES	DOWNEY UNIFIED SCHOOL DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21364	80	REPLACE 6 CNG FUEL TANKS ON SCHOOL BUSES	CHINO VALLEY UNIFIED SCHOOL DISTRICT	$0.00	11
44	SCIENCE & TECHNOLOGY ADVANCEMENT	G21390	80	LOWER EMISSION SCHOOL BUS CNG TANK REPLACEMENT PROGRAM	UPLAND UNIFIED SCHOOL DISTRICT	$0.00	11
44	MSRC	ML12014	23	PURCHASE CNG & LPG FUELED VEHICLES, EXPAND EXISTING CNG FUELING STATION AND INSTALL ELECTRIC CHARGING STATIONS	CITY OF SANTA ANA	$0.00	6
44	MSRC	ML12014	23	PURCHASE CNG & LPG FUELED VEHICLES, EXPAND EXISTING CNG FUELING STATION AND INSTALL ELECTRIC CHARGING STATIONS	CITY OF SANTA ANA	$0.00	6
44	MSRC	ML12045	23	INSTALL CNG STATION	CITY OF BALDWIN PARK	$0.00	6
44	MSRC	ML12091	23	INSTALL EV CHARGING STATIONS	CITY OF BELLFLOWER	$0.00	6
44	MSRC	ML14012	23	PURCHASE 7 HEAVY-DUTY ON-ROAD LPG VEHICLES AND INSTALL 6 EV CHARGING STATIONS	CITY OF SANTA ANA	$0.00	6
44	MSRC	ML14012	23	PURCHASE 7 HEAVY-DUTY ON-ROAD LPG VEHICLES AND INSTALL 6 EV CHARGING STATIONS	CITY OF SANTA ANA	$0.00	6
44	MSRC	ML16006	23	PURCHASE HEAVY-DUTY CNG VEHICLE AND IMPLEMENT BICYCLE EDUCATION	CITY OF CATHEDRAL CITY	$0.00	6
44	MSRC	ML16039	23	INSTALL EV CHARGING STATIONS	CITY OF TORRANCE	$0.00	6
44	MSRC	ML16040	23	INSTALL EV CHARGING STATIONS	CITY OF EASTVALE	$0.00	11
44	MSRC	ML16057	23	IMPLEMENT COUNTY LINE ROAD "COMPLETE STREETS" PROJECT	CITY OF YUCAIPA	$0.00	6
44	MSRC	ML16071	23	IMPLEMENT BOULDER AVENUE "COMPLETE STREETS" PROJECT	CITY OF HIGHLAND	$0.00	6
44	MSRC	ML16075	23	EXPAND CNG STATION AND MODIFY MAINTENANCE FACILITY	CITY OF SAN FERNANDO	$0.00	6
44	MSRC	ML18020	23	PURCHASE ONE MEDIUM AND ONE HEAVY-DUTY ZERO EMISSION VEHICLE	CITY OF COLTON	$0.00	6
44	MSRC	ML18031	23	PROCURE 2 LIGHT-DUTY ZEVS, 1 HEAVY-DUTY NEAR ZERO VEHICLE AND EVSE	CITY OF DIAMOND BAR	$0.00	6
44	MSRC	ML18036	23	INSTALL ELECTRIC VEHICLE CHARGING STATIONS	CITY OF INDIAN WELLS	$0.00	6

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	MSRC	ML18041	23	INSTALL ELECTRIC VEHICLE CHARGING STATION	CITY OF WEST HOLLYWOOD	$0.00	6
44	MSRC	ML18043	23	INSTALL EV CHARGING STATIONS	CITY OF YORBA LINDA	$0.00	6
44	MSRC	ML18059	23	INSTALLATION OF 6 ELECTRIC VEHICLE CHARGING STATIONS	CITY OF GLENDALE	$0.00	11
44	MSRC	ML18060	23	PROCURE 29 ON-ROAD LIGHT DUTY ZERO EMISSION VEHICLES, ONE ON-ROAD HEAVY-DUTY ZERO EMISSION VEHICLE, 6 ON-ROAD HEAVY-DUTY NEAR-ZERO EMISSIONS VEHICLE AND INSTALL 185 EV CHARGING STATIONS	COUNTY OF LOS ANGELES	$0.00	6
44	MSRC	ML18076	23	PROCURE ONE LIGHT-DUTY ZERO EMISSION VEHICLE	CITY OF CULVER CITY	$0.00	6
44	MSRC	ML18088	23	INSTALL A CLASS I BIKEWAY	CITY OF BIG BEAR LAKE	$0.00	11
44	MSRC	ML18090	23	INSTALL 9 EV CHARGING STATIONS	CITY OF SANTA CLARITA	$0.00	6
44	MSRC	ML18092	23	PROCURE 2 LIGHT-DUTY ZEV'S AND INSTALL A EV CHARGING STATION	CITY OF SOUTH PASADENA	$0.00	6
44	MSRC	ML18100	23	INSTALL 24 EV CHARGING STATIONS	CITY OF BREA	$0.00	6
44	MSRC	ML18101	23	INSTALL 20 EV CHARGING STATIONS	CITY OF BURBANK	$0.00	6
44	MSRC	ML18129	23	INSTALL 6 ELECTRIC VEHICLE CHARGING STATIONS	CITY OF YUCAIPA	$0.00	6
44	MSRC	ML18141	23	PROCURE ONE LIGHT-DUTY ZEV AND INSTALL TWO EV CHARGING STATIONS	CITY OF ROLLING HILLS ESTATES	$0.00	6
44	MSRC	ML18147	23	INSTALL 18 EV CHARGING STATIONS	CITY OF PALM SPRINGS	$0.00	6
44	MSRC	ML18159	23	PROCURE 9 LIGHT-DUTY ZEV'S AND INSTALL EV CHARGING STATIONS	CITY OF RIALTO	$0.00	6
44	MSRC	ML18177	23	PROCURE MEDIUM-DUTY AND HEAVY-DUTY ZEVS AND INSTALL EV CHARGING STATIONS	CITY OF SAN BERNARDINO	$0.00	6
44	MSRC	ML18178	23	PROCURE 1 HEAVY-DUTY NEAR-ZERO EMISSIONS VEHICLE	CITY OF LA PUENTE	$0.00	6
44	MSRC	MS14059	23	SIGNAL SYNCHRONIZATION PARTNERSHIP PROGRAM	RIVERSIDE COUNTY TRANSPORTATION COMM	$0.00	6
44	MSRC	MS14072	23	SIGNAL SYNCHRONIZATION PARTNERSHIP PROGRAM	SAN BERNARDINO COUNTY TRANSPORTATION	$0.00	6
44	MSRC	MS14079	23	INSTALL LIMITED ACCESS CNG STATION	WASTE RESOURCES INC	$0.00	6
44	MSRC	MS14083	23	INSTALL AND MAINTAIN LIMITED ACCESS CNG FUELING STATION	HACIENDA LA PUENTE UNIFIED SCHOOL DIST	$0.00	6
44	MSRC	MS16094	23	COMMUTER RAIL "FIRST MILE/LAST MILE" IMPROVEMENTS	RIVERSIDE COUNTY TRANSPORTATION COMM	$0.00	6

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	MSRC	MS16114	23	PURCHASE 3 HEAVY-DUTY NEAR-ZERO CNG VEHICLES	CITY OF NORWALK	$0.00	6
44	MSRC	MS16121	23	PURCHASE 40 HEAVY-DUTY NEAR-ZERO VEHICLES	LONG BEACH TRANSIT	$0.00	6
44	MSRC	MS18024	23	REGIONAL VAN POOL INCENTIVE PROGRAM	RIVERSIDE COUNTY TRANSPORTATION COMM	$0.00	6
44	MSRC	MS18027	23	INSTALL CNG STATION, MODIFY MAINTENANCE FACILITY AND TRAIN MECHANICS	CITY OF GARDENA	$0.00	6
44	MSRC	MS18122	23	INSTALL LIMITED ACCESS CNG STATION W/ RNG	UNIVERSAL WASTE SYSTEMS, INC.	$0.00	6
44	MSRC	MS21002	23	PROVIDE PROGRAMMATIC SERVICES TO THE MSRC	BETTER WORLD GROUP ADVISORS	$0.00	11
44	MSRC	MS21006	23	HOST & MAINTAIN MSRC WEBSITE	GEOGRAPHICS	$0.00	6
44	MSRC	MS21017	23	PROCURE AND DEPLOY UP TO 10 ZERO-EMISSION TRUCKS AND ASSOCIATED CHARGING INFRASTRUCTURE	MHX LLC	$0.00	11
					Subtotal	**$1,128,144.88**	

V. TERMINATED CONTRACTS - PARTIAL/NO WORK PERFORMED

44	SCIENCE & TECHNOLOGY ADVANCEMENT	C15150	31	INSTALL/UPGRADE EIGHT HYDROGEN FUELING STATIONS THROUGHOUT SCAB	AIR PRODUCTS AND CHEMICALS, INC	-$237,500.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18175	81	PROP 1B TRUCK REPLACEMENT PROGRAM	BELLAPORT TRANSPORTATION INC	-$980,000.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18240	56	PROVIDE TECHNICAL ASSISTANCE TO THE ENHANCED FLEET MODERNIZATION PROGRAM	GREEN PARADIGM CONSULTING, INC	-$200,000.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18286	17	PROVIDE LAWN AND GARDEN EQUIPMENT FOR INCENTIVE EXCHANGE PROGRAM	PACIFIC STIHL	-$59,520.83	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C18328	32	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	COUNTY OF LOS ANGELES	-$93.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19024	17	COMMERCIAL LAWN AND GARDEN EQUIPMENT INCENTIVE AND EXCHANGE PROGRAM WITHIN EJ AREAS	BLOUNT, INC	-$43,494.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19026	17	SUPPLY COMMERICIAL ELECTRIC LAWN & GARDEN EQUIPMENT FOR INCENTIVE & EXCHANGE PROGRAM	HUSQVARNA PROFESSIONAL PRODUCTS INC	-$17,881.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19027	17	PROVIDE LAWN AND GARDEN EQUIPMENT FOR INCENTIVE AND EXCHANGE PROGRAM	MAKITA U.S.A., INC.	-$823.00	7

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C19409	32	CONSTRUCT AND OPERATE 4 RENEWABLE NATURAL GAS FILLING STATIONS	SUPERIOR READY MIX CONCRETE, L.P.	-$1,553,240.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20203	77	REPLACEMENT OF 1 OFF-ROAD EQUIPMENT	MARVO HOLSTEINS	-$380,558.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20224	32	REPOWER 44 ENGINES ON 22 DUAL-ENGINE VEHICLES	TGI EQUIPMENT CORPORATION	-$125,402.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20261	32,80	REPLACEMENT OF 4 OFF-ROAD EQUIPMENT	GH DAIRY	-$5,681.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20262	77	REPOWER 2 MAIN ENGINES OF A MARINE VESSEL	FUKUTO / REDLEW CHARTERS, INC.	-$6,800.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20300	77	REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	PICK YOUR PART AUTO WRECKING	-$589.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20300	32	REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	PICK YOUR PART AUTO WRECKING	-$11,790.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20305	77	REPLACEMENT OF 5 OFF-ROAD EQUIPMENT	TK CONSTRUCTION	-$4,740.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C20319	32	REPLACEMENT OF 3 OFF-ROAD EQUIPMENT	KLM INC	-$153,575.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21038	77	REPLACE 3 OFF-ROAD EQUIPMENT	SUPRA NATIONAL EXPRESS INC.	-$16,756.00	7

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21047	77	REPLACEMENT OF ONE 1 ON-ROAD EQUIPMENT	VICTOR KI CHOI	-$1,247.00	7
44	SCIENCE & TECHNOLOGY ADVANCEMENT	C21115	80	REPLACE 7 OFF-ROAD EQUIPMENT	BECKCO, INC	-$1,418.00	7
02	GOVERNING BOARD	C22003	01	BOARD ASSISTANT SERVICES FOR GIDEON KRACOV	GENEVIEVE MICHELLE AMSALEM	-$34,026.17	7
02	GOVERNING BOARD	C22008	01	BOARD ASSISTANT SERVICES FOR V. MANUEL PEREZ	GUILLERMO GONZALEZ	-$3,685.01	7
02	GOVERNING BOARD	C22018	01	BOARD ASSISTANT SERVOCES FOR GIDEON KRACOV	ROSS BENJAMIN ZELEN	-$379.87	7
44	MSRC	ML14012	23	PURCHASE 7 HEAVY-DUTY ON-ROAD LPG VEHICLES AND INSTALL 6 EV CHARGING STATIONS	CITY OF SANTA ANA	-$180,000.00	7
44	MSRC	ML16048	23	INSTALL A BICYCLE LOCKER AND EV CHARGING STATIONS	CITY OF PLACENTIA	-$10,000.00	7
44	MSRC	ML18031	23	PROCURE 2 LIGHT-DUTY ZEVS, 1 HEAVY-DUTY NEAR ZERO VEHICLE AND EVSE	CITY OF DIAMOND BAR	-$15,000.00	7
44	MSRC	ML18038	23	PROCURE 5 LIGHT-DITY ZEV'S AND EVSE	CITY OF ANAHEIM	-$69,870.00	7
44	MSRC	ML18039	23	PROCURE ONE HEAVY-DUTY ZERO EMISSION VEHICLE (ZEV) AND INSTALL ONE LEVEL III FAST CHARGE ELECTRIC VEHICLE CHARGING STATION	CITY OF REDLANDS	-$23,809.00	7
44	MSRC	ML18044	23	UPGRADE AND INSTALL ELECTRIC VEHICLE CHARGING STATIONS	CITY OF MALIBU	-$50,000.00	7
44	MSRC	ML18051	23	PROCURE 9 LIGHT-DUTY & 2 MEDIUM-DUTY ZEVS AND INSTALL 11 EV CHARGING AND1 CNG FUELING STATION	CITY OF RANCHO CUCAMONGA	-$135,540.00	7
44	MSRC	ML18078	23	PURCHASE 17 HEAVY-DUTY NEAR-ZERO EMISSION VEHICLES	COUNTY OF RIVERSIDE	-$50,000.00	7
44	MSRC	ML18155	23	INSTALL 3 LEVEL II TYPE EV CHARGING STATIONS	CITY OF CLAREMONT	-$14,391.00	7
44	MSRC	ML18161	23	PROCURE 1 LIGHT-DUTY ZEV, 1 HD NEAR-ZERO VEHICLE AND INSTALL STATIONS	CITY OF INDIO	-$25,000.00	7
44	MSRC	MS16115	23	RE-POWER 58 TRANSIT BUSES WITH NEAR-ZERO ENGINES	CITY OF SANTA MONICA	-$420,000.00	7
					Subtotal	**-$4,412,808.88**	

South Coast AQMD
Contract Activity Report
July 1, 2021 - June 30, 2022

DEPT ID	DEPT NAME	CONTRACT NUMBER	FUND CODE	DESCRIPTION	VENDOR NAME	CONTRACT AMOUNT	FOOT NOTE

SPECIAL FUNDS

17 ADV. TECH, OUTREACH & EDU FUND
22 AIR QUALITY IMPROVEMENT FUND
23 MSRC FUND
27 AIR QUALITY INVESTMENT FUND
31 CLEAN FUELS FUND
32 CARL MOYER FUND - SB1107 ACCOUNT
33 SCHOOL BUS REPLACEMENT PROGRAM
35 AES SETTLEMENT FUND
36 RULE 1309.1 PRIORITY RESERVE FUND
46 BP ARCO SETTLEMENT FUND
48 HEALTH EFFECTS RESEARCH FUND
49 CEQA GHG MITIGATION FUND
54 RULE 1118 MITIGATION FUND
56 HEROS II PROGRAM FUND
57 EL MONTE PARK PROJECT SETTLEMENT FUND
58 AB1318 MITIGATION FEES FUND
59 VOUCHER INCENTIVE PROGRAM FUND (VIP)
61 ADVANCED TECHNOLOGY GOODS MOVEMENT
67 GHG REDUCTION PROJECTS FUND
69 LADWP SETTLEMENT PROJECTS FUND
75 AIR FILTRATION FUND
76 SO CAL GAS SETTLEMENT FUND
77 COMMUNITY AIR PROTECTION AB 134 FUND
79 VW MITIGATION REVENUE FUND
80 CARL MOYER FUND - AB923 ACCOUNT
81 PROPOSITION 1B - GOODS MOVEMENT FUND
83 CLEAN SHIPPING TECH DEMO FUND
84 ALISO CANYON AIR FILTRATION FUND
85 ALISO FUND PORTER RANCH SEP FUND

FOOTNOTES

1 NO FIXED VALUE
2 RATES VARY - NO FIXED VALUE
3 REVENUE CONTRACT - NO AMOUNT SHOWN
4 NO COST - COST REALLOCATION
5 CHANGED TO EMPLOYEE STATUS
6 NO COST- TIME EXTENSION
7 DE-OBLIGATION OF FUNDING
8 COMPETITIVE SOLICITITATION ISSUED BY ANOTHER GOVERNMENT AGENCY
9 NO COST - AIR MONITORING/LICENSE AGR
11 NO COST - CHANGE IN TERMS
12 FEDERAL GOVERNMENT PASS-THRU
13 AT DIRECTION OF LEGISLATIVE COMMITTIEE
14 OPTIONAL YEAR RENEWAL/MULTI-YR CONTRACT
15 TRUCK GRANT PAID TO CASCADE SIERRA SOLUTIONS THROUGH LEASE-TO-OWN PROGRAM. THIS CONTRACT
16 AMOUNT UTILIZED MAY BE LESS

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 19

REPORT: Status Report on Regulation XIII – New Source Review

SYNOPSIS: This report presents the state and federal Final Determination of Equivalency for January 2020 through December 2020. As such, it provides information regarding the status of Regulation XIII – New Source Review in meeting state and federal NSR requirements and shows that South Coast AQMD's NSR program is in compliance with applicable state and federal requirements from January 2020 through December 2020.

COMMITTEE: Stationary Source, August 19, 2022, Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

JA:JW:DO:GI:SKT

SUMMARY
South Coast AQMD's NSR rules and regulations are designed to comply with state and federal Clean Air Act requirements and ensure that emission increases from new and modified sources do not interfere with efforts to attain and maintain the state and federal air quality standards, while economic growth in the South Coast region is not unnecessarily impeded. Regulation XIII - New Source Review, regulates and accounts for all emission changes (both increases and decreases) from the permitting of new, modified, and relocated stationary sources within South Coast AQMD jurisdiction, excluding NOx and SOx sources that are subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM).[1]

[1] While the RECLAIM program is different than command and control rules for NOx and SOx and provides greater regulatory flexibility to businesses, its NSR requirements, as specified in Rule 2005, are designed to comply with the governing principles of NSR contained in the federal Clean Air Act (CAA) and the California State Health and Safety Code.

Rule 1315 – Federal New Source Review Tracking System, was adopted by the Board on February 4, 2011, to maintain South Coast AQMD's ability to issue permits to major sources that require offsets but obtain offset credits from South Coast AQMD's Priority Reserve under Rule 1309.1 – Priority Reserve, and/or that are exempt from offsets under South Coast AQMD Rule 1304 - Exemptions. Since these sources are not exempt from offsets under the federal Clean Air Act, South Coast AQMD provides offsets from South Coast AQMD's internal account balances, which have been generated primarily from orphan shutdowns (i.e., emissions reductions from sources that have shut down but the operator did not apply for emission reduction credits). The purpose of this Determination of Equivalency is to show that there are sufficient offsets in the internal account balances to cover sources that used these offsets for the year in question and the offset needs projected for the following two years.

Rule 1315 requires that, commencing with calendar year 2010, and for each calendar year thereafter, the Executive Officer prepare a Preliminary Determination of Equivalency (PDE) and Final Determination of Equivalency (FDE), which cover NSR activities for twelve-month periods. As required, the calendar year 2020 PDE was reported to the South Coast AQMD Board at the February 2022 Board meeting and the FDE is required to be reported at the September 2022 Board meeting. Rule 1315 also requires the Executive Officer to aggregate and track offsets debited from and deposited to South Coast AQMD's internal offset accounts for specified periods between October 1, 1990, and December 31, 2005, and each calendar year from 2006 through 2030 for purposes of making periodic determinations of compliance. The last annual report submitted to the Board on February 4, 2022, presented the PDE for calendar year 2020 and demonstrated that South Coast AQMD's NSR program continued to meet the state and federal offset requirements for calendar year 2020. Rule 1315 also requires that, commencing with calendar year 2011, and for each calendar year thereafter, the Executive Officer include in each FDE: the cumulative net emission increase of each nonattainment air contaminant that occurred at major and minor facilities from February 4, 2011, the date of adoption of Rule 1315, through the end of the calendar year 2011 reporting period and through the end of each subsequent reporting period; and the projected cumulative net emission increases at the end of each of the two subsequent reporting periods. The calendar year 2020 FDE contains the cumulative net emission increases through the end of calendar year 2020 and the projected cumulative net emission increases at the end of calendar years 2021 and 2022.

This report, which presents the FDE covering the calendar year 2020 reporting period, demonstrates compliance with state and federal NSR requirements by establishing aggregate equivalence with state and federal offset requirements for sources that were not exempt from state and federal offset requirements, but were either exempt from offsets or obtained their offsets from South Coast AQMD pursuant to Regulation XIII.

The federal offset accounts FDE for calendar year 2020 is summarized in Table 1. Projections of South Coast AQMD's federal offset account balances for January 2021 through December 2021 and January 2021 through December 2021, as specified and required pursuant to Rule 1315(e), are presented in Table 2. These results demonstrate that there were, and project that there will be, adequate offsets available to mitigate all applicable emission increases during these reporting periods.

The cumulative net emission increase of each nonattainment air contaminant that occurred at major and minor facilities that were issued permits pursuant to Rule 1304 exemptions or Rule 1309.1 Priority Reserve from February 4, 2011, the date of adoption of Rule 1315, through the end of the calendar year 2020 reporting period, as required under Rule 1315(g), is summarized in Table 3. Projections of cumulative net emission increase for January 2021 through December 2021 and January 2022 through December 2022 are summarized in Table 4. These results demonstrate that the cumulative net emission increase, and projections of cumulative net emission increase, of each nonattainment air contaminant remained below the thresholds identified in Table B of Rule 1315(g)(4), and therefore the Executive Officer can continue to issue permits to construct and permits to operate that rely on further use of Rule 1304 exemptions or Rule 1309.1 Priority Reserve offsets to major and minor sources.

The state offset accounts for calendar year 2020 are summarized in Table 5. This report demonstrates that, for calendar years 2020 through 2022, South Coast AQMD's NSR program continues to meet and is projected to meet state and federal offset requirements and is equivalent to those requirements on an aggregate basis.[2] The South Coast Air Basin was designated as being in attainment with the federal and state CO standards effective June 11, 2007, and therefore South Coast AQMD does not report CO accumulated credits and account balances in this equivalency determination. U.S. EPA designated the South Coast Air Basin as being in attainment with the federal PM10 standard effective July 26, 2013. However, the Coachella Valley has not attained the PM10 NAAQS, therefore, South Coast AQMD will continue to track and report PM10 (in the South Coast Air Basin) accumulated credits and account balances for informational purposes only.

[2] South Coast AQMD's NSR program is deemed to be equivalent to state and federal offset requirements. South Coast AQMD's ending offset account balances remained positive, indicating there were adequate offsets during this reporting period.

Table 1
Federal Offset Accounts FDE for January 2020 through December 2020

DESCRIPTION	VOC	NOx	SOx	PM10
2019 Actual Ending Balance[a] (tons/day)	**113.22**	**24.26**	**4.37**	**16.87**
2020 Discount of Credits for Surplus Adjustment[b] (tons/day)	0.00	-0.07	0.00	0.00
2020 Starting Balance (tons/day)	**113.22**	**24.19**	**4.37**	**16.87**
2020 Actual Total Debits[c] (lbs./day)	-188	-342	0	0
2020 Actual Total Debits[c] (tons/day)	**-0.09**	**-0.17**	**0.00**	**0.00**
2020 Actual Total Credits[c] (lbs./day)	4,846	1,335	1,957	1,747
2020 Actual Total Credits[c] (tons/day)	**2.42**	**0.67**	**0.98**	**0.87**
2020 Actual Ending Balance[d] (tons/day)	**115.55**	**24.69**	**5.35**	**17.74**

[a] "2019 Actual Ending Balance" is from Table 1 of the 2020 PDE Report dated February 4, 2022.

[b] This adjustment is surplus at the time of use discount, which is also discussed in Rule 1315(c)(4).

[c] For an explanation of the sources of credits and debits please refer to page 11 of this report, as well as Rule 1315(c) and the February 4, 2011, Rule 1315 staff report. Debits are shown as negative and credits as positive.

[d] "2020 Actual Ending Balance" equals the "2019 Actual Ending Balance," reduced by any surplus adjustments and 2020 actual debits, plus 2020 actual credits.

Table 2
Projections of South Coast AQMD's Federal Offset Account Balances for January 2021 through December 2021 and January 2022 through December 2022

DESCRIPTION	VOC	NOx	SOx	PM10
2020 Actual Ending Balance[a] (tons/day)	**115.55**	**24.69**	**5.35**	**17.74**
2021 Total Projected Debits[b] (lbs./day)	-740	-380	-120	-360
2021 Total Projected Credits[b] (lbs./day)	6,480	1,480	620	1,480
2021 Sum of Projected Debits/Credits[b] (lbs./day)	**5,740**	**1,100**	**500**	**1,120**
2021 Sum of Projected Debits/Credits[b] (tons/day)	**2.87**	**0.55**	**0.25**	**0.56**
2021 Projected Ending Balance[c] (tons/day)	**118.42**	**25.24**	**5.60**	**18.30**
2022 Total Projected Debits[b] (lbs./day)	-740	-380	-120	-360
2022 Total Projected Credits[b] (lbs./day)	6,480	1,480	620	1,480
2022 Sum of Projected Debits/Credits[b] (lbs./day)	**5,740**	**1,100**	**500**	**1,120**
2022 Sum of Projected Debits/Credits[b] (tons/day)	**2.87**	**0.55**	**0.25**	**0.56**
2022 Projected Ending Balance[d] (tons/day)	**121.29**	**25.79**	**5.85**	**18.86**

[a] "2020 Actual Ending Balance" is as shown in Table 1.

[b] Projections are based upon the average of the total annual debits and the average of the total annual credits for the five reporting periods most recently included in a PDE or an FDE, pursuant to Rule 1315(e). For an explanation of the sources of debits and credits please refer to page 11 of this report, as well as Rule 1315(c) and the Rule 1315 staff report. Debits are shown as negative and credits as positive, while the sum of debits/credits are shown as negative or positive, as appropriate.

[c] "2021 Projected Ending Balance" equals the "2020 Actual Ending Balance" plus the "2021 Sum of Projected Debits/Credits."

[d] "2022 Projected Ending Balance" equals the "2021 Projected Ending Balance" plus the "2022 Sum of Projected Debits/Credits."

Table 3
Cumulative Net Emission Increase
(February 4, 2011 – December 31, 2020)

DESCRIPTION	VOC	NOx	SOx	PM10
2019 Cumulative Net Emission Increase[a] (tons/day)	**-23.03**	**-3.35**	**-0.75**	**-1.05**
2020 Increases in Potential to Emit[b] (tons/day)	1.39	0.44	0.09	0.22
2020 Decreases in Potential to Emit[c] (tons/day)	-3.03	-0.83	-1.22	-1.09
2020 Cumulative Net Emission Increase[d] (tons/day)	**-24.67**	**-3.74**	**-1.88**	**-1.92**
Rule 1315(g) Table B Threshold (through December of 2020 - tons/day)	**12.67**	**0.92**	**0.30**	**1.86**

[a] "2019 Cumulative Net Emission Increase" is from Table 3 of the FDE report dated September 3, 2021.

[b] Increases in potential to emit that occur at major and minor facilities pursuant to Rule 1304 or Rule 1309.1.

[c] Decreases in potential to emit that occur at major and minor facilities pursuant to Rule 1304 or Rule 1309.1.

[d] "2020 Cumulative Net Emission Increase" is the sum of the increases and decreases in the potential to emit that occur at major and minor facilities pursuant to Rule 1304 or Rule 1309.1 over the period of February 4, 2011, through December 31, 2020.

Table 4
Projections of Cumulative Net Emission Increase
January 2021 through December 2021 and
January 2022 through December 2022

DESCRIPTION	VOC	NOx	SOx	PM10
2020 Cumulative Net Emission Increase[a] (tons/day)	**-24.67**	**-3.74**	**-1.88**	**-1.92**
2021 Projected Emission Increase[b] (tons/day)	1.91	0.63	0.13	0.57
2021 Projected Emission Decrease[b] (tons/day)	-4.05	-0.92	-0.39	-0.92
2021 Projected Cumulative Net Emission Increase[c] (tons/day)	**-26.81**	**-4.03**	**-2.14**	**-2.27**
Rule 1315(g) Table B 2021 Threshold (tons/day)	**13.94**	**1.00**	**0.33**	**2.05**
2022 Projected Emission Increase[d] (tons/day)	1.91	0.63	0.13	0.57
2022 Projected Emission Decrease[d] (tons/day)	-4.05	-0.92	-0.39	-0.92
2022 Projected Cumulative Net Emission Increase[e] (tons/day)	**-28.95**	**-4.32**	**-2.40**	**-2.62**
Rule 1315(g) Table B 2022 Threshold (tons/day)	**15.21**	**1.08**	**0.36**	**2.24**

[a] "2020 Cumulative Net Emission Increase" from Table 3.

[b] "2021 Projected Emission Increase" and "2021 Projected Emission Decrease" are the averages of the 2016, 2017, 2018, 2019 and 2020 increases and decreases, respectively, in potential to emit.

[c] "2021 Projected Cumulative Net Emission Increase" is the sum of the "2021 Projected Emission Increase" and "2021 Projected Emission Decrease" added to the "2020 Cumulative Net Emission Increase."

[d] "2022 Projected Emission Increase" and "2022 Projected Emission Decrease" are the averages of the 2016, 2017, 2018, 2019 and 2020 increases and decreases, respectively, in potential to emit.

[e] "2022 Projected Cumulative Net Emission Increase" is the sum of the "2022 Projected Emission Increase" and "2022 Projected Emission Decrease" added to the "2021 Projected Cumulative Net Emission Increase."

Table 5

State Offset Accounts FDE for January 2020 through December 2020

DESCRIPTION	VOC	NOx	SOx	PM10
2020 Actual Starting Balance[a] (tons/day)	**86.57**	**35.40**	**9.11**	**22.72**
2020 Actual Total Debits[b] (tons/day)	-1.11	-0.36	-0.04	0.00
2020 Actual Total Credits[b] (tons/day)	2.42	0.67	0.98	0.87
2020 Sum of Actual Debits/Credits[b] (lbs./day)	**2,627**	**625**	**1,883**	**1,745**
2020 Sum of Actual Debits/Credits[b] (tons/day)	**1.31**	**0.31**	**0.94**	**0.87**
2020 Actual Ending Balance[c] (tons/day)	**87.88**	**35.71**	**10.05**	**23.59**

[a] "2020 Actual Starting Balance" is from Table 5 of the PDE report dated February 4, 2022.

[b] For an explanation of the sources of debits and credits please refer to page 11 of this report. Debits are shown as negative and credits as positive, while the sums of debits/credits are shown as negative or positive, as appropriate.

[c] "2020 Actual Ending Balance" equals the "2020 Actual Starting Balance" plus the "2020 Sum of Actual Debits/Credits".

Background

South Coast AQMD originally adopted its NSR program in 1976. U.S. EPA approved South Coast AQMD's NSR program into the SIP initially on January 21, 1981 (46FR5965) and again on December 4, 1996 (61FR64291). U.S. EPA approved the May 3, 2002, Rule 1309.1 amendments into the SIP on June 19, 2006 (71FR35157). The original program has evolved into the current version of the Regulation XIII rules in response to state and federal legal requirements and the changing needs of the local environment and economy. Amendments to the NSR rules were adopted by the Board on December 6, 2002, to facilitate and provide additional options for credit generation and use. Rule 1315 was adopted and re-adopted on September 8, 2006, and August 3, 2007, respectively. Rule 1309.1 was amended and replaced on September 8, 2006, and August 3, 2007, respectively. On November 3, 2008, in response to a lawsuit filed by a group of environmental organizations, a California State Superior Court Judge in the County of Los Angeles invalidated the August 3, 2007, adopted Rule 1315 and amendments to Rule 1309.1, and prohibited South Coast AQMD from taking any action to implement Rule 1315 or the amendments to Rule 1309.1 until it had prepared a new environmental assessment under CEQA. On February 4, 2011, South Coast AQMD adopted a revised and enhanced version of Rule 1315, which included a new CEQA environmental assessment. U.S. EPA approved Rule 1315 into the SIP in 2012 (77FR31200), and this approval was upheld by the U.S. Court of Appeals for the Ninth Circuit Court in 2015.

One element of South Coast AQMD's NSR program design is to offset emission increases in a manner at least equivalent to state and federal statutory NSR

requirements. South Coast AQMD's NSR program implements the state and federal statutory requirements for NSR and ensures that construction and operation of new, relocated and modified stationary sources does not interfere with progress towards attainment of the National and State Ambient Air Quality Standards. South Coast AQMD's computerized emission tracking system is used to demonstrate equivalence with state and federal offset requirements on an aggregate basis. Specific NSR requirements of federal and state law are presented below.

Federal Law

Federal NSR requirements vary with respect to the area's attainment status and classification. Based on the current classification for the 1997 8-hour ozone standard, the South Coast Air Basin (SOCAB) and the Riverside County portion of the Salton Sea Air Basin (SSAB, also known as the Coachella Valley) are both extreme nonattainment areas.[3] For the 2008 and 2015 8-hour ozone standards, SOCAB and Coachella Valley are classified as extreme nonattainment and severe nonattainment, respectively.[4] As the NSR requirements are more stringent for a higher nonattainment classification and the more stringent requirements apply, both SOCAB and Coachella Valley must comply with the requirements for extreme nonattainment areas for ozone precursors (*i.e.,* VOC and NOx). During the 2020 equivalency period, both the SOCAB and the Coachella Valley complied with their respective requirements for ozone nonattainment and serious nonattainment for PM10 and its precursors (i.e., VOC, NOx, and SOx).[5] Coachella Valley is considered in attainment for CO. U.S. EPA designated the SOCAB as in attainment with federal CO standards on June 11, 2007. Starting calendar year 2017, South Coast AQMD did not report CO accumulated credits and account balances in this equivalency determination. Both SOCAB and Coachella Valley are considered in attainment for SO2 and NO2; however, SOx and NOx are precursors to pollutants for which both SOCAB and Coachella Valley are designated as in nonattainment.[6] The Non-Palo Verde, Riverside County portion of the Mojave Desert Air Basin (MDAB) under South Coast AQMD's jurisdiction is unclassifiable. Federal law requires the use of Lowest Achievable Emission Rate (LAER) and offsets for emissions of nonattainment pollutants (or their precursors) for new, modified, and relocated

[3] In 2019, the SSAB (Coachella Valley) was redesignated to extreme nonattainment for the 1997 8-hour ozone standard.

[4] As part of the Draft 2022 Air Quality Management Plan, South Coast AQMD is requesting to reclassify the Coachella Valley as extreme nonattainment area for the 2015 8-hour ozone standard.

[5] As of July 26, 2013, SOCAB was redesignated as in attainment for the federal 24-hour PM10 standard, and U.S. EPA approved a PM10 maintenance plan. South Coast AQMD will continue to track and report PM10 accumulated credits and account balances for informational purposes only in the SOCAB and for equivalency in the SSAB (Coachella Valley).

[6] SOx is a precursor to PM10 and NOx is a precursor to both PM10 and ozone.

stationary sources, when the source is considered a major stationary source[7] for the nonattainment pollutants (or their precursors). This report demonstrates compliance with the federal NSR offsets requirements.

State Law

State law requires the use of BACT for new and modified sources (Health and Safety Code Sections 40440(b)(1) and 40920.5) and "no net increase in emissions" from certain permitted new or modified sources based on their potential to emit and the nonattainment classification of the area in which they are located. This report demonstrates South Coast AQMD's compliance with the "no net emission increase" requirements of state law for the 2020 period by demonstrating compliance with the requirements for extreme ozone nonattainment areas for ozone precursors and with the requirements for serious nonattainment areas for PM10 and precursors to PM10. The South Coast Air Basin was designated as being in attainment with the state CO standards effective June 11, 2007.

Overview of Analysis Methodology

The two most important elements of state and federal nonattainment NSR requirements are BACT/LAER and emission offsetting. As set forth in South Coast AQMD's BACT Guidelines, South Coast AQMD's BACT requirements are at least as stringent as federal LAER for major sources and state BACT requirements for all sources. The NSR emission offset requirements that South Coast AQMD implements through its permitting process ensure that sources provide emission reduction credits (ERCs) to offset their emission increases in compliance with state and federal requirements. As a result, these sources each comply with state and federal offset requirements by providing ERCs. However, certain sources are exempt from South Coast AQMD's offset requirements pursuant to Rule 1304 or qualify for offsets from South Coast AQMD's Community Bank (applications received between October 1, 1990, and February 1, 1996, only) or Priority Reserve, both pursuant to Rule 1309.1. Providing offset exemptions and the Priority Reserve (as well as the previously administered Community Bank) are important to the NSR program and the local economy. Therefore, South Coast AQMD has assumed the responsibility of providing the necessary offsets for exempt sources, the Priority Reserve, and the Community Bank. This report

[7] The major source thresholds for SOCAB, SSAB, and MDAB, based on their attainment status during the calendar year 2020 reporting period are summarized below:

Pollutant	SOCAB	SSAB	MDAB
VOC	10 tons/year	10 tons/year	100 tons/year
NOx	10 tons/year	10 tons/year	100 tons/year
SOx	70 tons/year	70 tons/year	100 tons/year
PM10	70 tons/year	70 tons/year	100 tons/year
CO	50 tons/year	100 tons/year	100 tons/year

examines withdrawals from and deposits to South Coast AQMD's emission offset accounts during calendar year 2020 and demonstrates programmatic equivalence on an aggregate basis with state and federal emission offset requirements for the sources exempt from providing offsets and the sources that receive offsets from the Priority Reserve or the Community Bank.

South Coast AQMD's Offset Accounts

For the purposes of this report, federal debit and credit accounting for South Coast AQMD offset accounts was conducted pursuant to the same procedures previously agreed to by U.S. EPA and as delineated in Rule 1315 and described in the staff report dated January 7, 2011. Each of the pollutants subject to offset requirements has a separate federal offset account. State debit and credit accounting for South Coast AQMD offset accounts was similarly conducted, with the difference that state offset requirements apply to all increases of VOC or NOx from equipment subject to South Coast AQMD's permitting program and to increases of SOx and PM10 from facilities that emit 15 or more tons per year. South Coast AQMD's NSR program is considered to provide equivalent or greater offsets of emissions as required by state and federal requirements for each subject pollutant provided the balance of offsets in South Coast AQMD's state and federal offset account for each pollutant remains positive, indicating that there were adequate offsets available.

Debit Accounting

Staff tracks all emission increases that are offset through the Priority Reserve or the Community Bank, as well as all increases that are exempt from offset requirements pursuant to Rule 1304 exemptions. These increases are debited from South Coast AQMD's federal offset accounts when they occur at major sources. For federal equivalency demonstrations, South Coast AQMD uses an offset ratio of 1.2-to-1.0 for extreme nonattainment pollutants (ozone and ozone precursors, i.e., VOC and NOx) and uses a 1.0-to-1.0 ratio for all other nonattainment pollutants (non-ozone precursors, i.e., SOx and PM10) to offset any such increases. That is, 1.2 pounds are deducted from South Coast AQMD offset accounts for each pound of maximum allowable permitted potential to emit VOC or NOx increase at a major source and 1.0 pound is deducted for each pound of maximum allowable permitted potential to emit SOx or PM10 at a major source. A more detailed description of federal debit accounting is provided in the Rule 1315 staff report dated January 7, 2011, and Rule 1315(c)(2).

To comply with U.S. EPA's NSR Reform requirements applicable to extreme nonattainment areas for ozone, the South Coast AQMD tracks changes to facility-wide limits under Rule 1304 exemptions and debits any increases from the federal offset accounts accordingly.

State offset requirements are based on actual emissions rather than maximum allowable permitted potential to emit. South Coast AQMD methodology uses actual emissions as

eighty percent of permitted potential to emit.[8] Thus, 0.8 pounds is debited from South Coast AQMD's state accounts for each pound of maximum allowable permitted emissions increase.

Credit Accounting

When emissions from a permitted source are permanently reduced (e.g., installation of control equipment, removal of the source) and the emission reduction is not required by rule or law and is not included in an AQMP control measure that has been assigned a target implementation date,[9] the permit holder may apply for ERCs for the pollutants reduced. If the permit holder for the source generating the emission reduction had previously received offsets from South Coast AQMD or has a "positive NSR balance" (i.e., pre-1990 net emission increase), the quantity of South Coast AQMD offsets used or the amount of the positive NSR balance is subtracted from the reduction and "paid back" to South Coast AQMD's accounts prior to issuance of an ERC pursuant to Rule 1306. In certain other cases, permit holders do not always submit applications to claim ERCs or do not qualify to obtain ERCs for their equipment shutdowns or other eligible emission reductions. These unclaimed reductions are referred to as "orphan shutdowns" and are deposited in South Coast AQMD's offset accounts. ERCs provided as offsets by major sources in excess of the applicable federally required offset ratio and all ERCs provided as offsets by minor sources not subject to federal offset requirements are also deposited in South Coast AQMD's federal offset accounts. A more detailed description of federal credit accounting is provided in Rule 1315(c)(3)(A) and its staff report dated January 7, 2011.

Determination of Equivalency with Federal Offset Requirements

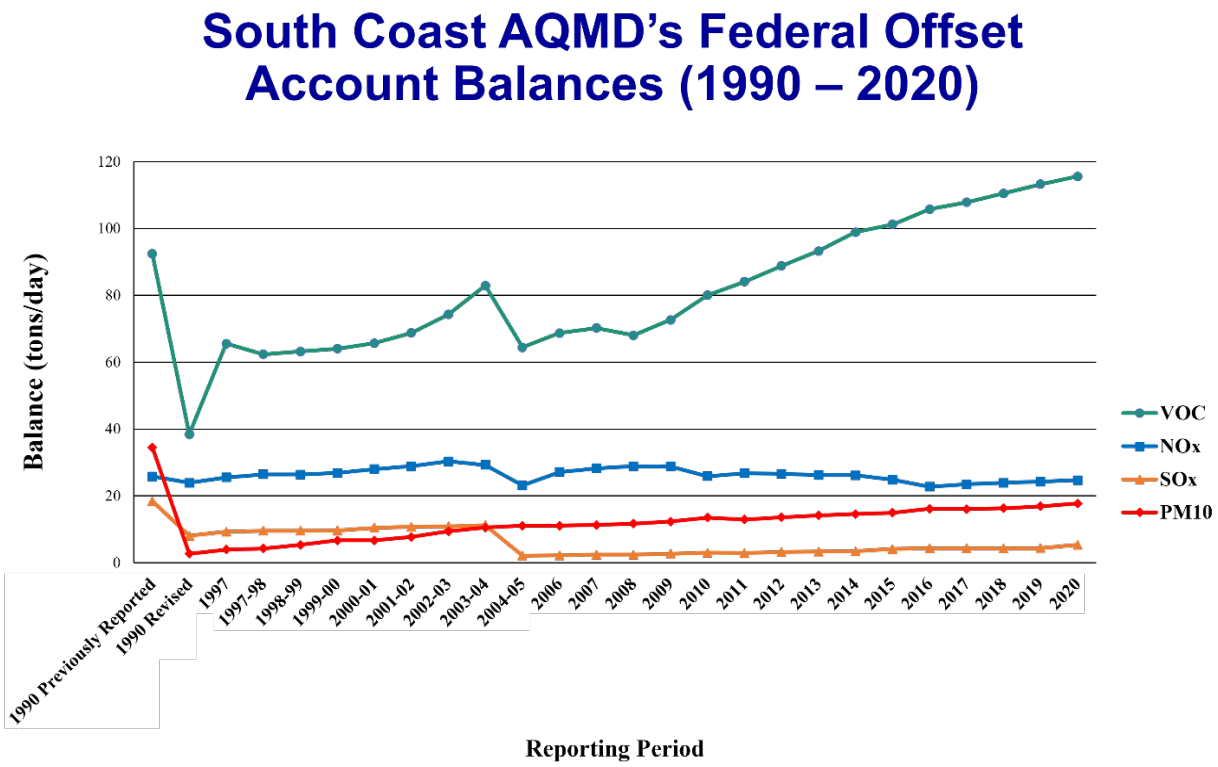
Figure 1 illustrates South Coast AQMD's federal offset account balances for calendar years 1990 and after.[10] The calendar year 2020 balances are based on final determinations.

[8] See Status Report on Regulation XIII – New Source Review dated April 2, 2004.

[9] Refer to Rule 1309(b) for a complete explanation of eligibility requirements.

[10] The 1990 and 2005 drops in federal account balances are due to the initial removal of pre-1990 balance and the 2005 removal of the remaining pre-1990 balance.

Figure 1



The federal offset requirements FDE for calendar year 2020 and the projections for calendar years 2021 and 2022 are summarized in Tables 1 and 2, respectively. The detailed listing of actual final withdrawals, deposits and sum of withdrawals and deposits are shown in Tables A, B, and C of Attachment 1 to this letter; the account balances shown in Tables A and B reflect the tracking sequence described under Rule 1315(c)(5).

California Environmental Quality Act Backstop Provisions

In addition to the equivalency demonstration with the federal offset requirements, Rule 1315(g) requires the tracking of all increases in potential to emit and emission reductions that occur at major and minor facilities and ensure that the cumulative net emission increases in any given year remain below the thresholds, established in Rule 1315.

Pursuant to Rule 1315(g)(1), net emission increases of nonattainment air contaminants at major and minor facilities are based on the sum of aggregate increases in potential to emit and aggregate emissions reductions at major and minor facilities pursuant to Rule 1304 or Rule 1309.1.

Aggregate increases in potential to emit for major and minor sources include potential to emit increases from the Priority Reserve or Community Bank pursuant to Rule 1309.1 and exemptions from the offset requirements of Rule 1303 – Requirements pursuant to Rule 1304.

Aggregate emissions reductions for major and minor sources include, but are not limited to, potential to emit reductions as a result of orphan shutdowns and/or orphan reductions.

Pursuant to Rule 1315(g)(2), projections of cumulative net emission increases at the end of the two subsequent reporting periods are based upon the average of the aggregate increase in potential to emit of each nonattainment air contaminant and the average of the aggregate emissions reductions of the same nonattainment air contaminant for the five reporting periods most recently included in a PDE or an FDE for each of the reporting periods commencing with the 2011 reporting period, whichever is fewer reporting periods. For calendar year 2020 FDE, the averages are based on the 2016, 2017, 2018, 2019 and 2020 aggregate increases in potential to emit and aggregate emissions reductions. The purpose of Rule 1315(g) is to ensure that implementation of Rule 1315 does not cause emission increases beyond those analyzed in the CEQA document for Rule 1315.

Cumulative net emission increases and projected cumulative net emission increases must remain below the thresholds shown in Table B of Rule 1315 in order for the Executive Officer to be able to continue to issue permits to exempt sources pursuant to Rule 1304 or subject to Rule 1309.1 Priority Reserve.

Conclusions

The analysis presented in this report demonstrates the following:

- For calendar year 2020, South Coast AQMD's NSR program provides equivalent offsets to those required by state and federal NSR requirements. The program is equivalent to the state and federal requirements on an aggregate basis. This conclusion is based on the fact that the final ending state and federal offset account balances for this calendar year reporting period, as shown in Tables 1 and 5, remained positive for all pollutants.
- South Coast AQMD's projected federal offset account balances for 2021 and 2022 are projected to remain positive. This means that the sum of the estimated withdrawals from and deposits to South Coast AQMD's federal offset accounts during 2021 and 2022 are projected to remain positive, and therefore, demonstrates that South Coast AQMD's NSR program is equivalent to federal NSR requirements, as show in Table 2.
- From the date of adoption of Rule 1315 (February 4, 2011) to the end of calendar year 2020, both the cumulative net emission increase of each

nonattainment air contaminant at major and minor facilities and the projected cumulative net emission increase for 2021 and 2022 remained below the thresholds identified in Table B of Rule 1315. Therefore, the Executive Officer can continue to issue permits to construct and permits to operate that rely on further use of Rule 1304 exemptions or Rule 1309.1 Priority Reserve offsets to major and minor sources, as shown in Tables 3 and 4.

ATTACHMENT

Detailed Listing of Actual Debits, Actual Credits, and Sum of Debits and Credits.

ATTACHMENT 1

Detailed Listing of Actual Debits, Actual Credits, and Sum of Debits and Credits

Table A
Total Actual Debits from South Coast AQMD's Federal Offset Accounts
(January 2020 through December 2020)

SOUTH COAST AQMD OFFSETS USED	VOC	NOx	SOx	PM10
Priority Reserve (lbs./day)	-17	-29	0	0
Community Bank (lbs./day)	0	0	0	0
Rule 1304 Exemptions (lbs./day)	-140	-256	0	0
Sum Total of South Coast AQMD Offsets (lbs./day)	-157	-285	0	0
1.2-to-1.0 Offset Ratio (lbs./day)	-31	-57	N/A	N/A
Total Actual Debits to South Coast AQMD Account (lbs./day)	**-188**	**-342**	**0**	**0**
Total Actual Debits to South Coast AQMD Account (tons/day)	**-0.09**	**-0.17**	**0**	**0**

Table B
Total Actual Credits to South Coast AQMD's Federal Offset Accounts
(January 2020 through December 2020)

SOUTH COAST AQMD CREDITS RECEIVED	VOC	NOx	SOx	PM10
Major Source Orphan Credits (lbs./day)	1,211	167	877	1,021
Minor Source Orphan Credits (lbs./day)	4,846	1,502	1,569	1,163
Total Orphan Credits (lbs./day)	**6,057**	**1,669**	**2,446**	**2,184**
Adjustment to Actual Emissions[a] (lbs./day)	-1,211	-334	-489	-437
Discount of ERCs[b] (lbs./day)	0	0	0	0
Creditable Minor Source ERC Use (lbs./day)	0	0	0	0
Creditable Major Source ERC Use (lbs./day)	0	0	0	0
Total Actual Credits to South Coast AQMD Account (lbs./day)	**4,846**	**1,335**	**1,957**	**1,747**
Total Actual Credits to South Coast AQMD Account (tons/day)	**2.42**	**0.67**	**0.98**	**0.87**

[a] Adjustment of orphan shutdown and orphan reduction offset credits deposited in South Coast AQMD offset accounts to correct from potential emissions to actual emissions as discussed in Rule 1315(c)(3)(B)(i).

[b] Prior to issuance of ERCs, they are discounted for NSR "Payback," which includes payback of NSR balance, Community Bank and Priority Reserve allocations, and offset exemptions, as discussed in Rule 1315(c)(3)(A)(v) and Rule 1306(c).

Table C
Sum of Final Credits/Debits Activities in South Coast AQMD's Federal Offset Accounts
(January 2020 through December 2020)

DESCRIPTION	VOC	NOx	SOx	PM10
Total Actual Debits[a] (lbs./day)	-188	-342	0	0
Total Actual Credits[a] (lbs./day)	4,846	1,335	1,957	1,747
Sum of Actual Debits(-)/Credits(+)[a] (lbs./day)	**4,658**	**993**	**1,957**	**1,747**
Sum of Actual Debits(-)/Credits(+)[a] (tons/day)	**2.33**	**0.50**	**0.98**	**0.87**

[a] Debits are shown as negative and credits as positive, while their sum is shown as negative or positive, as appropriate.

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 20

REPORT: Status Report on Major Ongoing and Upcoming Projects for Information Management

SYNOPSIS: Information Management is responsible for data systems management services in support of all South Coast AQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects.

COMMITTEE: Administrative, August 12, 2022, Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

RMM:MAH:XC:dc

Background
Information Management (IM) provides a wide range of information systems and services in support of all South Coast AQMD operations. IM's primary goal is to provide automated tools and systems to implement rules and regulations, and to improve internal efficiencies. The annual Budget and Board-approved amendments to the Budget specify projects planned during the fiscal year to develop, acquire, enhance, or maintain mission-critical information systems.

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

Summary of Report
The attached report identifies the major projects/contracts or purchases that are ongoing or expected to be initiated within the next six months. Information provided for each project includes a brief project description and the schedule associated with known major milestones (issue RFP/RFQ, execute contract, etc.).

Attachment
Information Management Status Report on Major Ongoing and Upcoming Projects During the Next Six Months

ATTACHMENT
September 2, 2022 Board Meeting
Status Report on Major Ongoing and Upcoming Projects for Information Management

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Phone System Upgrade	Upgrade components of the agency Cisco Unified Communications System that are past end of support	$175,000	• RFQ released September 3, 2021 • Awarded January 7, 2022	• Complete upgrade November 30, 2022
AQ-SPEC Cloud Platform Phase 2	Integrate separate data systems into the AQ-SPEC cloud-based platform to manage data and build interactive data visualizations and data dashboards for web-based viewing	$313,350	• Project Charter released • Task Order issued, evaluated, and awarded • Project kickoff completed • Requirements gathering completed • Fit Gap and data storage analysis completed • Architecture and functional design completed • Work Plan development for Phase 2 completed • Dashboard designs approved • Discovery Phase completed • Proposal for implementation phase received	• Begin implementation phase
PeopleSoft Electronic Requisition	This will allow submittal of requisitions online, tracking multiple levels of approval, electronic archival, pre-encumbrance of budget, and streamlined workflow	$75,800	• Project Charter released • Task Order issued, evaluated, and awarded • Requirements gathering and system design completed • System setup and code development, and User Acceptance Testing for Information Management completed • System setup and code development, and User Acceptance Testing completed for Administrative and Human Resources, and Technology Advancement Office completed	• Deploy to IM and AHR divisions • Training and Integrated User Testing for other divisions

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
South Coast AQMD Mobile Application Enhancements	Enhancement of Mobile Application to incorporate FIND	$90,000	• Vision and Scope completed • Task Order issued • Project initiation completed • System design completed • System development completed • User Acceptance Testing Completed • Deployed to both App Stores	• Post Production Support
Permitting System Automation Phase 2	Enhanced Web application to automate filing of permit applications, Rule 222 equipment and registration for IC engines; implement electronic permit folder and workflow for staff	$525,000	• Board approved initial Phase 2 funding December 2017 • Board approved remaining Phase 2 funding October 5, 2018 • Completed report outlining recommendations for automation of Permitting Workflow • Developed application submittals and form filing for first nine of 32 400-E forms • Completed application submittals and form filing for 23 types of equipment under Rule 222 for User Testing • Deployed production of the top three most frequently used Rule 222 forms: Negative Air Machines, Small Boilers and Charbroilers • Completed requirements gathering for Phase 2 of the project (an additional 10 400-E-XX forms) • Development of Phase 2 additional 12 400-E-XX forms completed • Deployment to stage of all 400-E-XX and Rule 222 forms for User Acceptance Testing completed • User Acceptance Testing and deployment to production of Emergency IC Engines Form completed • Deployed to production 3 additional Rule 222 forms (Tar Pots, Cooling Towers, and Power Washers)	• Requirements gathering for Phase 3 of the project (final twelve 400-E-XX forms) • Complete User Acceptance Testing and deployment to production of Phase 1 of the project (first ten 400-E-XX forms) • Complete User Acceptance Testing and deployment to production of next set of Rule 222 forms • Complete User Acceptance Testing and deployment to production of the EICE module

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Replace Your Ride (RYR)/One Stop Shop Integration	Development of integration access points for RYR and third-party applications	$115,026	• Draft Charter Document issued • Project initiation completed • Task Order issued • Phase 1 Sprint 1 – Security Portal Enhancement completed • Phase 2 Sprint 2 - RYR service endpoints completed • Phase 3 Sprint 4 – Cloud based service endpoints completed • Phase 3 Sprint 5 – end to end testing completed • Integration has been completed	• Post Production Support
Carl Moyer Program GMS	Development of simplified and streamlined Online Grant Management System (GMS) Portal for Carl Moyer Program	$116,275	• Project initiation completed • Task Order issued • Phase 1 completed and approved by stakeholder • Solicitation for On-Road opened to public • Phase 2 – initiation and kickoff completed • Phase 2 – tasks module enhancement User Acceptance Testing completed • Phase 2 – 30-day Letter User Acceptance Testing for completed	• Phase 2 – gathering requirements and development
Warehouse Indirect Source Rule Online Reporting Portal	Development of online reporting portal for Rule 2305 –Warehouse Indirect Source	$250,000	• Draft Charter Document issued • Project initiation completed • Task Order issued • Deployed Phase 1.1 – Warehouse Operations Notification Submittal • Deployed Phase 1.2 – Warehouse Operations Notification Evaluation • Phase 2 Project initiation and planning completed • Phase 2 software requirements completed • Phase 2 architecture and design completed • Phase 2 deployed – Early Annual WAIRE Report (EAWR) , Initial Site Information Report (ISIR), full Annual WAIRE Report (AWR)	• Post Production Support Identify system enhancements

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Source Test Tracking System (STTS)	Online STSS will keep track of timelines and quantify the number of test protocols and reports received. System will provide an external online portal to submit source testing protocols and reports, track the review process, and provide integration to all other business units. It will also provide an external dashboard to review the status of a submittal.	$250,000	• Project initiation completed • Task Order issued • Project kickoff completed • User requirements gathering for internal users completed • Developed full business process model • Developed screens mock-ups • Reviewed proposed automation with EQUATE Working Group completed • Proposal for system development approved • Completed development of Sprint 1 to 8 • Completed overview of development progress to EQUATE Working Group. • Deploy updated STTS Data Model and move application to stage completed • Internal and external orientation/training for testers completed	• Complete User Acceptance Testing of STTS Portal in stage environment • Complete testing of STTS Portal with regulated community volunteers • Deploy STTS Portal to production
Prop 1B GMS – Locomotive and Cargo	Development of two forms for Prop 1B to handle locomotive and cargo applications	$14,940	• Draft Charter Document - amended • Project planning phase for forms completed • Development of forms completed • Stakeholder testing of forms and workflow completed • Deployed to production and opened for solicitation	• Post Production support
CLASS Database Software Licensing	Purchase Actian Ingres database software licensing, support and maintenance for the CLASS system for one year period (November 30, 2022 – November 30, 2023)	$280,000		• Board approval October 7, 2022 • Execute contract(s) November 30, 2022

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
PeopleSoft HCM (Human Capital Management) upgrade	Upgrade PeopleSoft HCM product to latest tools and image level to maintain regulatory and functional support	$180,000	• Task order issued • Project initiation completed	• System assessment • Customization assessment

Projects that have been completed within the last 12 months are shown below.	
Completed Projects	
Project	Date Completed
Renewal of OnBase Software Support	July 15, 2022
Replace Your Ride (RYR)/One Stop Shop Integration	July 7, 2022
Warehouse Operations Notification Online Submittal Portal Phase 2.2 Initial Site Information Report (ISIR) and full Annual WAIRE Report (AWR)	June 1, 2022
Alternative Colors for Air Quality Map	May 20, 2022
Permit Application Enhancements for Rule 1109.1 Tracking	May 04, 2022
Mobile Application Enhancements	May 03, 2022
HP Server Maintenance & Support	April 30, 2022
National Weather Service Alert Integration	April 21, 2022
Prop 1B GMS – Locomotive and Cargo	April 19, 2022
AB 2766 Motor Vehicle Subvention Program Report Portal	March 2, 2022
Telecommunications Services	February 28, 2022
Warehouse Operations Notification Online Submittal Portal Phase 2.1 Annual WAIRE Report (AWR)	February 25, 2022
Prequalified Vendors to Provide Computer, Network, Printer, Hardware and Software, and Audio Visual Equipment	February 4, 2022
Three Additional Rule 222 Forms for Online Application Filing	February 1, 2022
Cybersecurity Assessment	January 31, 2022
Office 365 License Renewal	January 31, 2022
PeopleSoft Finance and Human Capital Management updates for tax year 2021	January 10, 2022
Implementation of Labor Agreement	January 10, 2022
Annual Emissions Reporting System 2022 Revisions	December 17, 2021
Warehouse Operations Notification Evaluation Module	December 12, 2021
CLASS Database Software Licensing	November 30, 2021
AQ-Spec/AB617 Data Management System	November 16, 2021
Rule 1180 Notification System	October 6, 2021

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 21

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee held a meeting remotely on Friday, August 12, 2022. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Ben J. Benoit, Chair
Administrative Committee

SN:cb

Committee Members

Present: Chair Ben Benoit, Committee Chair
Senator (Ret.) Vanessa Delgado, Vice Chair
Mayor Michael Cacciotti
Board Member Gideon Kracov
Supervisor Janice Rutherford

Call to Order

Chair Benoit called the meeting to order at 10:00 a.m.

For additional details of the Administrative Committee Meeting, please refer to the **Webcast**

DISCUSSION ITEMS:

1. **Board Members' Concerns:** Board Member Kracov expressed concerns about the monitoring data on ethylene oxide and in cities like Ontario and Carson. He commented on our diligent efforts in controlling these facilities and provided support to continue being strict on abatement orders and doing whatever it takes to get them to comply. Wayne Nastri, Executive Officer, expressed appreciation

for the support and reported that we are the most aggressive in protecting public health and are doing everything possible to bring these facilities under control.

Chair Benoit thanked staff for addressing the issue in Perris and working with local fire agencies. Mr. Nastri confirmed we have staff on the scene already and will provide an update as soon as possible.

2. **Chair's Report of Approved Travel:** Chair Benoit reported travel to a CCEEB seminar in Tahoe, Nevada and Board Member Kracov reported travel to Sacramento for two CARB meetings.

3. **Report of Approved Out-of-Country Travel:** There was no travel to report.

4. **Review September 2, 2022 Governing Board Agenda:** There was nothing to report.

5. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** There was none to report.

6. **Update on South Coast AQMD Inclusion, Diversity and Equity Efforts:** Francis Fernando, Senior Public Affairs Specialist/Diversity, Equity & Inclusion, provided an update on agency efforts and summer planning. Mr. Fernando reported that the Governing Board intern program was ending today. Mr. Fernando highlighted Anna Julia Cooper as the fabulous female for Fabulous Female Friday.

   Board Member Kracov announced that CARB had just selected the new Executive Officer to replace Richard Corey to be Dr. Steven Cliff. Mr. Nastri stated that Steve knows the districts and has been working on climate issues for the Biden Administration.

   Harvey Eder, Public Solar Power Coalition, provided public comment on fossil fuels and oil companies.

7. **South Coast AQMD's FY 2021-22 Fourth Quarter Ended June 30, 2022 Budget vs. Actual (Unaudited):** Sujata Jain, Chief Financial Officer, reported that with the unaudited 4th Quarter budget information, that for Fiscal Year 2021we had a balanced budget. Ms. Jain provided a revenue and expenditure comparison and reported the results are comparable to last year and are on track. Ms. Jain showed a five-year projection and reported that the agency is remains cautious in light of the economy, but the agency continues to maintain reserves that are higher than the Governing Board policy of 20%. Ms. Jain noted that

these projections don't include adjustments for any future labor negotiations and that the two-year agreement that will end December 2023.

Chair Benoit inquired about when labor negotiation discussions normally begin. Ms. Jain indicated that they will begin about this time next year.

Mayor Cacciotti inquired about the vacancy rate. Ms. Jain indicated the agency is continuing to lower the vacancy rate, but realistically, it will stay above the 11percent rate for a while. Susan Nakamura, Chief Operating Officer, reported that we hired 23 inspectors that will be onboard over the next few weeks.

8. **Report of RFPs/RFQs Scheduled for Release in September:** Sujata Jain reported that this item is to issue an RFQ to establish a list of qualified vendors for exterior building cleaning and interior and exterior window washing. The list will be good for three years and funds for this are included in the budget. The second item is for an RFP to establish a list of pre-qualified auditors for the audit of AB 2766 for fiscal years 2019-20 and 2020-21.

9. **Status Report on Major Ongoing and Upcoming Projects for Information Management:** Ron Moskowitz, Chief Information Officer, reported that IM staff was very busy in July with the migration of our legacy CLASS public records system onto OnBase and the onboarding for all Governing Board interns. Mr. Moskowitz reported that staff worked with CARB to deploy a cloud-based infrastructure that provides third-party entities with the capability to start applications and verify their income, deployed a Rule 461.1 mobile fuel registration and reporting online portal, and updated FIND to include AB 617 South Los Angeles Community boundaries, as well as the ability to filter facilities located within this community.

Mr. Eder provided public comment on using captured caption as a way of keeping records of all public meetings and environmental justice.

ACTION ITEMS:

10. **Appropriate Funds from the Undesignated (Unassigned) Fund Balance for Engineering and Permitting Assistance:** Jillian Wong, Assistant Deputy Executive Officer, Engineering & Permitting, reported that this item is to appropriate a total of $400,000 from the Undesignated Fund balance into the Engineering and Permitting budget for this fiscal year to cover costs to use retirees and consultants to temporarily supplement staff's efforts to reduce the permit inventory backlog. $300,000 would be spent to bring back retirees and $100,000 for consultant assistance from Castle Environmental Consulting and William Walters Air Quality Consulting.

Moved by Rutherford; seconded by Cacciotti, unanimously approved.

Ayes: Benoit, Delgado, Cacciotti, Kracov, Rutherford
Noes: None

11. **Recognize Revenue and Appropriate Funds for U.S. EPA Pass Through Grants to Develop Low-Cost Sensor Device for Measuring VOCs and Reference Method for Validating Open-path Remote Sensing Systems:** Dr. Jason Low, Deputy Executive Officer/Monitoring & Analysis, reported that South Coast AQMD would be co-investigators with Virginia Tech to develop a low-cost center to measure VOCs and also with UCLA to develop a standardized method for validating open path measurement systems for air toxics measurements. The actions are to recognize revenue of nearly $200,000 from Virginia Tech and up to nearly $210,000 from UCLA into the General Fund and appropriate around $46,000 and $41,000 respectively into the Monitoring & Analysis budget to support these efforts.

Chair Benoit inquired what is the current cost and cost we are aiming for VOC sensor. Dr. Low mentioned that there are some VOC sensors that are in the $300 to $2000 range that are not as sensitive and robust. As part of this grant effort, staff is considering sensors that are sensitive to specific chemicals such as benzene, rather than just total VOCs.

Moved by Cacciotti; seconded by Rutherford, unanimously approved.

Ayes: Benoit, Delgado, Cacciotti, Kracov, Rutherford
Noes: None

12. **Appropriate Funds, Transfer Funds, Issue Solicitations and Purchase Orders for Laboratory and Air Monitoring Equipment:** Dr. Low reported that staff is conducting ethylene oxide investigations, including ones in AB 617 communities such as Vernon and Carson and equipment is needed to conduct the laboratory analyses. The fiscal year 2022-23 authorized about $513,000 in capital outlays for air monitoring and laboratory equipment. These actions are to appropriate up to $250,000 from the General Fund to the Monitoring & Analysis budget and issue solicitations and purchase orders for laboratory monitoring equipment.

Moved by Cacciotti; seconded by Kracov, unanimously approved.

Ayes: Benoit, Delgado, Cacciotti, Kracov, Rutherford
Noes: None

13. **Recognize Revenue, Appropriate Federal Funds, and Issue Solicitations and Purchase Orders for Air Monitoring Equipment:** Dr. Low reported staff is expected to receive almost $275,00 for the NATTS program and almost $335,000 from the American Rescue Plan, both from U.S. EPA. These actions are to recognize and appropriate these funds and issue solicitations and purchase orders for air monitoring equipment.

    Moved by Cacciotti; seconded by Kracov, unanimously approved.

    Ayes: Benoit, Delgado, Cacciotti, Kracov, Rutherford
    Noes: None

WRITTEN REPORT:

14. **Local Government & Small Business Assistance Advisory Group Minutes for the March 11, 2022 Meeting:** The report was acknowledged and received.

OTHER MATTERS:

15. **Other Business:** There was none to report.

16. **Public Comment:** Mr. Eder provided public comment on state legislature and solar power.

17. **Next Meeting Date:** The next regular Administrative Committee meeting is scheduled for September 9, 2022 at 10:00 a.m.

Adjournment
The meeting adjourned at 10:48 a.m.

Attachment
Local Government & Small Business Advisory Group Minutes for March 11, 2022

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, MARCH 11, 2022
MEETING MINUTES

MEMBERS PRESENT:
Mayor Carlos Rodriguez, LGSBA Chair (Board Member)
Supervisor Janice Rutherford (Board Member)
Felipe Aguirre
Council Member Rachelle Arizmendi, City of Sierra Madre
Paul Avila, P.B.A. & Associates
Todd Campbell, Clean Energy
John DeWitt, JE DeWitt, Inc.
Bill LaMarr, California Small Business Alliance
Rita Loof, RadTech International
Eddie Marquez, Roofing Contractors Association
David Rothbart, Los Angeles County Sanitation Districts

MEMBERS ABSENT:
Geoffrey Blake, Metal Finishers of Southern California
LaVaughn Daniel, DancoEN

OTHERS PRESENT:
Mark Abramowitz
Troy Cowan, IUVA
Ramine Cromartie
Harvey Eder
Matt Holder, Board Member Consultant (*Rodriguez*)
Mike Idacavage, RadTech International
Debra Mendelson, Board Member Consultant (*Rutherford*)
Rock Reiser
Mark Taylor, Board Member Consultant (*Rutherford*)

SOUTH COAST AQMD STAFF:
Susan Nakamura, Chief Operating Officer
Derrick Alatorre, Deputy Executive Officer
Sarah Rees, Deputy Executive Officer
Jason Aspell, Deputy Executive Officer
Lisa Tanaka O'Malley, Assistant Deputy Executive Officer
Victor Yip, Assistant Deputy Executive Officer
Daphne Hsu, Principal Deputy District Counsel
Michael Morris, Planning & Rules Manager
Philip Crabbe III, Senior Public Affairs Manager

Denise Peralta-Gailey, Public Affairs Manager
Van Doan, Air Quality Specialist
Elaine Hills, Air Quality Specialist
Anthony Tang, Information Technology Supervisor
Paul Wright, Senior Information Technology Specialist

Agenda Item #1 – Call to Order/Opening Remarks
Chair Carlos Rodriguez called the meeting to order at 11:32 a.m.

Agenda Item #2 – Approval of February 11, 2022 Meeting Minutes
Chair Rodriguez called for approval of the February 11, 2022 meeting minutes.

No public comment.

Motion to approve minutes made by Mr. Todd Campbell; seconded by Mr. Eddie Marquez; unanimously approved.

Ayes: Aguirre, Arizmendi, Campbell, LaMarr, Loof, Marquez, Rothbart, Rutherford, Rodriguez
Noes: None
Abstain: None
Absent: Avila (during voting), Blake, Daniel, DeWitt (during voting)

Agenda Item #3 – Review of Follow-Up/Action Items
Mr. Derrick Alatorre reviewed the follow-up and action items from the previous meeting. Mr. Alatorre indicated that staff is reaching out to California Air Resources Board (CARB) regarding old engine scrapping guidelines and that Mr. Wayne Nastri will be discussing potential reinstatement of Home Rule Advisory Group with Chair Ben Benoit.

No public comment.

Agenda Item #4 – Information on Ultraviolet (UV)/Electron Beam (EB)/Light-Emitting Diode (LED) Technology and Disinfection Systems
Mr. Mike Idacavage and Mr. Troy Cowan, representatives from RadTech International and IUVA, respectively, provided information on recent technological developments for UV/EB/LED technology and disinfection systems.

Mr. Harvey Eder commented on high-efficiency particulate air filters and the integration of small businesses working on control technologies.

Supervisor Janice Rutherford referenced slide #7 and asked for clarification on regulatory concerns on VOC emissions "in most cases." Ms. Rita Loof stated since they are global companies, a claim that all coatings produced contain zero VOC could not be made and has agreed with the limit of less than 50 grams per liter (g/L). A photo initiator is added to a conventional solvent UV system to cure the coatings and this portion does not emit VOCs. However, the solvent systems do emit VOCs and are being regulated.

Mr. Michael Morris stated that there was a previous request for a full exemption from Rule 1115 – Motor Vehicle Assembly Line Coating Operations for all UV products. He explained that the concern is that there are VOC emissions from some solvent systems, which need to be properly regulated. Mr. Jason Aspell stated that in addition to product VOC contents, the total VOC emissions are important for compliance evaluation. Since photo initiators decrease coatings curing time, there could potentially be an increase throughput, leading to higher VOC emissions.

Mr. Bill LaMarr commented that there are many different types of photo initiators with different properties and understood staff's concerns. Mr. LaMarr referenced slide #12 and commented on ink types. Ms. Loof commented that she has not seen coatings containing toxic and hazardous air pollutants and would not support exemptions for materials that do. Chair Rodriguez inquired how the limit of 50 g/L relates to exemption thresholds. Mr. Aspell stated that there are two different limits: coating VOC contents and daily total usage. The 50 g/L is the VOC content and there is a 6 gallon per day usage limit for permitting exemption.

Ms. Susan Nakamura stated that two topics were previously brought up by RadTech: exemption from permitting and exemption for UV/EB coatings. Rule 1401 evaluations are completed through permitting, which provides an opportunity for review of the materials and its use. In 2014, as part of the amendment process for Rule 1130 – Graphic Arts, there was evaluation of UV/EB inks, coatings, and solvents and staff found that there were some materials being used containing greater than 50 g/L VOC. Chair Rodriguez asked for confirmation that 6 gallons per day is the exemption limit. Ms. Nakamura responded yes and both the VOC content and usage have been incorporated into several exemptions, ensuring not to exceed 1 pound per day of emissions. Ms. Loof clarified that the solvent process that is part of any coating operation is associated with clean-up materials, which are subject to Rule 1171.

Agenda Item #5 – Updates on the 2022 State Legislative Priorities

Mr. Philip Crabbe III provided updates on the 2022 State legislative priorities.

Mr. Eder commented on exposure to toxic materials and that particulate matter 2.5 ($PM_{2.5}$) is a criteria air contaminant, but not listed as a toxic air contaminant under the Clean Air Act.

Mr. LaMarr requested documents referenced in Mr. Crabbe's presentation on Assembly Bill (AB) 617 and relevant agencies and AB 8. Mr. LaMarr mentioned that CARB is in the process of developing zero-emission forklift rule and asked if South Coast AQMD coordinates with CARB. Dr. Sarah Rees replied that South Coast AQMD coordinates with CARB on incentive programs and upcoming regulatory developments.

Action Item #1: *Provide advisory group with AB 617 and AB 8 information.*

Mr. David Rothbart mentioned the 2016 Air Quality Management Plan (AQMP) and asked if South Coast AQMD considers cost-effectiveness. Mr. Crabbe replied that all options are considered to determine which are most cost-effective and would bring the soonest emission reductions. Dr. Rees stated there is an obligation to take all feasible emission reductions as soon as possible; part of that is utilizing the incentive funds available in the most cost-effective way by supporting near-zero emission vehicles and promoting zero-emission technology.

Mr. Paul Avila asked whether replacing engines or purchasing new vehicles would be more cost-effective. Dr. Rees replied that currently, near-zero emission vehicles are more cost-effective, but both near-zero and zero-emission technologies should be considered.

Agenda Item #6 – Other Business

Council Member Rachelle Arizmendi asked if future meetings will continue to be held virtually. Ms. Nakamura stated that we are transitioning to a hybrid format.

Agenda Item #7 – Public Comment

Mr. Eder expressed opposition to Dr. Rees' comment on near-zero emission technology and indicated that zero-emission technology is available and should be used now.

Agenda Item #8 – Next Meeting Date

The next regular LGSBA Advisory Group meeting is scheduled for Friday, April 8, 2022 at 11:30 a.m.

Adjournment

The meeting adjourned at 12:59 p.m.

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 22

REPORT: Investment Oversight Committee

SYNOPSIS: The Investment Oversight Committee held a meeting remotely on Friday, August 19, 2022. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Michael A. Cacciotti, Chair
Investment Oversight Committee

SJ:gp

Committee Members

Present: Mayor Michael Cacciotti, Chair
Patrick Pearce
Richard Dixon

Absent: Senator Vanessa Delgado (Ret.), Vice Chair
Board Member Veronica Padilla-Campos
Brent Mason

Call to Order

Chair Michael Cacciotti called the meeting to order at 12:00 p.m.

DISCUSSION ITEMS:

1. *Quarterly Report of Investments:* The Committee reviewed the quarterly investment report that was provided to the Board. By June 30, 2022, South Coast AQMD's weighted average yield on total investments of $1,189,266,629.69 from all sources was 1.15 percent. The allocation by investment type was 94.0 percent in the Los Angeles County Pooled Surplus Investment Fund (PSI) and 6.0 percent in the State of California Local Agency Investment Fund (LAIF) and South Coast AQMD's

Special Purpose Investments (SPI). The one-year Treasury Bill rate as of June 30, 2022, was 2.70 percent.

Financial Market Update: Richard Babbe from PFM Asset Management provided an overview of current economic conditions. Mr. Babbe reported that inflation is the biggest issue that the economy is dealing with. As of June 2022, inflation was 9.1 percent affecting all sectors of the economy. Gas and oil were up almost 50 percent. Inflation is expected to remain high, while the federal reserve target inflation rate is two percent. On the positive side, the labor market is very strong with the unemployment rate at 3.5 percent. However, due to rising inflation, consumer sentiment has gone down. If this trend continues and consumers spend less, there could be a recession in the future. Mortgage rates increased to approximately 5.66 percent compared to 3.0 percent last year. This caused a slight slowdown in home sales. Businesses were less optimistic and are looking to raise prices. The Gross Domestic Product (GDP) was negative for two consecutive quarters. The two-year and ten-year Treasury yields rose sharply to 3.25 percent and 2.98 percent, respectively. The stock market has been very volatile with the S&P 500 showing a 13.9 percent loss as of June 30, 2022.

OTHER MATTERS:

2. **Other Business**
   There was no other business to report.

3. **Public Comment Period**
   There were no public comments to report.

4. **Next Meeting Date**
   The next regular meeting of the Investment Oversight Committee is scheduled for November 18, 2022, at noon.

Adjournment
The meeting adjourned at 12:48 p.m.

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 23

REPORT: Legislative Committee

SYNOPSIS: The Legislative Committee held a meeting remotely on Friday, August 12, 2022. The following is a summary of the meeting.

Agenda Item	**Recommendation/Action**
AB 1749 (C. Garcia) – Community emissions reduction programs: toxic air contaminants and criteria air pollutants.	Withdraw Support

RECOMMENDED ACTION:
Receive and file this report and approve agenda items as specified in this letter.

Michael A. Cacciotti, Chair
Legislative Committee

DJA:LTO:PFC:ar:kv

Committee Members

Present: Mayor Pro Tem Michael A. Cacciotti, Chair
Senator Vanessa Delgado (Ret.)
Board Member Veronica Padilla-Campos
Supervisor V. Manuel Perez
Council Member Nithya Raman
Supervisor Janice Rutherford

Absent: None

Call to Order

Chair Michael Cacciotti called the meeting to order at 9:00 a.m.

For additional information of the Legislative Committee Meeting, please refer to the Webcast.

1. **Update on State Budget**
   Philip Crabbe, Senior Public Affairs Manager/Legislative, Public Affairs & Media, provided a status update regarding the state budget. On June 30, Governor Newsom signed the $307.9 billion state budget. Statewide AB 617 Program funding was part of the agreement as follows:

   - $240 million for Incentives
   - $50 million for air district implementation
   - $10 million for community grants

   The Governor's office also included an annual $300 million funding allocation for the AB 617 Program from the General Fund beginning in FY 2023-24. This creates an annual baseline for AB 617 funding, which could be augmented in the future through advocacy efforts to seek additional funding.

   Supervisor Perez inquired if the AB 617 funding allocations meets South Coast AQMD needs. Mr. Crabbe responded that the amount allocated by the Legislature is not enough for the AB 617 program, as South Coast AQMD had requested $600 million statewide. Wayne Nastri, Executive Officer, provided additional details on challenges to secure additional state funding, especially as it relates to AB 617. For additional information, please refer to the Webcast beginning at 8:54.

2. **Update on State Proposition 30**
   Derrick Alatorre, Deputy Executive Officer/Legislative, Public Affairs & Media, provided an update on Proposition 30, which will be on the statewide ballot in November. This proposition would increase the Personal Income Tax Rate by 1.75% on taxable income above $2 million. Per the Legislative Analyst's Office, this proposition is estimated to raise $3-$4.5 billion per year. Funds generated by the tax would be spent as follows:

   - 35% for zero-emission vehicle infrastructure
   - 45% for zero-emission vehicles and clean mobility through incentives and CARB administration
   - 20% for wildfire prevention

   The proposed tax would expire in 2043. However, the tax could expire in 2030, if greenhouse gas emissions are reduced by 80% for three consecutive years below 1990 levels. For additional information, please refer to the Webcast beginning at 24:03.

Harvey Eder, Public Solar Power Coalition, commented on Proposition 30 and AB 617.

ACTION/DISCUSSION ITEMS:

3. **Update on South Coast AQMD Sponsored and High-Priority State Legislation**
   Mr. Alatorre provided updates on South Coast AQMD's sponsored legislation and a key support bill.

   AB 1749 (C. Garcia), a South Coast AQMD key support bill, would allow for one additional year to develop AB 617 Community Emission Reduction Plans (CERP). The bill was amended and is currently on the Senate Floor. The author rejected South Coast AQMD proposed amendments and instead added language that would create a complicated approval process before a two-year time extension is allowed for the CERP development. CAPCOA has withdrawn their support for the bill. Staff recommended that South Coast AQMD withdraw support for the bill.

   The Committee discussed legislative options and staff's recommendation to withdraw support from AB 1749. For additional information, please refer to the Webcast beginning at 30:53.

   Board Member Padilla-Campos recommended a "SUPPORT IF AMENDED" position on this bill.

   Moved by Padilla-Campos; seconded by Raman
   Ayes: Padilla-Campos, Raman
   Noes: Cacciotti, Delgado, Perez, Rutherford
   Abstain: None
   Absent: None

   Staff recommended a "WITHDRAW SUPPORT" position on this bill.

   Moved by Delgado; seconded by Perez
   Ayes: Cacciotti, Delgado, Perez, Raman, Rutherford
   Noes: Padilla-Campos
   Abstain: None
   Absent: None

   Mr. Alatorre advised that AB 2836 (E. Garcia) as sponsored by South Coast AQMD had passed the Senate Appropriations Committee, clearing the way for full Senate consideration of the bill. This bill would reauthorize the Carl Moyer and AB 923 programs to 2034.

Another South Coast AQMD sponsor bill, AB 2910 (Santiago), would increase civil penalty ceilings for air quality violations. The bill passed out of Senate Appropriations Committee with amendments and will head to the Senate Floor. South Coast AQMD continues to work on amendments regarding a community mitigation provision in the bill to reduce the financial impacts to air districts. CARB has stated that AB 2910 would create a large fiscal impact because the State would have to backfill any loss of resources experienced by air districts. Additionally, the Department of Finance (DOF) sent a letter of opposition unless the bill is amended to delete the community mitigation provision. Discussions are ongoing to amend AB 2910.

The Committee discussed the community mitigation provision in AB 2910. For additional information, please refer to the Webcast beginning at 50:53.

Mr. Eder commented on funding opportunities for air districts and the Solar New Deal.

4. Update and Discussion on Federal Legislative Issues

South Coast AQMD's federal legislative consultants (Carmen Group, Cassidy & Associates, Kadesh & Associates) provided written reports on key Washington, D.C. issues.

Gary Hoitsma, Carmen Group, commented on H.R. 5376 the "Inflation Reduction Act of 2022." The bill includes many of the provisions South Coast AQMD has been seeking to help address emissions related to goods movement, including prioritization for nonattainment areas and environmental justice, energy and other air quality programs.

Jed Dearborn, Cassidy & Associates, commented on the Ports and Medium-Duty Vehicle provisions of the bill which provide separate pots of funding for nonattainment areas as advocated for by South Coast AQMD.

Ben Miller, Kadesh & Associates, commented on other air quality and environmental justice provisions of importance for South Coast AQMD, including the Neighborhood Access and Equity Grant program. The bill also includes funding for the Bureau of Reclamation which would support mitigation and restoration efforts at the Salton Sea.

For additional information, please refer to the Webcast beginning at 52:05.

5. **Update and Discussion on State Legislative Issues**
   South Coast AQMD's state legislative consultants (Resolute, California Advisors, LLC, Joe A. Gonsalves & Son) provided written reports on key issues in Sacramento.

   Ross Buckley, California Advisors, LLC, informed the Committee that CARB's Chair, Liane Randolph, announced the appointment of Dr. Steven Cliff as CARB's new Executive Officer.

OTHER MATTERS:

6. **Other Business**
   Chair Cacciotti requested a report on the status of AB 2766 fees from staff at a future meeting. Mr. Alatorre stated that this item would be placed on the Committee's agenda in September.

7. **Public Comment Period**
   There was no public comment to report.

8. **Next Meeting Date**
   The next regular Legislative Committee meeting is scheduled for Friday, September 9, 2022, at 9:00 a.m.

Adjournment
The meeting adjourned at 9:53 a.m.

Attachments
1. Attendance Record
2. Update on Federal Legislative Issues – Written Reports
3. Update on State Legislative Issues – Written Reports

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
LEGISLATIVE COMMITTEE MEETING
ATTENDANCE RECORD – June 10, 2022

Mayor Michael Cacciotti	South Coast AQMD Board Member
Senator Vanessa Delgado	South Coast AQMD Board Member
Board Member Veronica Padilla-Campos	South Coast AQMD Board Member
Supervisor V. Manuel Perez	South Coast AQMD Board Member
Council Member Nithya Raman	South Coast AQMD Board Member
Supervisor Janice Rutherford	South Coast AQMD Board Member
Mark Taylor	Board Consultant (Rutherford)
Amy Wong	Board Consultant (Padilla-Campos)
Ben Wong	Board Consultant (Cacciotti)
Ross Buckley	California Advisors, LLC
Paul Gonsalves	Joe A. Gonsalves & Son
Gary Hoitsma	Carmen Group, Inc.
Mark Kadesh	Kadesh & Associates
Amelia Morales	Cassidy & Associates
David Quintana	Resolute
Mark Abramowitz	Public Member
Ken Chawkins	Public Member
Ramine Cromartie	Public Member
Jackson Guze	Public Member
Bill La Marr	Public Member
Josh Nuni	Public Member
David Rothbart	Public Member
Patty Senecal	Public Member
Derrick Alatorre	South Coast AQMD Staff
Jason Aspell	South Coast AQMD Staff
Barbara Baird	South Coast AQMD Staff
Cindy Bustillos	South Coast AQMD Staff
Philip Crabbe	South Coast AQMD Staff
Scott Gallegos	South Coast AQMD Staff
Sheri Hanizavareh	South Coast AQMD Staff
Mark Henninger	South Coast AQMD Staff
Kathryn Higgins	South Coast AQMD Staff
Aaron Katzenstein	South Coast AQMD Staff
Alicia Lizarraga	South Coast AQMD Staff
Cristina Lopez	South Coast AQMD Staff
Jason Low	South Coast AQMD Staff
Susan Nakamura	South Coast AQMD Staff
Wayne Nastri	South Coast AQMD Staff
Denise Peralta Gailey	South Coast AQMD Staff
Sarah Rees	South Coast AQMD Staff
Aisha Reyes	South Coast AQMD Staff
Lisa Tanaka O'Malley	South Coast AQMD Staff
Anthony Tang	South Coast AQMD Staff
Uyen-Uyen Vo	South Coast AQMD Staff
Paul Wright	South Coast AQMD Staff
Victor Yip	South Coast AQMD Staff

ATTACHMENT 2A

Carmen Group
INCORPORATED

To: South Coast AQMD Legislative Committee

From: Carmen Group

Date: July 28, 2022

Re: Federal Update -- Executive Branch (June and July)

Reconciliation: After almost two months of seeming consensus that Democrats in Congress would not be able to reach agreement on any new "reconciliation" package with serious energy and climate provisions -- to replace their earlier plans for a multi-trillion dollar "Build Back Better" tax and spending bill -- Senators Schumer and Manchin surprised almost everyone on July 27 by announcing they had reached a secret deal on a $739 billion package, the largest component of which was a $369 billion series of energy and climate spending items, claiming these would reduce US carbon emissions by 40 percent by 2030. Among these items, based on early press reports, were the following:

- $4000 consumer tax credits to buy used clean vehicles
- $7500 consumer tax credits to buy new clean vehicles
- $1 billion grant program to make affordable housing more energy efficient
- $9 billion in consumer home energy rebate programs
- Tax credits to make homes more energy efficient
- Tax credits to encourage the manufacture of solar panels and wind turbines
- $10 billion in investment tax credits for clean technology manufacturing centers
- $2 billion in grants to retool auto manufacturing plants to produce clean vehicles
- Tax credits for clean sources of electricity and energy storage
- $40 billion for grant/loan programs for states/utilities to cut use of fossil fuels
- $60 billion in "environmental justice" priorities
- $3 billion in grants to "reconnect communities divided by existing infrastructure"
- $3 billion to address air pollution at ports with "zero-emission" equipment
- $1 billion for cleaner school and transit buses and garbage trucks.

In order to pass, the bill would need the votes of all 50 Democrats in the Senate, plus the Vice President's tie-breaking vote. In the early aftermath of the announcement, it was clear that not all of those votes were yet secured.

Appropriations: On July 28, Senate Appropriations Chairman Leahy released the Majority's texts of appropriations bills, prompting Senate Appropriations Ranking Member Shelby to respond with his own laundry list of Republican objections, suggesting that a yearlong CR (which neither side wants) may be a real possibility at the end of the year. Both sides say they hope this back-and-forth is the start of a more serious

negotiation on spending priorities, but it looks more like a rather hardened election-year (pre-election) stalemate.

Supreme Court Decision: In its 6-3 decision in the *West Virginia v. EPA* Clean Air Act case in June, the court ruled that the Clean Power Plan established under the Obama Administration went beyond the EPA's regulatory authority bestowed on it by the Congress. The court majority embraced the major questions doctrine, holding that federal agencies must be able to point to clear congressional authorization for regulations in extraordinary cases dealing with "major questions" of serious "economic and political significance."

Senate Hearing on Air Quality Monitoring Legislation: In July, the Senate Environment & Public Works Committee held a hearing to consider three air quality monitoring bills: S. 1345, the Comprehensive National Mercury Monitoring Act; S. 2476, the Environmental Justice Air Quality Monitoring Act; and the Public Health Air Quality Act. While it was an interesting discussion on the bills and on related environmental justice issues, it seemed clear that none of these items had enough support by themselves to move farther in the legislative process this year.

Joe Goffman Nomination: President Biden's nomination of Joe Goffman to be EPA Assistant Administrator for Air and Radiation was still in limbo at the end of July. Since his nomination hearing in May, a committee vote was twice postponed in July where he faces a likely party-line 10-10 tie vote, and where it will be necessary for all of the Democrats to be present and voting both in the Committee and then on the Senate floor, something which has been a little dicey in the wake of some recent COVID-related absences. Goffman's history as the Obama Administration's architect of the EPA's Clean Power Plan that was just stuck down by the Supreme Court has animated Republican opposition.

Environmental Protection Agency

EPA Releases Annual Air Report: In June, the EPA released its annual interactive report tracking America's progress in controlling air pollution. *"Our Nation's Air: Trends Through 2021"* provides information about the health and environmental impacts of air pollution, trends in air quality and emissions data, and community-level health impacts of air toxics emissions. https://gispub.epa.gov/air/trendsreport/2022/

EPA Releases Justice40-Covered Program List: In June, the EPA released a list of 72 EPA programs that will be covered under the Administration's Justice40 Initiative which aims to deliver 40 percent of the overall benefits of federal climate, clean energy and other investments to disadvantaged communities. Key programs on the list include DERA, Target Airshed Grants, Ports Initiative Small Grants and Clean School Bus Grants.

EPA Awards EJ Grants in California: In June, the EPA awarded over $1 million in grants to support 13 projects designed to advance environmental justice in California. The grants were awarded through EPA's national Environmental Justice Small Grants and Collaborative Problem-Solving programs and cover a wide array of environmental

justice issues including COVID-19 pandemic response, air and water monitoring, food access, community planning, emergency preparedness and port-related air quality.

UC-Irvine Students Win First Place in EPA's National EJ Video Challenge: In July, a team of eight students at the University of California, Irvine, were awarded the First-Place prize of $20,000 in EPA's national Environmental Justice Video Challenge for Students. The challenge contest tasked teams of college students from across the nation to create videos identifying and characterizing an environmental justice issue important to a local community. The winning entry was titled, *Unearthing Lead: The Power of Historical Maps.* See the 5-minute winning video here: **https://youtu.be/IE-ax71ClaI**

Department of Energy

Notable Appointment:
Jeff Marootian, *Assistant Secretary for Energy Efficiency and Renewable Energy*
Biden WH Pres. Personnel; Dir., DC DOT; Obama DOT; GWU Alum and Faculty

DOE Launches $8 Billion Program for Clean Hydrogen Hubs: In June, the Department of Energy released a Notice of Intent to fund the Bipartisan Infrastructure Law's $8 billion program to develop regional clean hydrogen hubs across the country. The hubs will create networks of hydrogen producers, consumers, and local connective infrastructure to accelerate the use of hydrogen as a clean energy carrier. DOE will select proposals that prioritize employment opportunities, and address hydrogen feedstocks, end uses, and geographic diversity.

DOE Announces Funding Opportunity to Support Vehicle Electrification: In July, the Department of Energy announced a $96 million funding opportunity under the Vehicle Technologies Office to support clean vehicles. The focus will be projects that expand vehicle electric charging accessibility, advance innovation in electric drive components and materials, and create cleaner non-road engines. Concept papers due August 25, 2022. Full applications due November 10, 2022.

DOE Releases Justice40-Covered Program List: In July, the DOE released its list of 146 Department of Energy programs that will be covered under the Administration's Justice40 Initiative which aims to deliver 40 percent of the overall benefits of federal climate, clean energy and other investments to disadvantaged communities. Key programs on the list include those under the offices of Energy Efficiency and Renewable Energy, Advanced Research Project Agency-Energy, Loan Program Office, Clean Energy Demonstrations and State and Community Energy Programs, among others.

DOE Announces First ATVM Loan in Over a Decade: In July, the Department of Energy's Loan Program Office announced it closed a $102.1 million loan to support a private processing facility in Vidalia, Louisiana, that produces a critical material used in lithium-ion batteries for electric vehicles. This marks the first loan from the Advanced Technology Vehicle Manufacturing (ATVM) Loan Program since 2011, and the first such loan exclusively for a supply chain manufacturing project.

Department of Transportation

Notable Appointments:
Gen. Stephen R. Lyons (Ret.), *Port and Supply Chain Envoy* (Replacing John Porcari)
Former Commander, US Transportation Command

Dr. Steven Cliff, *National Highway Traffic Safety Administrator* (Confirmed by Senate)
CARB 2008-22 and Dep. Exec. Off., CA DOT, UC-Davis Air Quality Research Center

Shailen Bhatt, *Federal Highway Administrator* (Nominated)
Dir. CO DOT; Dir., DE DOT

FHWA Proposes Standards for EV Chargers: In June, the Federal Highway Administration issued a Notice of Proposed Rulemaking on proposed minimum standards and requirements for projects funded under the National Electric Vehicle Infrastructure (NEVI) Formula Program ($5 billion over 5 years) established under the Bipartisan Infrastructure Law. The proposed rule seeks to establish the groundwork for states to build a seamless network of charging stations across the country.

DOT/DOE Joint Office Announces Electric Vehicle Working Group: In June, the Administration's Joint Office of Energy and Transportation announced the Federal Advisory Committee Act (FACA) Electric Vehicle Working Group (EVWG) to make recommendations regarding the integration of electric vehicles into America's transportation and energy systems. Established by the Bipartisan Infrastructure Law, the group will consist of 25 representatives, Federal Government employees, and special Government employees (SGEs).

FHWA Proposes Guidelines for State DOTs on Reducing Carbon Emissions: In July, the Federal Highway Administration issued a Notice of Proposed Rulemaking for state DOTs and metropolitan planning organizations (MPOs) to track and reduce highway-related greenhouse gas (GHG) emissions under the Carbon Reduction Formula Program established in the Bipartisan Infrastructure Law. The rule would add a new GHG performance management measure to help states track progress and "make more informed investment decisions," while creating "a flexible system under which State DOTs and MPOs would set their own declining targets" for GHG emissions. Republican critics in Congress have noted that a closer reading of the rule suggests states should also be guided with less flexibility by goals set out in Presidential "net-zero" climate executive orders which are not spelled out in the law, a point which likely needs more clarity before the proposed rule is finalized.

Outreach: Contacts included Sen. Jim Inhofe and Senate Environment & Public Works Committee staff on clean air issues and reconciliation; and Lee Janger with the Alliance for Vehicle Efficiency on the Clean Truck Plan and on possible changes to EPA's NAAQS standard for particulate matter.

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ATTACHMENT 2B

CASSIDY | ASSOCIATES

To: South Coast Air Quality Management District
From: Cassidy & Associates
Date: July 27, 2021
Re: June & July Report

HOUSE/SENATE

Both the House and Senate are in session this week as they rush towards August recess. Time is running short before recess and, shortly after, the break for the midterm elections. Congress is hoping to move on the CHIPS-Plus bill, public safety policies, and government funding before the Fall. The CHIPS Act passed the Senate this week and will be passed by the House shortly and head to the President's desk. The $280 billion package is designed to aid both domestic semiconductor chip manufacturing and US high-tech research.

It is a long shot for the House to pass their gun control and police funding bills this week. House Democratic leadership is struggling to get the party on the same page. Different factions within the caucus are jockeying for leverage as the House prepares to leave town for August recess.

We should see Senate Appropriations language this week, but any further movement on the government funding package may wait until the Fall. There is discussion of a continuing resolution (CR) before September that would extend through early December.

Reconciliation is back again, but in a very stripped-down form. This current version of reconciliation includes two key provisions that Sen. Joe Manchin will support – Medicare prescription drug price reform and a two-year extension of Obamacare premium subsidies. There are rumors that Congress will be brought back into session early at the end of August to take up reconciliation. The Democrats have struggled with razor thin margins in both the House and Senate as COVID-19 cases run through Capitol Hill once again.

EPA

On June 1, the EPA released their annual air report, tracking air quality trends, exploring visibility in treasured parks, and measuring impacts of air-toxic emissions. The interactive report includes a summary tool for community-level information regarding potential hazards from air emissions. The report found that between 1970 and 2021, the combined emissions of six key emissions dropped by 78%. However, while emissions continue to decline, the air quality varies year by year. Read more here.

Applications are now open for school districts to apply for clean school bus funding as a part of the $500 million investment to replace the nation's fleet of school buses with clean, American-made, zero-emission buses in the Bipartisan Infrastructure Law (BIL). The EPA will prioritize applications that will replace buses serving high-need local education agencies, Tribal Schools, and rural areas, and it supports President. Biden's Justice40 initiative to direct at least 40% of the benefits of certain government investments to underserved communities. Applications are being accepted until August 19, more information can be found here and questions about the process can be directed to CleanSchoolBus@epa.gov.

The EPA named Los Angeles the top city with the most ENERGY STAR certified buildings (650 buildings) this year. Given that commercial buildings are responsible for 18% of the country's energy use, ENERGY STAR buildings are crucial in reducing greenhouse gas emissions by using on average 35% less energy and producing 35% less carbon dioxide than conventional buildings. These buildings have saved over $5 billion on energy bills.

An initial list of programs covered by the Biden-Harris Administration's Justice40 initiative includes 72 initatives, ranging from the agency's Lead Risk Reduction program to the newly created Clean School Bus Program. The full list of programs can be found here.

On June 3, the EPA announced the final biofuel volume requirements for 2020-2022, strengthening the Renewable Fuel Standard program (RFS). The EPA also allowed biointermediates, which are feedstocks converted at two separate facilities, to be included in the RFS program. The EPA also classified renewable diesel and biofuels made of canola oil as advanced biofuels. Both biointermediates and canola oil biofuels may increase compliance and encourage innovative biofuels. Finally, the EPA provided an alternative schedule for small refineries to comply with RFS obligations and an alternate compliance approach for certain refineries for 2016-2018. The final volume requirements can be found here.

In response to the recent *West Virginia v. EPA* ruling on June 30, the Administrator Regan released a statement making it clear that he was disappointed in the ruling. The EPA announced that the agency will set and implement lawful environmental standards to protect communities from environmental harm. The EPA will continue to reduce pollution and support the energy sector in growing the clean energy economy. The full statement can be read here.

Administrator Regan joined representatives from Mexico and Canada to announce the second cycle of the EJ4Climate grant program. EJ4Climate is a program launched by the Commission for Environmental Cooperation (CEC) to support environmental justice and climate resilience for underserved, vulnerable, and Indigenous communities across North America. This second cycle of the grant program will be funded with $2 million in grant funding, supported by $1 million from the EPA, and will focus on projects that strengthen environmental education and build resilience to climate change. Full statements can be read here. In addition to the grant program, all the representatives discussed progress on the two initiatives announced during last year's CEC session – the large scale initiative on Air Quality Improvement for Environmental Justice and development of a Community Environmental Justice Network, which will begin implementation in 2022.

Cassidy and Associates support in June and July:

- Secured key meetings with the Biden Administration for Executive staff and the Senate Environment and Public Works Committee.
- Worked with South Coast AQMD staff to strategize on DC outreach
- Continued to monitor and report on activities in Congress and the Administration that impact the District.

IMPORTANT LEGISLATIVE DATES

August 1, 2022
House out for August Recess

August 8, 2022
Senate out for August Recess

October 3, 2022
House and Senate out for midterm elections

PANDEMIC RESPONSE PROGRAMS AND AUTHORITIES

End Date/Program

Sept. 30, 2025
Pandemic Response Accountability Committee, Congressional Oversight Commission

AGENCY RESOURCES

USA.gov is cataloging all U.S. government activities related to coronavirus. From actions on health and safety to travel, immigration, and transportation to education, find pertinent actions here. Each Federal Agency has also established a dedicated coronavirus website, where you can find important information and guidance. They include: Health and Human Services (HHS), Centers of Medicare and Medicaid (CMS), Food and Drug Administration (FDA), Department of Education (DoED), Department of Agriculture (USDA), Small Business Administration (SBA), Department of Labor (DOL), Department of Homeland Security (DHS), Department of State (DOS), Department of Veterans Affairs (VA), Environmental Protection Agency (EPA), Department of the Interior (DOI), Department of Energy (DOE), Department of Commerce (DOC), Department of Justice (DOJ), Department of Housing and Urban Development (HUD), Department of the Treasury (USDT), Office of the Director of National Intelligence (ODNI), and U.S. Election Assistance Commission (EAC).

Helpful Agency Contact Information:
U.S. Department of Health and Human Services – Darcie Johnston (Office – 202-853-0582 / Cell – 202-690-1058 / Email – darcie.johnston@hhs.gov)

U.S. Department of Homeland Security – Cherie Short (Office – 202-441-3103 / Cell – 202-893-2941 / Email – Cherie.short@hq.dhs.gov)

U.S. Department of State – Bill Killion (Office – 202-647-7595 / Cell – 202-294-2605 / Email – killionw@state.gov)

U.S. Department of Transportation – Sean Poole (Office – 202-597-5109 / Cell – 202-366-3132 / Email – sean.poole@dot.gov)

ATTACHMENT 2C

KADESH & ASSOCIATES

South Coast AQMD Report for the August 2022
Legislative Meeting covering June-July 2022
Kadesh & Associates

The House spent much of the early summer working through their versions of the Fiscal Year (FY) 23 appropriations bills, including committee markups throughout the month of June. On July 20, the House approved a package of six of those bills, including the Energy & Water and the Interior-Environment bill. The EPA accounts that are important to South Coast AQMD all fared very well, including $100M for TAG, $150M for DERA, and $322.2 million in Sec 103 and 105 grants to air agencies. The House has not yet scheduled a vote on the other six appropriations bills.

The Senate process has been much less straightforward: the Senate Appropriations committee majority has not yet released its bills, and the latest reporting suggests that they might release their draft bills online before the August recess and skip the committee process and floor consideration altogether, which is similar to their approach last year.

As a reminder, the new fiscal year begins on October 1, but the bicameral and bipartisan Appropriations committee leaders have not yet agreed on topline funding levels. If and when a topline agreement is reached, the twelve appropriations bills will need to be altered to conform to those levels. It is very likely that we will see a continuing resolution to continue current funding levels past the end of FY22.

In the House, we have also seen recent action on other South Coast AQMD policy priorities, including in the Wildfire Response and Drought Resiliency Act that was considered the week of July 25. That bill included authorization for additional federal funding to remediate issues at the Salton Sea, as well as several authorizations designed to address wildfire smoke impacts, including the Smoke Planning and Research Act to research the public health effects of smoke from wildland fires, and provide grant funding to mitigate those effects, which South Coast AQMD has also supported.

Finally, the on-again off-again budget reconciliation negotiations between Senate Majority Leader Schumer and Senator Joe Manchin continued in dramatic fashion this summer. After weeks of negotiation, Senator Manchin announced in July that he could not support the climate policy and tax reforms that he had been negotiating, and would instead only support a reconciliation bill that targeted prescription drug prices and health insurance costs. At the end of the July, in a surprise to all of Capitol Hill, Manchin and Schumer announced that they had reached agreement on a 725 page bill that includes the health cost provisions as well as $1B for clean heavy-duty vehicles, consumer tax credits for clean vehicles, and significant incentives for energy efficiency and clean power.

Kadesh & Associates Activity Summary-
-Worked with South Coast AQMD and the congressional delegation on efforts to support the CA truck rule and to encourage federal efforts to address air quality.

-Continued work with the delegation and South Coast AQMD staff to focus attention on air quality implications of FY23 budget request and appropriations.

Contacts:
Contacts included staff and House Members throughout the CA delegation, especially the authors of priority legislation, Senate offices, members of the South Coast House delegation, and members of key committees. We have also been in touch with administration staff.

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ATTACHMENT 3A

RESOLUTE

South Coast Air Quality Management District

Legislative and Regulatory Update – June and July 2022

❖ Important Upcoming Dates

August 1	–	Legislature Reconvenes from Summer Recess.
August 12	–	Last day for fiscal committees to meet and report bills
Aug 15-31	–	Floor session only
August 31	–	Last day for each house to pass bills. Final recess begins upon adjournment

❖ RESOLUTE Actions on Behalf of South Coast AQMD.

RESOLUTE partners David Quintana, Jarrell Cook, and Alfredo Arredondo continued their representation of South Coast AQMD before the State's Legislative and Executive branch. Selected highlights of our recent advocacy include:

- Assisted South Coast staff in confirming and participating in key meetings with staff for legislators as AB 2836 (E. Garcia) and AB 2141 (E. Garcia) moved from the Assembly to the Senate and were heard in Senate committees. Additional meetings were set during July for AB 2836 as that bill is heading to Senate Appropriations Committee.
- Assisted South Coast staff in confirming and participating in an AB 617 funding meeting with the Governor's Office.
- Continued outreach to numerous legislative members and offices regarding South Coast priority legislation and issues.

❖ SCAQMD Sponsored Legislation.

- AB 2141 (Eduardo Garcia): AB 617 Sustainable Funding
  - AB 2141 was not presented in Senate policy committee by the author given that the funding for AB 617 was agreed upon in the 2022 Annual Budget Act (SB 154).
  - SB 154 included appropriations for AB 617 which for this budget year will allocate a total of $300 million to AB 617 ($40 million of the total from the General Fund, and $260 million from the Greenhouse Gas Reduction Fund). Additionally, the budget agreement includes funding of $300 million from the General Fund in the 2023-2024 budget which presents a unique shift in fund source for the program. This shift in funding should allow the District to pursue additional funding from the Greenhouse Gas Reduction Funding while keeping the General Fund allocation as a floor.
  - SB 154 was passed by the Assembly and Senate on June 13 and signed by the Governor on June 27.

- AB 2836 (E. Garcia): Carl Moyer Extension
  Senate Transportation (6/14/2022). Passed with 14 Ayes, 0 Noes, and 3 No Vote Recorded.
  - Ayes: Allen, Bates, Becker, Cortese, Dahle, Dodd, Gonzalez, Limón, McGuire, Min, Newman, Skinner, Wieckowski, Wilk
  - Noes: N/A
  - NVR: Archuleta, Melendez, Rubio

- AB 2836 (E. Garcia): Carl Moyer Extension
  Senate Environmental Quality Committee (6/22/2022). Passed with 7 Ayes, 0 Noes, and 0 No Vote Recorded.

- Ayes: Allen, Bates, Dahle, Eggman, Gonzalez, Skinner, Stern
- Noes: N/A
- NVR: N/A

- AB 2836 will now head to the Senate Appropriations Committee where it will be placed on the Suspense File. The Suspense hearing is expected to take place on Thursday, August 11.

❖ **June Budget Agreement.** On June 1, the Assembly and Senate announced an agreement on the Joint Legislative Budget Plan. This initial agreement was reflected in SB 154 (Budget Act of 2022) and was the budget bill that the legislature passed in time for the constitutionally mandated deadline of June 15. While it set overall spending levels for what will ultimately become the $21 billion 'Climate and Energy Package', SB 154 did not specify appropriations for the environment, air quality, water and drought, or wildfire components of the $21 billion.

However, one key investment that was agreed upon was AB 617 funding: $300 million was appropriated in SB 154, signifying that the legislature chose to specifically prioritize these investments and not delay action on this item until August.

In addition to SB 154, which was the Legislative version of the budget, the Governor and the Legislature subsequently came to agreement on the overall budget bill with AB 178 (Budget Act of 2022). AB 178, also known as Budget Bill Jr., was passed by the legislature on June 29, and signed by the Governor on June 30. As referenced earlier, it is expected that the final amendments to the Budget Act, including details of the Climate and Energy Package, will be approved in August.

❖ **Air Resources Board Hearing to consider Draft 2022 Climate Change Scoping Plan Update.** On June 23-24, the Air Resources Board held a hearing to discuss and gather public comment from the public on the Draft Plan that was released in May. The hearing, which began at 9am on June 23, lasted into the night with a very long list of public commenters weighing in to provide their comments. The following morning the Board itself discussed their priorities and thoughts in relation to the draft and that portion of the hearing can be found here: https://cal-span.org/unipage/?site=cal-span&owner=CARB&date=2022-06-24

❖ **Governor Newsom Sends Letter to ARB Chair on Accelerating Targets in Scoping Plan.** On July 22, Governor Newsom outlined new targets and requested actions to accelerate progress on the State's climate goals. The letter to Chair Randolph is available here: https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf?emrc=1054d6

The new targets and actions highlighted in the press release are these:

- Offshore Wind: Establishing a California Energy Commission planning goal of at least 20GW of offshore wind in 2045.
- Clean and Healthy Buildings: Creating a goal of 3 million climate-ready and climate-friendly homes by 2030 and 7 million by 2035, supplemented by 6 million heat pumps by 2030, and directing 50 percent of investments to low-income and disadvantaged communities.
- Moving Away from Fossil Fuels: Directing state agencies to plan for an energy transition to meet our long-term energy goals that avoids the need for new natural gas plants, while ensuring reliability. Establishing a 20 percent clean fuels target for the aviation sector. The Governor also requested that CARB evaluate a more stringent Low Carbon Fuel Standard and accelerate refinery transitions to clean fuels production.
- Methane: Forming a Task Force to identify and address methane leaks from oil infrastructure near communities, recognizing the threats these leaks can pose to community health and safety.
- Carbon Removal: Setting a 20 MMT carbon removal target for 2030 and 100 MMT carbon removal target for 2045, emphasizing the role of natural and working lands and the need for safe and equitable engineered carbon removal.

- Increasing Climate Ambition: Partnering with the Legislature to make carbon neutrality state law and accelerate progress toward California's 2030 target; bring new ambition to the state's clean energy goals; develop policy to support sequestration from natural and working lands while incorporating industrial carbon capture in carbon neutrality efforts; and finalize investments under the state's $53.9 billion Climate Commitment.

❖ **Governor Newsom Announces Opposition to EV Funding Initiative.** In late July, the Governor also announced his opposition to Proposition 30 which has qualified for the November 22 ballot. The initiative would tax income earners making more than $2 million annually and fund ZEV incentive programs alongside funding to fight wildfires. A summary for the initiative is available from the Legislative Analyst Office here: https://lao.ca.gov/handouts/resources/2022/Initiative-Statute-ZEV-and-Wildfire-Activities-053122.pdf

Politico Pro: Gavin Newsom is fighting a wealth tax that would fund his own climate goals
BY JEREMY B. WHITE | 07/28/2022 05:00 AM EDT

California environmentalists know how to fund Gov. Gavin Newsom's aggressive plan to get gas-powered vehicles off the road: Tax the rich.

What's standing in their way? Newsom.

The state's ambitious, progressive governor is vehemently opposing a November ballot initiative to subsidize the electric vehicle market through a wealth tax. He declared the measure a "cynical scheme" by one of its key backers, ride-hail company Lyft, to meet a state EV mandate on the public's dime.

Lyft's environmentalist bedfellows see something else: a governor standing in the way of a clean car transition he's touted but failed to fully fund.

"I'm pretty disgusted," said Mary Creasman, CEO of California Environmental Voters, another of the measure's backers and the type of environmentalist who has cheered much of Newsom's assertive climate agenda. "It is astounding to say the least from a governor who says he's progressive and wants to be a climate leader."

The issue isn't whether to swap gas cars for electric — something Newsom has ordered — but how to pay for the transition. The ballot battle underscores the enormous financial and logistical obstacles — and highlights the political perils for companies such as Lyft that are seeking public help to achieve mandates. Newsom's alignment with anti-tax Republicans and business groups demonstrates that warning signs have the Democratic governor treading carefully.

The reaction from backers of the measure, known as Proposition 30, is a sign of the bitter battles to come as California, the largest new car market in the nation, tries to wean itself off the carbon-emitting vehicles that are one of the principal causes of climate change. It also reflects the difficult balancing act Newsom faces as he tries to achieve his policy goals.

Prop 30 would raise income taxes on people earning more than $2 million a year to fund zero-emission vehicle purchases and infrastructure. Half the money for incentives would go to people in lower-income communities and a share of the money for infrastructure would be used to install charging stations at apartment buildings. A portion would also be used to fund wildfire prevention efforts, a provision that backers have stressed as they tout support from firefighters."

Newsom galvanized environmentalists and bolstered California's ambitious climate agenda with his 2020 order requiring all new vehicles sold in the state to be zero-emission by 2035. A related but less-noticed law compels ride-hailing companies like Lyft and Uber to mostly abolish internal combustion engines from their fleets by 2030. That last requirement is proving challenging since electric vehicles are still pricey, chargers remain relatively scarce, and the people driving for ride-hail apps work as independent contractors.

That tech industry mandate has now attracted outsized attention.

Lyft has also spent years lobbying the state for more money. It has spent $15 million so far to pass Prop 30.

Newsom noticed. His denunciation of the company was a notable contrast from his stance to Silicon Valley giants during the 2020 election cycle, when the governor frustrated some allies by remaining neutral on a ballot initiative that Lyft and other tech firms funded to carve themselves out of a new employment mandate.

"Prop. 30 is fiscally irresponsible and puts the profits of a single corporation ahead of the welfare of the entire state," Newsom said in a statement.

The governor's fiery denunciation abruptly opened a fissure between Newsom and some typical allies, including the California Democratic Party. Creasman called Newsom's assertion that the measure was solely intended to benefit Lyft "an out-right lie," and said the governor is placing the interests of his donors over the public.

"We've been hearing this is driven by billionaire donors saying they don't want higher taxes," Creasman said.

A Newsom spokesman, Nathan Click, dismissed the idea that donors played a role, saying the governor was minding the "welfare and fiscal health of the entire state." Lyft has already given a maximum donation to Newsom's re-election bid.

The company declined to comment on Newsom's broadside. It said in an earlier statement it backed the initiative "to help people afford zero-emission vehicles and develop a more robust and convenient charging network."

The company has long sought more electric vehicle and charger funding. It lobbied against a 2018 California bill requiring the company to deploy more zero-emission vehicles. It ultimately dropped its opposition but subsequently pressed regulators for more help.

The governor was joined in opposition by the powerful California Teachers Association, a close ally that deployed significant resources to defend Newsom from last year's recall attempt. The union says Prop 30 could take money from schools by setting aside a portion of the general fund to subsidize electric vehicles.

Unions that would build electric infrastructure have backed the initiative.

Newsom's position aligned him with the California Republican Party and with conservative groups like the California Chamber of Commerce. The business group said "the last thing California needs right now is a tax increase" as inflation soars and economists warn of a potential recession. The governor has signaled a similar aversion to new taxes. His team

conveyed its opposition to another initiative that sought to fund pandemic detection by taxing the rich. That measure did not qualify for the ballot.

Newsom drew national praise when he unveiled the 2020 order requiring all new vehicles sold in California to be electric by 2035. Reaching that goal, however, will likely not be cheap.

Although California has already spent heavily over the years to incubate and nurture the growing electric vehicle market, automakers and environmental policy experts broadly agree that the state will need to keep the funds flowing to reach Newsom's benchmark.

"I think it is necessary to reach the goals that the state has set," said Mary Nichols, former chair of the California Air Resources Board and a Prop 30 endorser. "I understand and share the reluctance to create permanent protected funding sources for particular favored projects, but this area is one that, although it has received a lot of funding, needs more."

Zero-emission vehicles accounted for about 12 percent of California's light-duty car sales last year, although annual purchases and market share are gradually growing as car companies ramp up production amid rising demand. The roughly 79,000 operational charging stations around the state are far short of the number needed, and the majority are privately owned.

The market is dominated by wealthier consumers who can afford, say, a Tesla and a charging station in their single-family home. Expanding that market to middle-and-lower-income buyers will require subsidies both for purchasing vehicles and for charging stations in public places and apartment complexes, say policy experts and industry players.

"It's unclear to us where, as automakers, that volume of charging infrastructure is going to come from if there's not state investment," said Curt Augustine, senior director of state affairs for the Alliance for Automotive Innovation, an industry group that has remained neutral on the ballot initiative. "With this state mandate we're going to need all the help we can get."

Newsom noted in his opposition statement that the state has already allocated billions of dollars to build infrastructure, with his latest budget channeling part of an enormous surplus to $6.1 billion for clean vehicles over the next five years. California has already handed out roughly 450,000 rebates to help people purchase low-emission vehicles — part of a suite of subsidies that Newsom has argued were critical to launching electric vehicle companies like Tesla.

Yet the message from Prop 30 supporters is: It's not enough. They argue that budget booms like California's current windfall are fleeting, and they worry that the Legislature will turn its attention to other issues if electric vehicle funding is not set aside for the future.

"If there is a stable source of funding both for wildfire and EVs, then you create the ability to plan in a more profound way," said Ken Alex, who was a high-level climate adviser to former Gov. Jerry Brown and now heads UC Berkeley's Project Climate. "I think there's a ways to go. That doesn't mean it needs to go on forever, but if it was 10 years, 15 years, that wouldn't surprise me."

ATTACHMENT 3B

CALIFORNIA ADVISORS, LLC

South Coast AQMD Report
California Advisors, LLC
August 12, 2022, Legislative Committee Hearing

Legislative Update

The last two weeks of June saw hundreds of bills being heard in policy committees between the Senate and the Assembly. July 1 marked the deadline for policy committees to meet and refer bills to the fiscal committees. Additionally, the beginning of July saw lawmakers head back to their districts for a four-week long summer recess. Upon returning to Sacramento on August 1st, the countdown to the finish line begins. In all, the Legislature will have about a month to finish up its business for this legislative session. We expect a flurry of actions during the month of August. The "suspense" hearings in the respective appropriations committees will occur and additional budget actions will be taken. The deadline for each house to pass bills is August 31st.

On July 22, Governor Gavin Newsom pushed for California to move faster to reach its climate goals, setting ambitious new targets for renewable energy, clean buildings, carbon removal, and clean fuels in the transportation sector.

Specifically, in a letter to the Chair of the California Air Resources Board (CARB), Governor Newsom called for the state to ensure that the 2022 Climate Change Scoping Plan provides a path to achieve both the 2030 climate goal and state carbon neutrality no later than 2045, requesting that the final plan incorporate new efforts to advance offshore wind, clean fuels, climate-friendly homes, and carbon removal and address methane leaks. CARB will meet in the fall to consider adopting a final draft of the 2022 Climate Change Scoping Plan.

The Governor also announced a new climate dashboard highlighting state climate action and progress toward key targets. The California Environmental Protection Agency (CalEPA) will continue to expand the dashboard to help Californians understand the actions the state is taking to adapt to a changing climate, and track progress in areas such as zero-emission vehicle sales, clean energy job creation, and consumer savings from energy efficiency standards.

Budget Update

On June 30, ahead of the new fiscal year, Governor Newsom signed the $307.9 billion state budget. The budget covers the 2022-23 fiscal year that began July 1. Newsom and Legislative Leadership have touted that this budget aims "to help address rising costs, tackles the state's most pressing needs, builds our reserves, and invests in California's future."

The Legislature also passed 29 budget-related bills. Notably, the budget includes $9.5 billion in refunds to Californians to offset higher gas prices and inflation; $14.8 billion for a multi-year transportation package which included funding for regional transit, rail, and ports; and $53.9 billion to address the issues of climate change in California. The budget also included funds for the AB 617 program and additional investments in zero-emission vehicles.

The conversations around the budget will continue into the month of August. There will likely be several negotiations that will occur on funding over the next few weeks, and clean-up bills will be needed. The budget continues to be a year-long conversation.

Election Update

On July 15, Secretary of State Dr. Shirley Weber certified the results for the June 7 primary election. In doing so, Dr. Weber issued the Statement of the Vote, which provides detailed information on how votes were cast within each county. In total, 7,285,230 votes were cast. This is a new high for a California gubernatorial primary slightly above the 7,141,947 votes cast in June 2018.

Further, while there had been concerns about low turnout going into the election, the data shows that 33.2% of registered voters cast a ballot. The fact that voter turnout was decent is even more impressive when accounting for the fact that there were no state propositions on the June primary ballot.

Dr. Weber also announced that there will be seven propositions on the ballot this November. Proposition 30 would tax people making more than $2 million a year to fund greenhouse gas emission reduction programs, including rebates for the purchase of zero-emission vehicles. Governor Newsom has already expressed his opposition to this proposition. He has concerns over raising taxes when the state has already allocated billions of dollars to zero-emission vehicle deployment.

Appointments

Governor Gavin Newsom announced the appointment of Joe Stephenshaw as Director of the California Department of Finance. In this capacity, Stephenshaw will, among other things, oversee the development of the governor's budget proposals.

If confirmed by the Senate, Stephenshaw will fill the role held by Keely Martin Bosler since 2018. He has served as Senior Counselor on Infrastructure and Fiscal Affairs in the Office of the Governor since March 2022.

ATTACHMENT 3C

Joe A. Gonsalves & Son
Anthony D. Gonsalves
Jason A. Gonsalves
Paul A. Gonsalves
PROFESSIONAL LEGISLATIVE REPRESENTATION
925 L ST. · SUITE 250 · SACRAMENTO, CA 95814-3766
916 441-0597 · FAX 916 441-5061
Email: gonsalves@gonsalvi.com

TO: South Coast Air Quality Management District
FROM: Anthony, Jason & Paul Gonsalves
SUBJECT: Legislative Update – June & July, 2022
DATE: Thursday, July 28, 2022

The Legislature passed a budget on June 13, 2022, and while this budget allowed the Legislature to meet its constitutional deadline to adopt a budget by June 15, it was opposed by the Governor and did not represent a negotiated compromise between the Assembly, Senate, and Administration. Consequently, the Governor did not sign the budget bill.

Given the start of the state's budget year on July 1, the Governor and Legislative Leadership continued to negotiate behind the scenes. Just before the Legislature was scheduled to adjourn for summer recess on July 1, 2022, the Governor and Legislative Leaders reached agreement on a $300 billion budget. The centerpiece for this budget agreement is a $9.5 billion "inflation relief package." Under the agreement, 95% of California taxpayers will be eligible for stimulus payments ranging from $200 up to $1,050 for some families. The budget proposal will also suspend the state's diesel tax.

In addition to the budget, the Legislature had until July 1, 2022 to pass all bills out of policy committees. When the Legislature returns from Summer Recess, they will have until August 12, 2022 to pass all bills out of the Appropriations Committees and until the end of the month to pass all of their legislation to Governor Newsom for his consideration. The Governor will then have until September 30 to act on the legislation sent to him.

The following will provide you with updates of interest to the District:

BUDGET

As previously mentioned, on June 13, 2022, the Legislature approved SB 154 (Skinner), a $300 billion state budget bill, however, legislative leaders had to continue to negotiate with Governor Newsom over numerous items including a proposed multibillion-dollar rebate to taxpayers. The Legislature adopted the record spending plan to meet a constitutional requirement that the Legislature pass a balanced budget by June 15 or forgo their pay.

On June 27, 2022, Legislative Leaders and Governor Newsom announced they reached an agreement on the 2022-23 budget, which includes total spending of $308 billion, of which

$234.4 billion is from the General Fund. The budget includes total reserves of $37.1 billion, including $3.4 billion in the regular operating reserve.

The following will provide you with the highlights of the newly agreed upon budget:

Middle-Class Tax Refund:
Part of the newly agreed upon budget is the Middle-Class Tax Refund**,** totaling $9.5 billion, which provides direct tax refunds for 23 million Californians based on 3 tiers:

- First Tier: 14.2 million tax filers with incomes up to $75,000/$150,000 (Single Filers / Joint Filers):
    - $350 per tax filer, plus an additional $350 if tax filer has at least one dependent.

- Second Tier: 2.1 million tax filers with incomes above First Tier, but below $125,000/$250,000 (Single Filers / Joint Filers):
    - $250 per tax filer, plus an additional $250 if tax filer has at least one dependent.

- Third Tier: 1.1 million tax filers with incomes above Second Tier, but below $250,000/$500,000 (Single Filers / Joint Filers):
    - $200 per tax filer, plus an additional $200 if tax filer has at least one dependent.

$439 Million to Pause the State Sales Tax on Diesel for 12 Months:
The suspension of the State's Diesel tax is an effort to bring relief to the commercial sector and drivers by pausing the General Fund (3.9375 percent rate) portion of the sales tax rate on diesel fuel that will provide an estimated $439 million in relief.

$53.9 Billion California Climate Commitment

- Drought and Water Resilience: The budget invests another $2.8 billion (on top of last year's $5.2 billion) to ensure water security for Californians and focuses on near- and long-term actions to build water resilience and promote conservation.
- Fighting Wildfires: $2.7 billion to reduce the risk of catastrophic wildfires and bolster forest health. These projects include forest thinning, prescribed burns, grazing, reforestation, and fuel breaks.
- Accelerating the Zero-Emission Vehicle (ZEV) Transition: $6.1 billion to expand ZEV access and affordability and support the build-out of infrastructure across the state.
- Bolstering our Energy System: $4.3 billion to support energy reliability, provide relief to ratepayers, create strategic energy reserves and accelerate clean energy projects. Additionally, the budget includes $3.8 billion for clean energy projects to boost affordability and reliability.
- Regional Transit, Rail and Ports: $14.8 billion for projects to support the continued development of clean transportation projects, including the high-speed rail system and bicycle and pedestrian projects.

Homelessness and Mental Health:
The budget includes $3.4 Billion over two years to build on last year's $12 billion multi-year investment by continuing progress on expanding behavioral health housing, encampment cleanup grants and support for local government efforts.

COVID-19:

The budget adds $1.8 billion to continue implementing the state's SMARTER plan, including more funding to support school testing, increase vaccination rates and more. The budget also invests $300 million General Fund for the California Dept. of Public Health and local health jurisdictions to permanently expand the state's capacity to protect public health and promote health equity.

AB 178 (Ting) is the Budget Bill that amends the Legislature's original budget contained in SB 154. AB 180 is the Budget Bill that amends the 2021-22 budget to make current year allocations. There is also a substantial trailer bill package to make statutory changes needed to implement the budget agreement. The budget and related budget trailer bills include:

- AB 178 by Assemblymember Philip Ting – Budget Act of 2022.
- AB 180 by Assemblymember Philip Ting – Budget Act of 2021.
- AB 181 by the Committee on Budget – Education finance: education omnibus budget trailer bill.
- AB 182 by the Committee on Budget – COVID-19 emergency response: Learning Recovery Emergency Fund.
- AB 183 by the Committee on Budget – Higher education trailer bill.
- AB 186 by the Committee on Budget – Public health.
- AB 192 by the Committee on Budget – Better for Families Tax Refund.
- AB 194 by the Committee on Budget – Taxation.
- AB 195 by the Committee on Budget – Cannabis.
- AB 199 by the Committee on Budget – Courts.
- AB 200 by the Committee on Budget – Public safety omnibus.
- AB 202 by the Committee on Budget – County jail financing.
- AB 203 by the Committee on Budget – Public resources.
- AB 205 by the Committee on Budget – Energy.
- AB 210 by the Committee on Budget – Early childhood: childcare and education.
- SB 125 by the Committee on Budget and Fiscal Review – Public resources: geothermal resources: lithium.
- SB 130 by the Committee on Budget and Fiscal Review – State employment: State Bargaining Units 5, 6, 7, and 8: agreements.
- SB 131 by the Committee on Budget and Fiscal Review – November 8, 2022, statewide general election: ballot measures.
- SB 132 by the Committee on Budget and Fiscal Review – State employment: State Bargaining Units 16 and 18: agreements.
- SB 184 by the Committee on Budget and Fiscal Review – Health.
- SB 187 by the Committee on Budget and Fiscal Review – Human services.
- SB 188 by the Committee on Budget and Fiscal Review – Developmental services omnibus.
- SB 189 by the Committee on Budget and Fiscal Review – State Government.
- SB 191 by the Committee on Budget and Fiscal Review – Employment.
- SB 193 by the Committee on Budget and Fiscal Review – Economic development: grant programs and other financial assistance.
- SB 196 by the Committee on Budget and Fiscal Review – State employment: State Bargaining Units: agreements.

- SB 197 by the Committee on Budget and Fiscal Review – Housing.
- SB 198 by the Committee on Budget and Fiscal Review – Transportation.
- SB 201 by the Committee on Budget and Fiscal Review – Taxation: Earned Income Tax Credit: Young Child Tax Credit: Foster Youth Tax Credit.

CAP-AND-TRADE

The May 2022 Cap-and-Trade auction results demonstrate strong demand for allowances as all of the 58,331,300 current vintage allowances offered for sale were purchased, resulting in the seventh consecutive sold out auction. The current auction settled at $30.85, $11.15 above the $19.70 floor price and $1.70 above the February settlement price of $29.15. This is the third consecutive record auction settlement price.

All of the 7,942,750 future vintage allowances offered for sale were purchased (these allowances can be used for compliance beginning in 2025). This is a rebound from last quarter's auction when allowances for future use fell just short of a sellout.

Future vintage allowances settled at $28.13, $8.43 above the $19.70 floor price. This is the second-highest settlement price of an advance auction after the November 2021 price of $34.01.

The May auction generated almost $1.1 billion for the California Climate Investments, which continue to drive resources toward some of the most overburdened communities in the state.

GOVERNOR'S NEW FINANCE DIRECTOR

On July 1, 2022, Governor Newsom announced the appointment of Joe Stephenshaw as Director of the California Department of Finance, filling the role held by Keely Martin Bosler since 2018.

Joe Stephenshaw has served as Senior Counselor on Infrastructure and Fiscal Affairs in the Office of the Governor since March 2022. Prior to that, he was Staff Director for the Senate Budget and Fiscal Review Committee from 2017 to 2022 and he held multiple positions in the California Legislature from 2008 to 2017, including serving as a Policy Consultant in the Office of the Senate President pro Tempore, a Special Advisor to the Speaker of the Assembly, and as a Budget Consultant for both the Assembly Budget Committee and the Senate Budget and Fiscal Review Committee. Additionally, Joe Stephenshaw was a Budget Analyst for the California Department of Finance from 2005 to 2008.

CARB'S CORE PROJECT

On July 18, 2022, the California Air Resources Board (CARB) announced their second round of the Clean Off-Road Equipment Voucher Incentive Project (CORE). The CORE project, administered by CALSTART, will provide $125M in point-of-sale discounts on off-road zero-emission equipment. Originally, the CORE program was only for freight, but in 2022, CORE is expanding to include funding for the commercial harbor craft and agriculture and construction sectors.

Participation in the project has been streamlined for ease of use. Qualified participants will receive vouchers for point-of-sale discounts on off-road zero-emission equipment, up to a maximum of $500,000 per voucher. There is no requirement to scrap, sell, or retire existing

equipment and additional funding may be available for charging/refueling infrastructure, equipment operated in disadvantaged communities, and small businesses.

The CORE project supports nine equipment categories:

1. On- and off-road terminal tractors
2. Truck- and trailer-mounted transport refrigeration units (TRUs)
3. Large forklifts and cargo-handling equipment
4. Airport ground-support equipment
5. Railcar movers and switcher locomotives
6. Mobile power units (MPUs) and mobile shore-power cable management systems
7. Construction equipment
8. Agricultural equipment
9. Commercial harbor craft

The first round of CORE provided over $62 million in funds and over 460 vouchers for vehicles and electric vehicle supply equipment, with terminal tractors being the most requested equipment type.

The CORE project is part of the California Climate Investments, a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing GHG emissions, strengthening the economy, improving public health and the environment, and providing meaningful benefits to the most disadvantaged communities, low-income communities, and low-income households.

GOVERNOR'S PUSH TO MEET CLIMATE GOALS

On July 22, 2022, Governor Newsom pushed California to move faster to reach its climate goals, setting ambitious new targets for renewable energy, clean buildings, carbon removal, and clean fuels in the transportation sector.

In a letter to the Chair of CARB, Governor Newsom called for the state to ensure that the 2022 Climate Change Scoping Plan provides a path to achieve both the 2030 climate goal and state carbon neutrality no later than 2045, requesting that the final plan incorporate new efforts to advance offshore wind, clean fuels, climate-friendly homes, and carbon removal and address methane leaks.

The Governor also announced that he will work with the Legislature to enshrine carbon neutrality into state law, increase the state's ambition towards our 2030 climate goals and accelerate our clean energy targets, while supporting carbon sequestration from our natural and working lands and advancing safe and equitable engineered carbon removal. He will also work to finalize the state's historic investments under the $53.9 billion climate commitment, with a focus on equity and community resilience, while expanding opportunities for climate innovation and manufacturing here in California.

The Governor's letter requested actions on the 6 new targets outlined in the letter, which include:

1. Offshore Wind: Establishing a California Energy Commission planning goal of at least 20GW of offshore wind in 2045.

2. Clean and Healthy Buildings: Creating a goal of 3 million climate-ready and climate-friendly homes by 2030 and 7 million by 2035, supplemented by 6 million heat pumps by 2030, and directing 50% of investments to low-income and disadvantaged communities.
3. Moving Away from Fossil Fuels: Directing state agencies to plan for an energy transition to meet our long-term energy goals that avoids the need for new natural gas plants, while ensuring reliability. Establishing a 20% clean fuels target for the aviation sector. The Governor also requested that CARB evaluate a more stringent Low Carbon Fuel Standard and accelerate refinery transitions to clean fuels production.
4. Methane: Forming a Task Force to identify and address methane leaks from oil infrastructure near communities, recognizing the threats these leaks can pose to community health and safety.
5. Carbon Removal: Setting a 20 MMT carbon removal target for 2030 and 100 MMT carbon removal target for 2045, emphasizing the role of natural and working lands and the need for safe and equitable engineered carbon removal.
6. Increasing Climate Ambition: Partnering with the Legislature to make carbon neutrality state law and accelerate progress toward California's 2030 target; bring new ambition to the state's clean energy goals; develop policy to support sequestration from natural and working lands while incorporating industrial carbon capture in carbon neutrality efforts; and finalize investments under the state's $53.9 billion Climate Commitment.
7. CARB will meet in the fall to consider adopting a final draft of the 2022 Climate Change Scoping Plan.

Governor Newsom also announced the launch of a new climate dashboard highlighting state climate action and progress toward key targets. CalEPA will continue to expand the dashboard to help Californians understand the actions the state is taking to adapt to a changing climate, and track progress in areas such as zero-emission vehicle sales, clean energy job creation and consumer savings from energy efficiency standards. The climate dashboard can be found here: https://calepa.ca.gov/climate-dashboard/

2022 LEGISLATIVE DEADLINES

June 15:	Budget Bill must be passed by midnight
June 30:	Last day for a legislative measure to qualify for the Nov. 8, 2022 General Election ballot
July 1:	Last day for policy committees to meet and report bills
July 1- August 1:	Summer Recess
August 12:	Last day for fiscal committees to meet and report bills
August 15 – 31:	Floor session only. No committee may meet for any purpose except Rules Committee.

August 25:	Last day to amend bills on the floor
August 31:	Last day for each house to pass bills. Final Recess begins upon adjournment

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 24

REPORT: Mobile Source Committee

SYNOPSIS: The Mobile Source Committee held a remote meeting on Friday, August 19, 2022. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Gideon Kracov, Chair
Mobile Source Committee

SLR:ak

Committee Members

Present: Board Member Gideon Kracov/Chair
Mayor Larry McCallon
Council Member Nithya Raman

Absent: Supervisor Sheila Kuehl/Vice Chair
Supervisor V. Manuel Perez
Mayor Carlos Rodriguez

Call to Order

Chair Kracov called the meeting to order at 9:00 a.m.

For additional details of the Mobile Source Committee Meeting, please refer to the Webcast at: Webcast

INFORMATIONAL ITEM:

1. **Voluntary Reclassification of Coachella Valley for the 2008 8-hour Ozone Standard**
   Dr. Sang-Mi Lee, Planning and Rules Manager/Planning, Rule Development & Implementation, provided a summary on the Voluntary reclassification of Coachella Valley for the 2008 8-hour ozone standard.

Chair Kracov inquired if the control strategy regarding Coachella Valley's attainment of the 2008 ozone standard will be brought back to the committee and staff responded affirmatively. For additional details, please refer to the Webcast beginning at 19:33.

Council Member Raman asked clarifying questions regarding which agency will be developing this new plan and how existing and future transportation plans will be impacted. Staff responded that South Coast AQMD will develop the new plan and that existing projects will continue to move forward under existing Motor Vehicle Emissions Budgets (MVEB), but no new projects are allowed until new budgets are established under the reclassification. For additional details, please refer to the Webcast beginning at 20:24.

Mayor McCallon raised concerns on meeting the 70 ppb ozone standard in 2037. For additional details, please refer to the Webcast beginning at 22:40.

Public commenters included Rongsheng Luo, SCAG, who emphasized the importance of updating the MVEB, and Dan McGivney, SoCalGas, who requested clarification that the $26 billion worth of transportation projects applies to the whole SCAG region, not just Coachella Valley. For additional details, please refer to the Webcast beginning at 23:40.

2. **Update on Indirect Source Rules**

Ian MacMillan, Assistant Deputy Executive Officer/Planning/Rule Development & Implementation, provided a status update on Proposed Rules (PR) 2304 - Indirect Source Rule (ISR) for Commercial Marine Ports and 2306 - Indirect Source Rule for New Intermodal Facilities.

Council Member Raman requested clarifications on the divergence between the 2008 EPA locomotive fleet projections and the 2021 CARB locomotive fleet projections. She also questioned if similar discrepancies will impact projections for the PR 2306 rulemaking. Staff responded that the observed discrepancies between U.S. EPA and CARB projections are due to remanufacturing of existing locomotives instead of purchasing new cleaner locomotives due to the lower cost of remanufacturing. Executive Officer Wayne Nastri added the need for in-use authority to limit remanufacturing of locomotives. For additional details, please refer to the Webcast beginning at 52:19.

Mayor McCallon commented that some older locomotive chassis are not compatible with newer engines, and it is up to the rail operators to decide whether or not to invest on new locomotives. Mayor McCallon also highlighted Metrolink's decision to use renewable diesel with Tier 4 passenger locomotives, and the technology's capability to lower criteria pollutants. Staff highlighted that there are differences in

the composition of fleets between Metrolink and Class 1 railroads and that renewable diesel is part of Staff's technology assessments. For additional information, please refer to the Webcast beginning at 57:36.

Chair Kracov asked staff on the current schedule for the release of environmental documents for California High Speed Rail (HSR) for the Colton Intermodal Facility. Staff responded that based on a recent meeting with California HSR staff that the environmental documents will be delayed from the previous scheduled timeframe of late 2022. For additional details, please refer to the Webcast beginning at 1:02:30.

Fernando Gaytan (Earthjustice), Chris Chavez (Coalition for Clean Air), Yassi Kavezade (Sierra Club – My Generation Campaign) made the following comments:

- Expressed concerns about public health impacts and requested that a health expert be assigned to measure and track health outcomes during ISR development and implementation
- Need to maintain ISR rulemaking on parallel track with CARB rulemaking
- Expressed concern with piecemeal approach on port ISR and possibility of delaying rulemaking
- Support more frequent staff updates to Mobile Source Committee
- Prioritizing ZE technology for ISR rulemaking
- Concern for the delayed adoption of cleaner emission technologies for trucks and locomotives

For additional details, please refer to the Webcast beginning 1:04:30.

Todd Campbell, Clean Energy, expressed support for indirect source rules and commented on the importance of consideration for natural gas trucks as part of the emission reduction strategy. For additional details, please refer to the Webcast beginning 1:04:24.

Chair Kracov confirmed staff's ongoing discussions with U.S. EPA on federal sources such as ships and locomotives and encouraged industry partners to invest in cleaner technologies. For additional details, please refer to the Webcast beginning 1:16:05.

Chair Kracov requested feedback from stakeholders and Committee Members on revising frequency of ISR updates. Mr. Nastri recommended quarterly staff updates. Mayor McCallon expressed support for staff's recommendation. Council Member Raman expressed concerns for potential delays in rulemaking linked to staffing shortages and requested staff to keep a line of communication open to the committee members in case of further potential delays. The Committee expressed support for staff's recommendation to move to quarterly updates with for the condition that staff would come before the Committee prior to making any determination that the rules

need to be delayed or changed on the Board calendar. For additional details, please refer to the Webcast beginning 1:20:45.

WRITTEN REPORTS:

3. **Rule 2305 Implementation Status Report: Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program**
   This item was received and filed.

4. **Rule 2202 Activity Report: Rule 2202 Summary Status Report**
   This item was received and filed.

5. **Monthly Report on Environmental Justice Initiatives: CEQA Document Commenting Update**
   This item was received and filed.

OTHER MATTERS:

6. **Other Business**
   There was no other business to report.

7. **Public Comment Period**
   Yassi Kavezade and Angie Balderas (Sierra Club) encouraged the Committee members to participate in a community visit/tour of the Inland Empire. For additional information, please refer to the Webcast beginning at 1:28:20

8. **Next Meeting Date**
   The next regular Mobile Source Committee meeting is scheduled for Friday, September 16, 2022.

Adjournment

The meeting adjourned at 10:30 a.m.

Attachments

1. Attendance Record
2. Rule 2305 Implementation Status Report
3. Rule 2202 Activity Report – Written Report
4. Monthly Report on Environmental Justice Initiatives: CEQA Document Commenting Update – Written Report

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
MOBILE SOURCE COMMITTEE MEETING
Attendance – August 19, 2022

Board Member Gideon Kracov	South Coast AQMD Board Member
Mayor Larry McCallon	South Coast AQMD Board Member
Council Member Nithya Raman	South Coast AQMD Board Member
Jackson Guze	Board Consultant (Raman)
Matthew Holder	Board Consultant (Rodriguez)
Loraine Lundquist	Board Consultant (Kuehl)
Josh Nuni	Board Consultant (Raman)
Mark Taylor	Board Consultant (Rutherford)
Chris Wangsaporn	Board Consultant (Do)
Ross Zelen	Board Consultant (Kracov)
Mark Abramowitz	Community Environmental Services
Angie Balderas	Sierra Club
Todd Campbell	Clean Energy
Chris Chavez	Coalition for Clean Air
Curtis Coleman	Southern California Air Quality Alliance
Fernando Gaytan	Earthjustice
Dan McGivney	So Cal Gas
Yassi Kavezade	Sierra Club
Bill LaMarr	California Small Business Alliance
Rongsheng Luo	SCAG
Bill Quinn	CCEEB
David Rothbart	SCAP/LACSD
John Ungvarsky	U.S. EPA
Frank Wen	SCAG
Peter Whittingham	Whittingham Public Affairs Advisors
Mandeera Wijetunga	Public Member
Derrick Alatorre	South Coast AQMD Staff
Jason Aspell	South Coast AQMD Staff
Barbara Baird	South Coast AQMD Staff
Brian Choe	South Coast AQMD Staff
Ranil Dhammapala	South Coast AQMD Staff
Philip Crabbe III	South Coast AQMD Staff
Britney Gallivan	South Coast AQMD Staff
Bayron Gilchrist	South Coast AQMD Staff
Lane Garcia	South Coast AQMD Staff
Sheri Hanizavareh	South Coast AQMD Staff
Anissa Heard-Johnson	South Coast AQMD Staff
Mark Henninger	South Coast AQMD Staff
Kathryn Higgins	South Coast AQMD Staff

Kayla Jordan	South Coast AQMD Staff
Aaron Katzenstein	South Coast AQMD Staff
Angela Kim	South Coast AQMD Staff
Michael Krause	South Coast AQMD Staff
Jong Hoon Lee	South Coast AQMD Staff
Sang-Mi Lee	South Coast AQMD Staff
Jason Low	South Coast AQMD Staff
Susan Nakamura	South Coast AQMD Staff
Wayne Nastri	South Coast AQMD Staff
Ian MacMillan	South Coast AQMD Staff
Ron Moskowitz	South Coast AQMD Staff
Dylan Plautz	South Coast AQMD Staff
Sarah Rees	South Coast AQMD Staff
Zafiro Sanchez	South Coast AQMD Staff
William Senga	South Coast AQMD Staff
Elaine Shen	South Coast AQMD Staff
Mark Carreras Sospedra	South Coast AQMD Staff
Lisa Tanaka O'Malley	South Coast AQMD Staff
Anthony Tang	South Coast AQMD Staff
Sam Wang	South Coast AQMD Staff
Shawn Wang	South Coast AQMD Staff
Paul Wright	South Coast AQMD Staff
Priscilla Yuen	South Coast AQMD Staff

South Coast
Air Quality Management District
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Rule 2305 Implementation Status Report: Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program

June 1, 2022 to July 31, 2022

1. Implementation and Outreach Activities:

Activity	Past 2 Months	Since Rule Adoption
Calls and Emails to WAIRE Program Hotline (909 396-3140) and Helpdesk (waire-program@aqmd.gov)	466	1,585
Views of Compliance Training Videos (outside of webinars)	375	1,963
Emails Sent with Information About WAIRE Program Resources*	1,474	~21,000
Visits to www.aqmd.gov/waire	4,646	~19,000
Presentations to Stakeholders	32**	130

**Including responses to media inquiries.*
*** City of Murrieta, GXO Logistics, Inc., Riverside County Board of Supervisors, Corman Leigh Properties, Prologis, PLM Fleet, Pechanga Development Corporation, City of Rancho Cucamonga, City of San Jacinto, Sebastian Solutions, National Association for Industrial and Office Parks (NAIOP), City of Ontario, City of Beaumont, City of Moreno Valley.*

2. Highlights of Recent Implementation Activities

WAIRE Program staff conducted WAIRE Program Compliance Webinar #6 on June 10, 2022. Staff presented an overview of the Initial Site Information Report (ISIR) and provided information on the WAIRE Program Online Portal (WAIRE POP) ISIR web forms and functionality. Approximately 148 people participated in the virtual webinar meeting. Questions from attendees focused on counting truck trips and how to input site information and compliance actions and investments into WAIRE POP. Participants also inquired about applicability of warehouse operations and specific warehouse operations scenarios.

Warehouse operators operating in Phase 1 Warehouses (≥ 250,000 square feet) were required to submit an Initial Site Information Report (ISIR) by July 5, 2022, through the WAIRE POP. Report data included the actual truck trips in the previous 12-months, the number of truck trips anticipated for the current compliance period, potential onsite equipment, and anticipated actions to meet the WAIRE Points Compliance Obligation (WPCO). Staff is continuing to process, validate, and analyze submitted data, and is concurrently reaching out to warehouse operators for clarification and ensure that all reports are submitted.

The WAIRE Program Compliance Team continues their efforts in outreaching to warehouse operators and owners on the requirements of Rule 2305. The Legislative, Public Affairs & Media

Office and WAIRE Program Compliance Team continued to conduct informational presentations to various groups and individuals to broaden outreach efforts and respond to WAIRE Program emails and hotline calls.

Anticipated Activity in August

- Continue to conduct outreach to Phase 1 warehouse operators to advise of Rule 2305 requirements, including tracking truck trips and earning WAIRE Points for the 2022 compliance period
- Continue to conduct outreach to warehouse owners to update their Warehouse Owner Notification (WON) submissions, as needed
- Continue to analyze data submitted in the WON and ISIR reports
- Begin development of first Annual Report on WAIRE Program Implementation, with anticipated presentation to Mobile Source Committee in October 2022
- Continue to develop an approach for making WAIRE Program data publicly accessible via the online F.I.N.D. database on the South Coast AQMD's website

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Rule 2202 Summary Status Report

Activity for January 1, 2022 – July 31, 2022

Employee Commute Reduction Program (ECRP)	
# of Submittals:	200

Emission Reduction Strategies (ERS)	
# of Submittals:	244

Air Quality Investment Program (AQIP) Exclusively		
County	**# of Facilities**	**$ Amount**
Los Angeles	36	$ 218,452
Orange	3	$ 11,309
Riverside	0	$ 0
San Bernardino	1	$ 10,234
TOTAL:	**40**	**$ 239,995**

ECRP w/AQIP Combination		
County	**# of Facilities**	**$ Amount**
Los Angeles	1	$ 24,213
Orange	0	$ 0
Riverside	1	$ 51
San Bernardino	0	$ 0
TOTAL:	**2**	**$ 24,264**

Total Active Sites as of July 31, 2022

ECRP (AVR Surveys)			TOTAL Submittals w/Surveys	AQIP	ERS	TOTAL
ECRP[1]	AQIP[2]	ERS[3]				
511	10	98	619	104	621	1,344
38.02%	0.74%	7.29%	46.06%	7.74%	46.21%	100%[4]

Total Peak Window Employees as of July 31, 2022

ECRP (AVR Surveys)			TOTAL Submittals w/Surveys	AQIP	ERS	TOTAL
ECRP[1]	AQIP[2]	ERS[3]				
360,735	3,487	20,753	384,975	14,469	256,048	655,492
55.03%	0.53%	3.17%	58.73%	2.21%	39.06%	100%[4]

Notes:
1. ECRP Compliance Option.
2. ECRP Offset (combines ECRP w/AQIP). AQIP funds are used to supplement the ECRP AVR survey shortfall.
3. ERS with Employee Survey to get Trip Reduction credits. Emission/Trip Reduction Strategies are used to supplement the ECRP AVR survey shortfall.
4. Totals may vary slightly due to rounding.

BOARD MEETING DATE: September 2, 2022 AGENDA NO.

REPORT: Lead Agency Projects and Environmental Documents Received

SYNOPSIS: This report provides a listing of CEQA documents received by South Coast AQMD between July 1, 2022 and July 31, 2022, and those projects for which South Coast AQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, August 19, 2022, Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

SR:MK:MM:SW:MC

CEQA Document Receipt and Review Logs (Attachments A and B) – Each month, South Coast AQMD receives numerous CEQA documents from other public agencies on projects that could adversely affect air quality. A listing of all documents received during the reporting period July 1, 2022 to July 31, 2022 is included in Attachment A. A list of active projects for which South Coast AQMD staff is continuing to evaluate or prepare comments for the June reporting period is included as Attachment B. A total of 46 CEQA documents were received during this reporting period and 13 comment letters were sent.

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

with potential air quality-related environmental justice concerns. The public may contact South Coast AQMD about projects of concern by the following means: in writing via fax, email, or standard letters; through telephone communication; and as part of oral comments at South Coast AQMD meetings or other meetings where South Coast AQMD staff is present. The attachments also identify, for each project, the dates of the public comment period and the public hearing date, if applicable. Interested parties should rely on the lead agencies themselves for definitive information regarding public comment periods and hearings as these dates are occasionally modified by the lead agency.

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

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

During the period of July 1, 2022 to July 31, 2022, South Coast AQMD received 46 CEQA documents. Of the 53 documents listed in Attachments A and B:

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

(The above statistics are from July 1, 2022 to July 31, 2022 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 South Coast AQMD's CEQA webpage at the following internet address: http://www.aqmd.gov/home/regulations/ceqa/commenting-agency.

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

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

Attachments

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

DRAFT

ATTACHMENT A*
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Goods Movement **LAC220719-01** Berths 187-191 (VOPAK) Liquid Bulk Terminal Wharf Improvements and Cement Terminal Project	The project consists of seismic and structural improvements to an existing wharf, resuming storage activities, and an issuance of a 30 year lease on 40.9 acres. The project is located near the northwest corner of Canal Street and Yacht Street within the Port of Los Angeles in the designated AB 617 Wilmington, Carson, West Long Beach community. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/LAC220719-01.pdf Comment Period: 7/7/2022 - 8/22/2022 Public Hearing: 7/20/2022	Notice of Preparation	City of Los Angeles Harbor Department	South Coast AQMD staff commented on 7/26/2022
Warehouse & Distribution Centers **RVC220712-06** OLC3 Ramona Expressway and Perris Boulevard Commercial Warehouse	The project consists of construction of a 774,419 square foot warehouse and 65,000 square feet of retail and restaurant uses on 36.3 acres. The project is located near the northeast corner of Perris Boulevard and Ramona Expressway. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220712-06.pdf Comment Period: 7/8/2022 - 8/8/2022 Public Hearing: 7/20/2022	Notice of Preparation	City of Perris	South Coast AQMD staff commented on 7/26/2022
Warehouse & Distribution Centers **RVC220726-06** The Orchard Logistics Center Project	The project consists of construction of a 610,000 square foot warehouse on 30.91 acres. The project is located at 38021 State Route 60 on the southeast corner of State Route 60 and Western Knolls Avenue. Reference RVC220628-04 and RVC220316-01 Comment Period: 7/20/2022 - 8/18/2022 Public Hearing: 8/3/2022	Notice of Preparation	City of Beaumont	** Under review, may submit written comments
Warehouse & Distribution Centers **RVC220726-08** Northern Gateway Commerce Centers II#	The project consists of construction of a 1,316,741 square foot warehouse on 70.04 acres. The project is located near the southeast corner of Ethanac Road and Hulls Street. Reference RVC211201-01, RVC210819-18, and RVC210819-17 Comment Period: 7/22/2022 - 8/22/2022 Public Hearing: 8/11/2022	Amended Notice of Preparation	City of Menifee	** Under review, may submit written comments

**Sorted by Land Use Type (in order of land uses most commonly associated with air quality impacts), followed by County, then date received.*
- Project has potential environmental justice concerns due to the nature and/or location of the project.
** Disposition may change prior to Governing Board Meeting
Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **RVC220728-01** Ramona-Indian Warehouse Project	The project consists of construction of a 232,575 square foot warehouse and a hotel with 125 rooms on 15 acres. The project is located on the northeast corner of Ramona Expressway and Indian Avenue. Comment Period: 7/29/2022 - 8/29/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Perris	** Under review, may submit written comments
Warehouse & Distribution Centers **RVC220728-02** Beaumont Summit Station#	The project consists of construction of 2,557,465 square feet of warehouses, a 100,000 square foot hotel with 220 rooms, 50,000 square feet of commercial uses, 50,000 square feet of office uses, and 30.6 acres of open space on 188 acres. The project is located on the southeast corner of Interstate 10 and Cherry Valley Boulevard. Reference RVC220421-04, RVC211228-07, RVC210921-09, and RVC210825-01 Comment Period: N/A Public Hearing: N/A	Notice of Availability of a Final Environmental Impact Report	City of Beaumont	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **SBC220701-02** Slover and Alder Avenue Industrial Project	The project consists of construction of a 259,481 square foot warehouse on 13.23 acres. The project is located on the southeast corner of Slover Avenue and Alder Avenue in the community of Bloomington. Reference SBC211223-05 Comment Period: 6/30/2022 - 8/15/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	County of San Bernardino	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **SBC220715-03** AIREF Rialto Commerce Center	The project consists of construction of a 201,239 square foot warehouse on 9.4 acres. The project is located on the northeast corner of Cedar Avenue and Durst Drive. Comment Period: 7/13/2022 - 8/1/2022 Public Hearing: N/A	Mitigated Negative Declaration	City of Rialto	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **SBC220715-05** NWC of 3rd Street and Central Avenue Warehouse Project	The project consists of construction of a 54,330 square foot warehouse on 3.01 acres. The project is located on the northwest corner of Third Street and Central Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220715-05.pdf Comment Period: 7/13/2022 - 8/1/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Highland	South Coast AQMD staff commented on 7/29/2022
Industrial and Commercial **LAC220715-02** TVC 2050 Project	The project consists of demolition of 495,860 square feet of existing structures, and construction of 1,874,000 square feet of commercial uses and 20,000 square feet of retail uses on 25 acres. The project is located on the southeast corner of West Beverly Boulevard and North Fairfax Avenue in the community of Wilshire. Reference LAC210706-06 Comment Period: 7/14/2022 - 8/29/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Los Angeles	** Under review, may submit written comments
Industrial and Commercial **LAC220726-09** Crossings Campus (formerly Project Crossings)	The project consists of demolition of 105,047 square feet of existing buildings and construction of two office buildings totaling 536,000 square feet with subterranean parking on 4.46 acres. The project is located on the northeast corner of National Boulevard and Washington Boulevard. Reference LAC211104-01 Comment Period: 7/21/2022 - 9/6/2022 Public Hearing: 8/16/2022	Draft Environmental Impact Report	City of Culver City	** Under review, may submit written comments
Industrial and Commercial **RVC220705-03** Conditional Use Permit No. 190059	The project consists of construction of an 18,070 square foot industrial building for cannabis manufacturing and distribution on 5.03 acres. The project is located near the southeast corner of Willow Creek Road and Red Mountain Road in the community of Rancho California. Comment Period: 7/1/2022 - 8/2/2022 Public Hearing: 8/3/2022	Notice of Intent to Adopt a Mitigated Negative Declaration	County of Riverside	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Industrial and Commercial **RVC220705-07** Pre-Application Review No. 220030 (PAR220030)#	The project consists of construction of 11 industrial buildings totaling 16,582,535 square feet on 489.46 acres. The project is located on the northeast corner of Interstate 15 and Temescal Canyon Road in the community of Temescal Canyon. Comment Period: 6/23/2022 - 6/30/2022 Public Hearing: 6/30/2022	Notice of Availability of a Draft Mitigated Negative Declaration	County of Riverside	Document reviewed - No comments sent for this document received
Industrial and Commercial **RVC220712-07** CUP 22-05189	The project consists of construction of an 18,347 square foot hydrogen station on 2.78 acres. The project is located near the northwest corner of Mapes Road and Goetz Road. Comment Period: 7/7/2022 - 7/28/2022 Public Hearing: N/A	Site Plan	City of Perris	Document reviewed - No comments sent for this document received
Waste and Water-related **LAC220726-01** OU2 Groundwater Containment Facility	The project consists of construction of a 48,515 square foot groundwater treatment facility and seven groundwater wells with a combined daily consumption of 14,595 gallons a day on 3.23 acres. The project is located at 10051 Santa Fe Springs Road on the southwest corner of Santa Fe Springs Road and McCann Drive. Comment Period: 7/19/2022 - 8/17/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Santa Fe Springs	** Under review, may submit written comments
Waste and Water-related **ORC20719-05** Anita Street Wet Well and Coastal Accessway Improvement Project	The project consists of construction of a groundwater well 25 feet in depth on 0.2 acres. The project is located near the southwest corner of Anita Street and Gaviota Drive. Comment Period: 7/18/2022 - 8/17/2022 Public Hearing: 9/21/2022	Mitigated Negative Declaration	City of Laguna Beach	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **RVC220726-11** EM-11 Transmission Pipeline and Pump Station Project	The project consists of construction of a turnout treatment facility, a water pump station with a capacity of 140 cubic feet per second, and 9.9 miles of water pipelines ranging from 54 inches to 72 inches in diameter. The project is located near the northwest corner of Auld Road and Washington Street in unincorporated areas of Riverside County between the cities of Murrieta and Hemet. Comment Period: 7/25/2022 - 8/23/2022 Public Hearing: N/A	Notice of Preparation	Eastern Municipal Water District	Document reviewed - No comments sent for this document received
Waste and Water-related **SBC220719-06** PK 1 Chino Town Square (Former Dryclean USA)	The project consists of installation of soil vapor extraction system to clean up soil contaminated with volatile organic compounds and a land use covenant to restrict future land uses to commercial uses on 7.41 acres. The project is located at 5483-B Philadelphia Street on the southeast corner of Philadelphia Street and Central Avenue in the City of Chino. Comment Period: 7/18/2022 - 8/17/2022 Public Hearing: N/A	Draft Removal Action Workplan	Department of Toxic Substances Control	** Under review, may submit written comments
Waste and Water-related **SBC220726-05** City of Chino State Street Water Treatment Project	The project consists of construction of a groundwater treatment facility with the capacity of 4,000 gallons per minute, water pipelines, and improvements on 4.51 acres. The project is located at 10762 South Benson Avenue on the southwest corner of South Benson Avenue and West State Street. Comment Period: 7/15/2022 - 8/13/2022 Public Hearing: 9/6/2022	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Chino	** Under review, may submit written comments
Transportation **LAC220705-04** Valley Boulevard and Del Mar Avenue Intersection Improvements	The project consists of construction of multiple roadway improvements to the Valley Boulevard and Del Mar Avenue intersection. Comment Period: 6/27/2022 - 7/29/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of San Gabriel	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Transportation **ORC220705-05** I-5 Improvement Project from San Diego County Line to Avenida Pico	The project consists of construction of high occupancy toll lanes on a 3.4 mile segment of Interstate 5 (I-5). The project is located between the Interstate 5 and Avenida Pico interchange [12-ORA-5, Post Mile (PM) 3.4] in Orange County and Orange and San Diego county line (11-SD-5, PM 71.0). http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/ORC220705-05.pdf Comment Period: 6/30/2022 - 8/15/2022 Public Hearing: 7/28/2022	Notice of Preparation	California Department of Transportation	South Coast AQMD staff commented on 7/12/2022
Transportation **ORC220726-13** I-5 Managed Lanes Project (SR-55 to Orange County/Los Angeles County Line)	The project consists of improvements of existing high occupancy vehicle lanes. The project is located on Interstate 5 from Red Hill avenue (Post Mile [PM] 29.1) to Orange County Line (PM 0.5) and Los Angeles County Line (PM 0.0) to the City of La Mirada (PM 44.4) and traverses through cities of Tustin, Santa Ana, Orange, Anaheim, Fullerton, Buena Park, and La Mirada. Comment Period: 5/9/2022 - 6/8/2022 Public Hearing: 5/24/2022	Notice of Preparation (Received after close of comment period)	California Department of Transportation	Document reviewed - No comments sent for this document received
Institutional (schools, government, etc.) **LAC220715-01** Fire Station No. 9 Project at 4101 Long Beach Boulevard	The project consists of construction of a 12,780 square foot fire station on 0.4 acres. The project is located on the southwest corner of Long Beach Boulevard and East Randolph Place in the designated AB 617 Wilmington, Carson, West Long Beach community. Reference LAC220222-01 Comment Period: 7/15/2022 - 8/29/2022 Public Hearing: N/A	Notice of Preparation	City of Long Beach	Document reviewed - No comments sent for this document received
Retail **LAC220714-01** ENV-2021-9001: Sylmar Self Storage Building	The project consists of construction of a 130,094 square foot self storage facility on 87,337 square feet. The project is located at 12121 West Foothill Boulevard on the southeast corner of Foothill Boulevard and Carl Street in the community of Sunland-Tujunga- Lakeview Terrace-Shadow Hills–East La Tuna Canyon. Comment Period: 7/14/2022 - 8/15/2022 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Retail **RVC220712-05** PAR No. 220039	The project consists of construction of a 21,700 square foot storage facility on 8.17 acres. The project is located on the northeast corner of El Sobrante Road and La Sierra Avenue in the community of Lake Matthews and Woodcrest. Comment Period: 6/30/2022 - 7/7/2022 Public Hearing: 7/7/2022	Site Plan (Received after close of comment period)	County of Riverside	Document reviewed - No comments sent for this document received
Retail **RVC220715-04** Conditional Use Permit No. 220019	The project consists of construction of 2,800 square feet of restaurant uses, a hotel with 24 rooms on one acre. The project is located near the southwest corner of Grand Avenue and Blackwell Road in the community of Elsinore. Comment Period: 7/8/2022 - 7/21/2022 Public Hearing: 7/21/2022	Site Plan	County of Riverside	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220701-01** Norwalk Entertainment District-Civic Center Specific Plan	The project consists of construction of 350 residential units and 110,000 square feet of commercial uses on 13.2 acres. The project is located on the southeast corner of Imperial Highway and Norwalk Boulevard. Reference LAC220208-07 Comment Period: 7/1/2022 - 8/15/2022 Public Hearing: 8/3/2022	Notice of Availability of a Draft Environmental Impact Report	City of Norwalk	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220705-01** Ocean Avenue Project	The project consists of demolition of 44,450 square feet of existing structures, and construction of a 122,400 square foot building with 120 hotel rooms and 100 residential units, 36,110 square feet of commercial uses, and 35,500 square feet of public amenities on 1.2 acres. The project is located on the northeast corner of Ocean Avenue and Santa Monica Boulevard. Reference LAC200519-01 and LAC190102-06 Comment Period: N/A Public Hearing: 7/14/2022	Notice of Availability of a Final Environmental Impact Report	City of Santa Monica	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **LAC220705-08** Grand Estates Project	The project consists of construction of 12 residential units and 16 acres of open space on 27 acres. The project is located near the northeast corner of West Palm Drive and Grand Avenue. Comment Period: 6/30/2022 - 7/29/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Glendora	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220712-03** Norwalk Transit Village	The project consists of construction of 770 residential units, 23,500 square feet of commercial and civic uses, a hotel with 150 rooms, and 4.3 acres of open space on 32.3 acres. The project is located at 13200 Bloomfield Avenue on the northeast corner of Bloomfield Avenue and Dare Street. Comment Period: 7/8/2022 - 8/8/2022 Public Hearing: 7/21/2022	Notice of Preparation	City of Norwalk	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220726-02** Tentative Tract Map No. 82772	The project consists of subdivision of 2.12 acres for future development of five residential units. The project is located at 20836 Marcon Drive near the southwest corner of Marcon Drive and Gartel Drive. Comment Period: 7/21/2022 - 8/22/2022 Public Hearing: N/A	Site Plan	City of Walnut	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC220726-07** 5420 Sunset	The project consists of demolition of 100,796 square feet of existing commercial uses, and construction of an 845,868 square foot building with 735 residential units and subterranean parking on 6.75 acres. The project is located on the southeast corner of Sunset Boulevard and Western Avenue in the community of Hollywood. Reference LAC210819-10 and LAC170628-02 Comment Period: N/A Public Hearing: 8/17/2022	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **RVC220706-01** Xenia Apartments	The project consists of construction of 192 residential units totaling 476,164 square feet on 10.93 acres. The project is located on the southeast corner of Xenia Avenue and East Eighth Street. Reference RVC220301-08 Comment Period: 7/6/2022 - 7/14/2022 Public Hearing: 7/14/2022	Site Plan	City of Beaumont	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **RVC220719-03** Conditional Use Permit No. 03772R1	The project consists of construction of 1,440 square feet to be added to an existing 4,009 square foot senior living facility with 30 rooms on 0.39 acres. The project is located near the northwest corner of Rudell Road and East Ontario Avenue in the community of Temescal Canyon. Comment Period: 7/13/2022 - 7/21/2022 Public Hearing: 7/21/2022	Site Plan	County of Riverside	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **RVC220726-03** Wood and Lurin Planned Residential Development Project	The project consists of construction of 96 residential units and 61,909 square feet of recreational uses on 18.92 acres. The project is located on the southeast corner of Krameria Avenue and Wood Road. Comment Period: 7/19/2022 - 8/18/2022 Public Hearing: 8/3/2022	Notice of Preparation	City of Riverside	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **RVC220726-10** PAR220032	The project consists of subdivision of five acres into four parcels for future development of residential uses. The project is located on the southwest corner of Avenue D and Birch Street in the community of Lake Mathews and Woodcrest. Comment Period: 7/20/2022 - 7/28/2022 Public Hearing: 7/28/2022	Site Plan	County of Riverside	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **SBC220705-06** Rose Glen Specific Plan Residential Project	The project consists of construction of 64 residential units and 8,904 square feet of open space on 4.84 acres. The project is located at 1400 East Arrow Highway near the southwest corner of East Arrow Highway and Grove Avenue. Comment Period: 7/5/2022 - 8/4/2022 Public Hearing: 8/24/2022	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Upland	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **SBC220712-04** Downtown San Bernardino Specific Plan	The project consists of construction of 14,194 residential units and 11,780,515 square feet of commercial and retail uses on 621 acres. The project is located on the southeast corner of Interstate 215 and Eight Street in the designated AB 617 San Bernardino, Muscoy community. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220712-04.pdf Comment Period: 7/13/2022 - 8/11/2022 Public Hearing: 7/25/2022	Notice of Preparation	City of San Bernardino	South Coast AQMD staff commented on 7/26/2022
General Land Use (residential, etc.) **SBC220715-06** City Center Project	The project consists of construction of 131 residential units and 10,550 square feet of restaurant uses on 3.03 acres. The project is located on the northwest corner of Eureka Street and Brookside Avenue. Comment Period: 7/13/2022 - 8/12/2022 Public Hearing: 8/23/2022	Notice of Availability of a Sustainable Communities Environment Assessment	City of Redlands	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **SBC220719-02** The Grand Project	The project consists of construction of 146 residential units, 22,948 square feet of recreational uses, and subterranean parking on 1.49 acres. The project is located on the northeast corner of Eureka Boulevard and Redlands Boulevard. Comment Period: 7/14/2022 - 8/12/2022 Public Hearing: 8/23/2022	Notice of Availability of a Sustainable Communities Environment Assessment	City of Redlands	Document reviewed - No comments sent for this document received

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **SBC220719-04** Yucaipa Valley Wine Country Specific Plan	The project consists of construction of 1,091 residential units, agriculture uses and restore riparian habitat on 1,093.6 acres. The project is located on the northeast corner of Oak Glen Road and Cherry Croft Drive. Comment Period: 7/14/2022 - 8/15/2022 Public Hearing: 7/27/2022	Notice of Preparation	City of Yucaipa	Document reviewed - No comments sent for this document received
Plans and Regulations **LAC220726-12** Burbank Housing Element and Safety Element Update	The project consists of updates to the City's General Plan Housing Element to assess housing needs, densities, and development standards with a planning horizon of 2029. The project encompasses 17.1 square miles and is bounded by City of Los Angeles to the north, east, and west and State Route 134 to the south. Reference LAC220201-06 and LAC210325-01 Comment Period: 7/22/2022 - 9/6/2022 Public Hearing: 8/22/2022	Notice of Availability of a Recirculated Draft Environmental Impact Report	City of Burbank	Document reviewed - No comments sent for this document received
Plans and Regulations **ORC220705-02** City of Huntington Beach 2021-2029 Housing Element Updated Implementation Program	The project consists of updates to the City's General Plan Housing Element to assess housing needs, densities, and development standards with a planning horizon of 2029. The project encompasses 28 square miles and is bounded by unincorporated areas of Orange County to the north, cities of Westminster, Fountain Valley, and Costa Mesa to the east, City of Newport Beach to the south, and the Pacific Ocean to the west. Reference ORC210805-06 Comment Period: 6/29/2022 - 8/15/2022 Public Hearing: N/A	Notice of Availability of a Draft Subsequent Environmental Impact Report	City of Huntington Beach	Document reviewed - No comments sent for this document received
Plans and Regulations **RVC220712-01** Winchester Community Plan (GPA No. 1207)	The project consists of development of land use designations, community design guidelines, and zoning consistency program to identify and guide future land use growth opportunities in residential, commercial, mixed use, industrial, agricultural, and open space uses on 23,153 acres. The project is bounded by Stetson Road and Double Butt to the north, Diamond Valley Lake and City of Hemet to the east, Scott Road to the south, and Briggs Road to the west in the unincorporated areas of Riverside County between the cities of Menifee and Hemet. Reference RVC190418-05 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220712-01.pdf Comment Period: 7/5/2022 - 8/19/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	County of Riverside	South Coast AQMD staff commented on 7/26/2022

- 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
July 1, 2022 to July 31, 2022

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Plans and Regulations **RVC220712-02** City of Corona General Plan Housing Element Rezoning Program Update	The project consists of updates to the City's General Plan Housing Element to assess housing needs, densities, and development standards with a planning horizon of 2029. The project encompasses 39.55 square miles and is bounded by City of Norco to the north, community of El Cerrito to the east, community of Arcilla to the south, and City of Chino Hills to the west. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220712-02.pdf Comment Period: 7/1/2022 - 8/1/2022 Public Hearing: N/A	Notice of Preparation	City of Corona	South Coast AQMD staff commented on 7/26/2022
Plans and Regulations **SBC220726-04** Redlands General Plan Transit Villages District and Specific Plan	The project consists of development of design guidelines and standards to guide future transportation, conservation, and infrastructure development with a planning horizon of 2035. The project encompasses 1.48 square miles and is bounded by Sylvan Boulevard to the north, Olive Avenue to the east, Alabama Street to the south, and Colton Avenue to the west. Reference SBC210901-08 Comment Period: 7/21/2022 - 9/6/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Redlands	** 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 B*
ONGOING ACTIVE PROJECTS FOR WHICH SOUTH COAST AQMD HAS OR IS CONTINUING TO CONDUCT A CEQA REVIEW

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **SBC220628-01** Fontana Corporate Center	The project consists of construction of two warehouses totaling 355,370 square feet on 18.5 acres. The project is located at 13592 Slover Avenue near the northwest corner of Slover Avenue and Mulberry Avenue. Reference SBC210817-07 Comment Period: 6/27/2022 - 8/11/2022 Public Hearing: 7/19/2022	Notice of Availability of a Draft Environmental Impact Report	City of Fontana	**Under review, may submit written comments
Warehouse & Distribution Centers **RVC220621-08** Plot Plan PEN21-0079 (PEN20-0162, PEN20-0163)	The project consists of construction of a 164,187 square foot warehouse on 8.2 acres. The project is located on the northeast corner of Alessandro Boulevard and Day Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/RVC220621-08.pdf Comment Period: 6/16/2022 - 7/6/2022 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Moreno Valley	South Coast AQMD staff commented on 7/5/2022
Warehouse & Distribution Centers **SBC220602-01** Speedway Commerce Center II Specific Plan#	The project consists of construction of 6,600,000 square feet of warehouses, 261,360 square feet of commercial uses, 82.5 acres of parking uses, 33.7 acres of roadways and infrastructure, and 9.4 acres of open space on 433 acres. The project is located on the southwest corner of Whittram Avenue and Cherry Avenue in the City of Fontana. Reference SBC211221-02 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220602-01.pdf?sfvrsn= Comment Period: 6/1/2022 - 7/18/2022 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	County of San Bernardino	South Coast AQMD staff commented on 7/15/2022
Warehouse & Distribution Centers **SBC220621-09** Airport Gateway Specific Plan#	The project consists of construction of 10,597,178 square feet of business park uses, a 75,000 square foot hotel with 150 rooms, 7,802,541 square feet of warehouse uses, 142,792 square feet of commercial uses, and 209.65 acres of road improvements on 679 acres. The project is located on the northeast corner of Interstate 10 and Tippecanoe Avenue in the cities of San Bernardino and Highland. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220621-09.pdf Comment Period: 6/16/2022 - 7/18/2022 Public Hearing: 7/7/2022	Notice of Preparation	Inland Valley Development Agency	South Coast AQMD staff commented on 7/1/2022
Waste and Water-related **LAC220628-12** The Arroyo Site	The project consists of development of cleanup actions to excavate, dispose off site, and remediate soil contaminated with volatile organic compounds and installation of a soil vapor extraction system on three acres. The project is located on the southeast corner of South Magnolia Avenue and West Evergreen Avenue in the City of Monrovia. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/LAC220628-12.pdf Comment Period: 6/21/2022 - 7/22/2022 Public Hearing: N/A	Draft Removal Action Workplan	Department of Toxic Substances Control	South Coast AQMD staff commented on 7/12/2022

Sorted by Comment Status, followed by Land Use, then County, then date received.
- Project has potential environmental justice concerns due to the nature and/or location of the project.
** Disposition may change prior to Governing Board Meeting

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

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **ORC220628-13** Former Diesel Logistics	The project consists of installation of a vapor and dual phase extraction system to remediate soil vapor and groundwater contaminated with trichloroethylene and tetrachloroethylene on 1.24 acres. The project is located at 1331 East Warner Avenue on the northeast corner of East Warner Avenue and South Hathaway Street in the City of Santa Ana. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/ORC220628-13.pdf Comment Period: 7/7/2022 - 8/8/2022 Public Hearing: N/A	Draft Interim Removal Action Workplan	Department of Toxic Substances Control	South Coast AQMD staff commented on 7/12/2022
General Land Use (residential, etc.) **SBC220601-02** Shady View Residential Project	The project consists of removal of three existing aboveground oil storage tanks, and construction of 159 residential units, one aboveground 250 oil barrel capacity storage tank, two 500 oil barrel capacity storage tanks, and 80.8 acres of open space on 130 acres. The project is located near the southeast corner of Via La Cresta Road and Coyote Street. Reference SBC210701-03 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/july/SBC220601-02.pdf Comment Period: 5/27/2022 - 7/11/2022 Public Hearing: 6/21/2022	Notice of Availability of a Draft Environmental Impact Report	City of Chino Hills	South Coast AQMD staff commented on 7/7/2022

- Project has potential environmental justice concerns due to the nature and/or location of the project.
** Disposition may change prior to Governing Board Meeting

ATTACHMENT C
ACTIVE SOUTH COAST AQMD LEAD AGENCY
PROJECTS THROUGH JULY 31, 2022

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
Quemetco is proposing to modify existing South Coast AQMD permits to allow the facility to recycle more batteries and to eliminate the existing daily idle time of the furnaces. The proposed project will increase the rotary feed drying furnace feed rate limit from 600 to 750 tons per day and increase the amount of total coke material allowed to be processed. In addition, the project will allow the use of petroleum coke in lieu of or in addition to calcined coke, and remove one existing emergency diesel-fueled internal combustion engine (ICE) and install two new emergency natural gas-fueled ICEs.	Quemetco	Environmental Impact Report (EIR)	The Draft EIR was released for a 124-day public review and comment period from October 14, 2021 to February 15, 2022 and approximately 200 comment letters were received. Staff held two community meetings, on November 10, 2021 and February 9, 2022, which presented an overview of the proposed project, the CEQA process, detailed analysis of the potentially significant environmental topic areas, and the existing regulatory safeguards. Written comments submitted relative to the Draft EIR and oral comments made at the community meetings, along with responses will be included in the Final EIR which is currently being prepared by the consultant.	Trinity Consultants
Sunshine Canyon Landfill is proposing to modify its South Coast AQMD permits for its active landfill gas collection and control system to accommodate the increased collection of landfill gas. The proposed project will: 1) install two new low emission flares with two additional 300-horsepower electric blowers; and 2) increase the landfill gas flow limit of the existing flares.	Sunshine Canyon Landfill	Subsequent Environmental Impact Report (SEIR)	South Coast AQMD staff reviewed and provided comments on the preliminary air quality analysis, health risk assessment (HRA), and Preliminary Draft SEIR which are to be addressed by the consultant.	SCS Engineers

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 25

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee held a meeting remotely on Friday, August 19, 2022. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Ben J. Benoit, Chair
Stationary Source Committee

JA:cr

Committee Members

Present**:** Mayor Ben J. Benoit/Chair
Senator Vanessa Delgado (Ret.)
Board Member Veronica Padilla-Campos
Vice Mayor Rex Richardson

Absent: Supervisor Sheila Kuehl/Vice Chair
Supervisor Janice Rutherford

Call to Order

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

For additional information of the Stationary Source Committee Meeting, please refer to the Webcast at: Webcast

INFORMATIONAL ITEMS:

1. **Proposed Amended Rule 1135 – Emissions of Oxides of Nitrogen from Electricity Generating Facilities**
   Michael Morris, Planning and Rules Manager/Planning, Rule Development & Implementation, presented an update on and the BARCT assessment for the repower projects for Santa Catalina Island.

Mark Abramowitz, Community Environmental Services, expressed concern regarding the short-term replacement of diesel engines with other diesel engines and requested consideration to lower the emissions cap and to accelerate timelines for compliance.

Bethmarie Quiambao, Southern California Edison (SCE), commented that repower scenarios require power generation backup for Santa Catalina Island and SCE is currently conducting an analysis for grid stability, fire safety and fuel supply. She expressed that SCE remains committed to working with staff to evaluate the best technologies to maximize emissions reductions while ensuring grid reliability for residents and visitors.

Peter Whittingham, Public Affairs Advisor for Mainspring Energy, expressed appreciation for staff's consideration of linear generator technology as a potential solution.

There were no comments from Committee members. For additional details, please refer to the Webcast beginning at 5:02.

2. **Status Report on Regulation XIII – New Source Review**
   Jason Aspell, Deputy Executive Officer/Engineering and Permitting, provided a status report on Regulation XIII, New Source Review (NSR) Equivalency for Calendar Year (CY) 2020. The final determination for South Coast AQMD's NSR progress is equivalent to federal and state NSR requirements on an aggregate basis and is projected to maintain equivalency for CY 2021 and 2022. There were no Committee or public comments. For additional details, please refer to the Webcast beginning at 30:34.

WRITTEN REPORTS:

3. **Notice of Violation Penalty Summary**
   The report was acknowledged by the committee.

4. **Monthly Update of Staff's Work with U.S. EPA and CARB on New Source Review Issues for the Transition of RECLAIM Facilities to a Command-and-Control Regulatory Program**
   The report was acknowledged by the committee.

OTHER MATTERS:

5. **Other Business**
   There was no other business to report.
6. **Public Comment Period**
   There was no public comment to report

7. Next Meeting Date

The next Stationary Source Committee meeting is scheduled for Friday, September 16, 2022 at 10:30 a.m.

Adjournment

The meeting was adjourned at 11:09 a.m.

Attachments

1. Attendance Record
2. Notice of Violation Penalty Summary
3. Monthly Update of Staff's Work with U.S. EPA and CARB on New Source Review Issues for the Transition of RECLAIM Facilities to a Command-and-Control Regulatory Program

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
STATIONARY SOURCE COMMITTEE
Attendance –August 19, 2022

Mayor Ben J. Benoit	South Coast AQMD Governing Board
Board Member Padilla-Campos	South Coast AQMD Governing Board
Vice Mayor Richardson	South Coast AQMD Governing Board
Ruthanne Taylor Berger	Board Consultant (Benoit)
Tom Gross	Board Consultant (Benoit)
Mark Taylor	Board Consultant (Rutherford)
Amy Wong	Board Consultant (Padilla-Campos)
Mark Abramowitz	Community Environmental Services
Curtis Coleman	Southern California Air Quality Alliance
Chris Chavez	Coalition for Clean Air
Bill Lamarr	California Small Business Alliance
Dan McGivney	SoCalGas
Bethmarie Quiambao	SCE
Craig Sakamoto	PBF
Alison Torres	SCAP
Peter Whittingham	Whittingham Public Affairs Advisors
Derrick Alatorre	South Coast AQMD staff
Jason Aspell	South Coast AQMD staff
Barbara Baird	South Coast AQMD staff
Bayron Gilchrist	South Coast AQMD staff
Sheri Hanizavareh	South Coast AQMD staff
Mark Henninger	South Coast AQMD staff
Aaron Katzenstein	South Coast AQMD staff
Michael Krause	South Coast AQMD staff
Jason Low	South Coast AQMD staff
Michael Morris	South Coast AQMD staff
Ron Moskowitz	South Coast AQMD staff
Susan Nakamura	South Coast AQMD staff
Wayne Nastri	South Coast AQMD staff
Sarah Rees	South Coast AQMD staff
Jillian Wong	South Coast AQMD staff
Paul Wright	South Coast AQMD staff
Victor Yip	South Coast AQMD staff

SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX

JUNE 2022 PENALTY REPORT

REGULATION II - PERMITS

Rule 203	Permit to Operate
Rule 221	Plans
Rule 222	Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II

REGULATION IV - PROHIBITIONS

Rule 401	Visible Emissions
Rule 402	Nuisance
Rule 403	Fugitive Dust
Rule 461	Gasoline Transfer and Dispensing

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1146.2	Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers
Rule 1151	Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations
Rule 1166	Volatile Organic Compound Emissions from Decontamination of Soil
Rule 1171	Solvent Cleaning Operations

REGULATION XIV - TOXICS

Rule 1403	Asbestos Emissions from Demolition/Renovation Activities
Rule 1415	Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems
Rule 1421	Control of Perchloroethylene Emissions from Dry Cleaning Operations
Rule 1469	Hexavalent Chromium Emissions from Chrome Plating and Chromic Acid Anodizing Operations
Rule 1469.1.	Spraying Operations Using Coatings Containing Chromium

REGULATION XXX - TITLE V PERMITS

Rule 3002	Requirements
Rule 3004	Permit Types and Content

CODE OF FEDERAL REGULATIONS

40 CFR 61.145	Standard for Demolition and Renovation

CALIFORNIA HEALTH AND SAFETY CODE

41700	Prohibited Discharges
41960	Certification of Gasoline Vapor Recovery System

CALIFORNIA CODE OF REGULATIONS

13 CCR 2459	Portable Equipment Notification

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

Settlement Penalty Report (06/01/2022 - 06/30/2022)

Total Penalties

Civil Settlement:	$226,500.00
MSPAP Settlement:	$14,383.00
Total Cash Settlements:	$240,883.00
Fiscal Year through 06/30/2022 Cash Total:	$4,875,192.01

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
Civil						
155055	BALI CONSTRUCTION INC	1403, 40 CFR 61.145	06/15/2022	SH	P72911, P72912, P72913, P72914, P72917	$8,000.00
191590	CALTRANS DISTRICT 7	1403, 40 CFR 61.145	06/28/2022	SH	P72957	$5,000.00
172250	CORONA FUELING & ELECTRIC, INC	1166, 461	06/15/2022	KCM	P66370, P70065, P70159	$1,800.00
185115	GRIFFITH COMPANY	1166, 221	06/15/2022	DH	P67482, P67489, P67493	$6,400.00
191220	JIMS FALLBROOK MARKET	222, 401, 402, H&S 41700	06/17/2022	SP	P67719, P67729, P74341, P74347	$4,300.00
149450	LOS ANGELES WORLD AIRPORT	461	06/15/2022	EC	P67720	$1,300.00
53555	OR. CO., WATER DIST	461	06/15/2022	JL	P69772	$1,200.00
140552	PERFORMANCE COMPOSITES, INC	3002(c)(1), 3004	06/15/2022	KCM	P65869	$1,500.00
191589	SECURITY PAVING COMPANY, INC.	1403, 40 CFR 61.145	06/15/2022	SH	P72955	$5,000.00
9720	STILES ANIMAL REMOVAL INC	402, H&S 41700	06/15/2022	SP	P65390	$6,000.00
800267	TRIUMPH PROCESSING, INC.	1469, 1469.1, 3002	06/15/2022	NS/WW	P64523, P65408, P65409, P66274, P66293	$186,000.00
Total Civil Settlements : $226,500.00						
MSPAP						
126527	A & R AUTOMOTIVE BODY	1171(c)(1)	06/16/2022	GC	P69117	$1,600.00
153912	A M OIL	461, H&S 41960	06/16/2022	GC	P68445	$765.00
172613	ALL & ONE AUTO CENTER AND DISMANTLING	1151	06/22/2022	GC	P69378	$675.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
176259	AT&T CELL TOWER	203(b)	06/16/2022	GC	P69377	$800.00
163454	BIXBY KNOLLS CLEANERS, LINH CAO	1421	06/16/2022	GC	P69523	$300.00
163505	BROADWAY OIL 176 INC	203(b)	06/16/2022	GC	P67243	$440.00
67762	COLTON CITY	461	06/16/2022	GC	P68714	$638.00
178529	DESERT HOT SPRINGS OIL CORP BAHMAN NATAN	461	06/16/2022	GC	P70153	$800.00
162614	DHARAM V. BHATIA	461(c)(3)(Q)	06/21/2022	GC	P69612, P69617	$600.00
170704	ELMESIRY, INC SM OIL	203, 461	06/17/2022	GC	P68437	$595.00
176582	FEDEX PACKAGE HANDLING SYSTEMS	203(a)	06/21/2022	GC	P69376	$800.00
190421	FIRST RC CORP	403	06/21/2022	GC	P68269	$1,920.00
182344	FRONTIER CALIF, INC SANTA MONICA TOLL	1415	06/21/2022	GC	P65082	$1,000.00
77937	FULLERTON CITY HALL	1146.2	06/21/2022	GC	P69757	$1,600.00
190268	GENESIS AUTO	203(a), 1151(e)(1)	06/21/2022	GC	P68072	$1,600.00
171711	UPLAND ROCK, INC	13 CCR 2459	06/15/2022	TCF	P68375	$250.00

Total MSPAP Settlements : $14,383.00

SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX
FOR JULY 2022 PENALTY REPORT

REGULATION II - PERMITS

Rule 203	Permit to Operate
Rule 221	Plans

REGULATION IV - PROHIBITIONS

Rule 461	Gasoline Transfer and Dispensing
Rule 463	Storage of Organic Liquids

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1105.1	Reduction of PM and Ammonia Emissions from Fluid Catalytic Cracking Units
Rule 1114	Petroleum Refinery Coking Operations (MCS-01)
Rule 1118	Emissions from Refinery Flares
Rule 1143	Consumer Paint Thinners & Multi-Purpose Solvents
Rule 1166	Volatile Organic Compound Emissions from Decontamination of Soil
Rule 1173	Fugitive Emissions of Volatile Organic Compounds
Rule 1176	Sumps and Wastewater Separators

REGULATION XIV - TOXICS

Rule 1403	Asbestos Emissions from Demolition/Renovation Activities

REGULATION XX REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	Requirements
Rule 2012	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

REGULATION XXX - TITLE V PERMITS

Rule 3002	Requirements

CODE OF FEDERAL REGULATIONS

40 CFR 61.145	Standard for Demolition and Renovation

CALIFORNIA CODE OF REGULATIONS

13 CCR 2456	Portable Equipment Engine Requirements

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

Settlement Penalty Report (07/01/2022 - 07/31/2022)

Total Penalties

Civil Settlement: $1,594,990.00

Total Cash Settlements: $1,594,990.00

Fiscal Year through 07/31/2022 Cash Total: $1,594,990.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
Civil						
16353	BELLFLOWER HI SCH	1403, 40 CFR 61.145	07/07/2022	EC	P65048	$5,100.00
800189	DISNEYLAND RESORT	2004	07/28/2022	SH	P66922	$2,500.00
180908	ECO SERVICES OPERATIONS CORP.	2004	07/29/2022	SH	P69364	$2,750.00
185689	ECOLOGY RECYCLING SERVICES, LLC	461(c)(3)(Q)	07/19/2022	KCM	P65868	$1,090.00
189600	HERBARIUM	203, 13 CCR 2456	07/21/2022	JL	P62769	$5,000.00
191190	JAMES TRUE VALUE HARDWARE	1143	07/29/2022	ND	P69059	$4,000.00
181667	TORRANCE REFINING COMPANY LLC	3002(c)(1)	07/22/2022	DH	P65616	$250,000.00
181667	TORRANCE REFINING COMPANY LLC	203, 221, 463, 1105.1, 1114, 1118, 1173, 1176, 2004, 2012, 3002	07/22/2022	DH	P65637, P67964, P67965, P68205, P68206, P74057, P74058	$1,322,800.00
143046	WAYNE PERRY INC	221(b), 1166	07/07/2022	KCM	P67421	$1,750.00
Total Civil Settlements: $1,594,990.00						

August 2022 Update on Work with U.S. EPA and CARB on New Source Review Issues for the RECLAIM Transition

At the October 5, 2018 Board meeting, the Board directed staff to provide the Stationary Source Committee with a monthly update of staff's work with U.S. EPA regarding resolving NSR issues for the transition of facilities from RECLAIM to a command-and-control regulatory structure. The table below summarizes key activities with U.S. EPA and CARB since the last report.

Item	Discussion
Video Conference with U.S. EPA and CARB – June 24, 2022	• Reviewed presentations for the July RECLAIM and Regulation XIII working group meetings
RECLAIM and Regulation XIII Working Group Meetings – July 14, 2022	• Provided updates on rulemakings for the RECLAIM transition • Provided an update on Rule 2002 assessment • Presented proposed amendments to Regulation XX • Responded to Regulation XIII comment letter • Discussed changing surplus discounting method for Open Market emission reduction credits

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 26

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a meeting remotely on Friday, August 19, 2022. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Rex Richardson, Chair
Technology Committee

AK:psc

Committee Members

Present: Board Member Gideon Kracov
Mayor Larry McCallon
Board Member Veronica Padilla-Campos
Vice Mayor Rex Richardson, Chair

Absent: Supervisor Andrew Do
Mayor Carlos Rodriguez

Call to Order

Chair Richardson called the meeting to order at 12:00 p.m.

For additional details of the Technology Committee Meeting, please refer to the Webcast.

ACTION ITEMS:

1. **Recognize Revenue, Transfer Funds and Execute Contract with San Bernardino County, Acting on Behalf of Arrowhead Regional Medical Center for Deployment of Zero Emission Mobile Clinics**
   Arrowhead Regional Medical Center (ARMC) operates two mobile pediatric asthma clinics referred to as Breathmobiles. In June 2022, U.S. EPA awarded $500,000 to South Coast AQMD under the Clean Air Technology Initiative to help replace an existing older gasoline powered Breathmobile with a new zero emission platform.

San Bernardino County is supporting the development of a new third mobile clinic and has requested additional support in making this a zero emission clinical platform. These actions are to: 1) recognize revenue up to $500,000 from U.S. EPA into the Advanced Technology, Outreach and Education Fund (17); 2) transfer $500,000 from the Clean Fuels Program Fund (31) as cost-share into the Advanced Technology, Outreach, and Education Fund (17); and 3) execute a contract with San Bernardino County acting on behalf of ARMC for the purchase of two zero emission mobile clinics in an amount not to exceed $1,000,000 from the Advanced Technology, Outreach, and Education Fund (17).

Board Member Veronica Padilla-Campos inquired about whether there are other zero emission "Breathmobiles" in Los Angeles County. Staff responded that the University of Southern California, in conjunction with Los Angeles County, operates a "Breathmobile" but it is not zero emission. For additional details, please refer to the Webcast beginning at 07:15.

Moved by McCallon; seconded by Kracov; unanimously approved.

Ayes: Kracov, McCallon, Padilla-Campos, Richardson
Noes: None
Abstain: None
Absent: Do, Rodriguez

2. Amend Contract for Joint Electric Truck Scaling Initiative Pilot Project

In June 2021, the Board approved the execution of several contracts to CARB and CEC for the Joint Electric Truck Scaling Initiative (JETSI) Pilot Project, including a contract with Gladstein, Neandross and Associates to develop the ZEV workplan. The JETSI Pilot Project will deploy 100 Daimler and Volvo Class 8 battery electric trucks, charging infrastructure, and distributed energy resource technologies at two fleets in disadvantaged communities. Due to the large number of project partners and strict reporting requirements to submit quarterly progress reports within 10 days of the end of each quarter, CARB has approved the reallocation of $220,000 in South Coast AQMD administrative funds for project reporting. This action is to amend an existing contract with Gladstein, Neandross and Associates, adding $220,000 in CARB grant funds from the GHG Reduction Projects Special Revenue Fund (67) for project reporting.

Mayor McCallon commented that he does not have a financial interest but is required to identify for the record that he is the Chair of the Mobile Source Air Pollution Reduction Review Committee, which is involved in this item.

Board Member Kracov commented that he does not have a financial interest but is required to identify for the record that he is a Board Member of CARB, which is involved in this item.

Chair Richardson commented that he does not have a financial interest but is required to identify for the record that he is the Vice Mayor for the City of Long Beach, which is involved in this item.

Board Member Kracov stated that JETSI project partners have put in a great deal of work to make it successful and supports this action. For additional details, please refer to the Webcast beginning at 11:38.

Moved by McCallon; seconded by Kracov; unanimously approved.

Ayes: Kracov, McCallon, Padilla-Campos, Richardson
Noes: None
Abstain: None
Absent: Do, Rodriguez

3. **Adopt Resolution Recognizing Funds for FY 2021-22 Community Air Protection Incentives and Reimburse General Fund for Administrative Costs**
In June 2022, South Coast AQMD executed a grant agreement with CARB to receive FY 2021-22 Community Air Protection Program (CAPP) incentive funds in the amount of $98,799,787, of which 6.25 percent may be used to fund administrative costs. This action is to: 1) adopt a Resolution recognizing CAPP revenue up to $98,799,787 from CARB into the Community Air Protection AB 134 Fund (77). Eligible projects include those submitted under the Carl Moyer Program and Proposition 1B–Goods Movement Program, projects consistent with the Community Air Protection Incentives Guidelines, and other projects included in approved AB 617 community emissions reduction programs; and 2) reimburse the General Fund for administrative costs incurred in implementing the CAPP grant.

Board Member Kracov commented that he does not have a financial interest but is required to identify for the record that he is a Board Member of CARB, which is involved in this item.

Board Member Padilla-Campos inquired about a comment letter submitted by Earthjustice and other stakeholders and if this letter is considered community input for the use of CAPP incentives. Staff confirmed that the letter will be considered. For additional details, please refer to the Webcast beginning at 14:45.

Mayor McCallon inquired if CAPP incentives will be allocated by AB 617 communities. Staff explained that AB 617 communities will have input on how the funds are spent, excluding technology feasibility and other limitations. For additional details, please refer to the Webcast beginning at 16:29.

Fernando Gaytan, Earthjustice, provided public comment on the advantages of CAPP incentives, emphasized the adoption of zero emission mobile source technologies and requested a breakdown of AB 617 funding for zero emission projects. For additional details, please refer to the Webcast beginning at 17:25.

Moved by McCallon; seconded by Richardson; unanimously approved.

Ayes: Kracov, McCallon, Padilla-Campos, Richardson
Noes: None
Abstain: None
Absent: Do, Rodriguez

INFORMATIONAL ITEM:

4. **Measuring Emissions from Large Ocean-Going Vessels**

The 2016 AQMP identified the need to achieve significant NOx reductions to meet the federal 8-hour ozone standards. By 2023 ocean-going vessels (OGVs) are expected to be one of the largest sources of NOx emissions. The University of California Riverside/College of Engineering-Center for Environmental Research & Technology (UCR/CE-CERT) has extensive experience and has tested over 20 OGVs since 2005. Dr. Kent Johnson, Principal Investigator at the Emissions and Fuels Research Group at UCR/CE-CERT shared findings of emissions measurements from OGVs. Dr. Johnson also shared their future outlook on conducting OGV emissions research using new methods to improve emissions inventories from OGVs and the growing importance of off-cycle emissions from newer OGVs that meet the most stringent International Maritime Organization (IMO) Tier III emissions standards.

Board Member Kracov asked if other off-road engines would also have higher in-use emissions than the certification cycle. Dr. Johnson explained that the higher in-use emissions for marine engines are expected below 25 percent load which the certification cycle does not cover. Board Member Kracov asked which organization regulates and certifies the marine engines. Dr. Johnson responded that the OEM does self-certification, and the International Maritime Organization (IMO) regulates the marine engines. Board Member Kracov asked if the same issues occur with other off-road engines and also asked who regulates these engines. Dr. Johnson responded that off-road machines like backhoes, skid-loaders, scrappers, wheel-loaders have similar issues and are regulated by U.S. EPA and CARB. Board Member Kracov asked what IMO, U.S. EPA and CARB are doing to regulate these. Dr Johnson responded that there will be a new low-load cycle and lower emission standard coming from U.S. EPA and CARB as a result of studies done on on-road trucks with SCR over the years showing poor in-use NOx performance under low-load conditions in urban areas like Los Angeles. He also explained that South Coast AQMD funded many of these projects. Dr Johnson also suggested that IMO is a separate entity and discussions

are in progress. Dr. Johnson shared how drone measurements could streamline the process for taking measurements. For additional details, please refer to the Webcast beginning at 32:47.

Wayne Nastri commented that issues with scrubbers are more related to sulfur content in the fuel inside the emissions control area (ECA). For purposes of enforcement, U.S. EPA notifies the U.S. Coast Guard and the Coast Guard will board and take samples to determine if there is higher sulfur fuel (e.g. Bunker fuels) being used within the ECA. Dr. Johnson agreed. Wayne Nastri clarified that bunker fuel should not be used within the ECA. Dr. Johnson suggested the Coast Guard can use drones as screening/flagging tools to tell the Coast Guard which ships to board. For additional details, please refer to the Webcast beginning at 37:51.

Board Member Padilla-Campos asked if drones are commercially available. Dr. Johnson confirmed that the drone measurements are already widely in use in Europe. South Coast AQMD is already closely monitoring this work to determine if these results can be applied locally. Board Member Padilla-Campos asked if South Coast AQMD could help to streamline the process. Dr. Johnson responded that it will be helpful to relax drone restrictions locally. For additional details, please refer to the Webcast beginning at 40:22.

OTHER MATTERS:

5. **Other Business**
   Board Member Padilla-Campos requested status updates of incentive funds. Staff commented that South Coast AQMD submits a series of reports to the legislature which includes a breakdown of incentive fund spending. Staff will provide a status update on programs for which data is available at the October Technology Committee meeting. For additional details, please refer to the Webcast beginning at 44:56.

6. **Public Comment Period**
   There was no public comment to report.

7. **Next Meeting Date**
   The next regular Technology Committee meeting is scheduled for Friday, September 16, 2022, at noon.

Adjournment
The meeting adjourned at 12:50 p.m.

Attachment
Attendance Record

ATTACHMENT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
TECHNOLOGY COMMITTEE MEETING
Attendance Record – August 19, 2022

Board Member Gideon Kracov	South Coast AQMD Board Member
Mayor Larry McCallon	South Coast AQMD Board Member
Board Member Veronica Padilla-Campos	South Coast AQMD Board Member
Vice Mayor Rex Richardson	South Coast AQMD Board Member
Mark Taylor	Board Consultant (Rutherford)
Chris Wangsaporn	Board Consultant (Do)
Amy Wong	Board Consultant (Padilla-Campos)
Mark Abramowitz	Public Member
Nick Dwyer	Public Member
Scott Gallegos	Public Member
Fernando Gayton	EarthJustice
Kent Johnson	University of California, Riverside
Lizzy Melgoza	CARB
Fred Minassian	Public Member
Scott Skinner	Public Member
Nick Storelli	CARB
David Chen	South Coast AQMD Staff
Marjorie Eaton	South Coast AQMD Staff
Bayron Gilchrist	South Coast AQMD Staff
Darren Ha	South Coast AQMD Staff
Sheri Hanizavareh	South Coast AQMD Staff
Anissa Heard-Johnson	South Coast AQMD Staff
Mark Henninger	South Coast AQMD Staff
Kathryn Higgins	South Coast AQMD Staff
Justin Joe	South Coast AQMD Staff
Aaron Katzenstein	South Coast AQMD Staff
Christina Kusnandar	South Coast AQMD Staff
Patricia Kwon	South Coast AQMD Staff
Tom Lee	South Coast AQMD Staff
Wayne Nastri	South Coast AQMD Staff
Penny Shaw Cedillo	South Coast AQMD Staff
Walter Shen	South Coast AQMD Staff
Lisa Tanaka	South Coast AQMD Staff
Alejandra Vega	South Coast AQMD Staff
Mei Wang	South Coast AQMD Staff
Michelle White	South Coast AQMD Staff
Paul Wright	South Coast AQMD Staff
Alyssa Yan	South Coast AQMD Staff

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 27

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: The Mobile Source Air Pollution Reduction Review Committee held a hybrid meeting on Thursday, August 18, 2022. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Ben J. Benoit
South Coast AQMD Representative
to MSRC

AK:CR:av

Meeting Minutes Approved

The MSRC approved the minutes of the January 20, 2022 meeting. The approved minutes are attached *(Attachment 1)*.

FYs 2021-24 Work Program

FYs 2021-24 Major Event Center Transportation Program

As part of its FYs 2021-24 Work Program, the MSRC allocated $3,000,000 for event center transportation programs and released Program Announcement #PA2022-04. The Program Announcement solicits applications from qualifying major event centers and/or transportation providers to provide transportation service for venues not currently served by sufficient transportation service. Applicants are eligible to propose a maximum of two consecutive event seasons and are obligated to continue performing service for an additional two consecutive event seasons. The MSRC considered recommendations concerning an application submitted by Metro. Metro requested the MSRC to consider an award of $1,200,248 to provide express bus service to Dodger Stadium for the 2023 and 2024 baseball seasons. For the 2023 season, service would be provided for two preseason games, 82 regular season games, two special events and up to ten post-season games. The 2024 season would have approximately 82 regular season

games, two special events and up to ten post-season games. The express bus service would begin at least 90 minutes prior to game/event start time and would utilize "near-zero" CNG buses. Metro and the Los Angeles Dodgers are committed to provide at least $1,808,500 in co-funding contributions. The MSRC approved a contract award to Metro in an amount not to exceed $1,200,248 as part of the FYs 2021-24 Work Program for the Dodger Stadium Express bus service.

FYs 2021-24 Publicly Accessible Goods Movement Zero Emission Infrastructure

The MSRC also approved the release of Request for Information (RFI) #RFI2023-01 under the FYs 2021-24 Work Program. The RFI, with a targeted funding amount of up to $50,000,000, seeks the submittal of information packages which identify the respondent's potential role and available resources to partner with the MSRC to develop zero emission infrastructure. The RFI has a clear focus on goods movement, but it is also the MSRC's intention that the infrastructure would be accessible to all compatible zero emission vehicles and vehicle uses. Information packages may be submitted at any time from September 2 to November 30, 2022. Based on information submitted in response to the RFI, the MSRC may issue an RFP, or the MSRC may select one or more respondents and enter into discussions and/or negotiations and may make awards as a result of the RFI.

Update on Work Program Administration

At their June 2022 meeting, the MSRC asked about funding recipients' extension requests and asked for a report. The MSRC Contracts Administrator provided a status report on administrative ideas previously proposed to the MSRC, discussed reasons for extension requests, outlined additional administrative measures being implemented, and discussed likely impacts.

Contract Modification Requests

The MSRC considered three contract modification requests and took the following actions:

1. City of Santa Monica, Contract # ML18080 to install EV Charging Infrastructure, approval of a two-month term extension;
2. 4 Gen Logistics, Contract # MS21013 to revise project scope, approval to substitute 40 Volvo battery electric zero emission semi-tractors for 40 BYD zero emission electric semi-tractors; and
3. City of Glendora, Contract #ML18089 to purchase a medium-duty zero emission vehicle, approval of a 30-month term extension, with the contingencies that the City must provide documentation of the vehicle order and no additional extensions will be granted for this contract.

Contracts Administrator's Report

The MSRC AB 2766 Contracts Administrator's report provides a written status report on all open contracts from FY 2008-09 to the present. The Contracts Administrator's Report for May 26 through July 27, 2022 is attached *(Attachment 2)*.

Attachments

1. Approved January 20, 2022 MSRC Meeting Minutes
2. May 26 through July 27, 2022 Contracts Administrator's Report

MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE
THURSDAY, JANUARY 20, 2022 MEETING MINUTES
21865 Copley Drive, Diamond, Bar, CA 91765

All participants attended the meeting remotely pursuant to AB 361

MEMBERS PRESENT:

(Chair) Larry McCallon, representing San Bernardino County Transportation Authority (SBCTA)
(Vice-Chair) Brian Berkson, representing Riverside County Transportation Commission (RCTC)
Ben Benoit, representing South Coast AQMD
John Dutrey, representing Regional Rideshare Agency
Lisa Bartlett (Alt.), representing Orange County Transportation Authority (OCTA)*
Mark Henderson (Alt.), representing SCAG
Mark Yamarone (Alt.), representing Los Angeles County Metropolitan Transportation Authority (Metro)
Michelle Buffington (Alt.), representing California Air Resources Board (CARB)

*Attended the meeting at 2:10 p.m.

MEMBERS ABSENT:

Jed Leano, representing Southern California Association of Governments (SCAG)
Tim Shaw, representing Orange County Transportation Authority (OCTA)
Steve Veres, representing Metro
Sydney Vergis, representing California Air Resources Board (CARB)
John Valdivia (Alt.), representing SBCTA
Linda Krupa (Alt.), representing RCTC
Ray Marquez (Alt.), representing Regional Rideshare Agency

MSRC-TAC MEMBERS PRESENT:

Derek Winters, representing CARB
Nicole Soto, representing Regional Rideshare Agency
Rongsheng Luo, representing SCAG
Steven Lee, representing Metro
Vicki White, representing South Coast AQMD
Ash Nikravan (Alt.), representing South Coast AQMD

Scott Strelecki (Alt.), representing SCAG

OTHERS PRESENT:

Christian Hosler, Gladstein, Neandross & Assoc.
Claire Garcia, Lion Electric
Erlin Martinez, Long Beach Transit
Ish Lontok, City of Los Angeles
Ramine Cromartie
Ryan Laws, SCAG
Eduardo Rivera, SCAG

SOUTH COAST AQMD STAFF & CONTRACTORS PRESENT:

Aaron Katzenstein, Assistant Deputy Executive Officer
Alejandra Vega, MSRC Administrative Liaison
Anish Pathak, Financial Analyst
Anthony Tang, Information Technology Supervisor
Cynthia Ravenstein, MSRC Contracts Administrator
Daphne Hsu, Principal Deputy District Counsel
Lane Garcia, Program Supervisor
Leah Alfaro, MSRC Contracts Assistant
Maria Allen, Administrative Assistant
Matt MacKenzie, MSRC Contracts Assistant
Ray Gorski, MSRC MSRC Technical Advisor-Contractor
Ron Moskowitz, Chief Information Officer

CALL TO ORDER

- Chair McCallon called the meeting to order at 2:00 p.m.
- Roll call was taken at the start of the meeting.
- Chair McCallon asked for opening comments.

  There were no opening comments.

- Chair McCallon asked for disclosures.

  Items #2 and #6 – MSRC Member Alternate Mark Henderson commented he does not have a financial interest, but is required to identify for the record that he is a Regional Council Member of SCAG which is involved in these items.

  Items #2 and #6 – MSRC Member Ben Benoit commented he does not have a financial interest, but is required to identify for the record that he is a Regional Council Member of SCAG which is involved in these items.

  Items #2 and #6 – MSRC Member John Dutrey commented she does not have a financial interest, but is required to identify for the record that he is a Regional Council Member of SCAG which is involved in these items.

  Items #2 and #6 – MSRC Chair McCallon commented he does not have a financial interest, but is required to identify for the record that he is a Regional Council Member of SCAG which is involved in these items.

CONSENT ITEMS (Items 1 through 5):

Receive and Approve

1. **Comply with AB 361 Requirements to Allow MSRC to Continue to Meet Remotely**
   Moved by Berkson; seconded by McCallon; under approval of Consent Calendar Items #1 through #5, item unanimously approved.

   Ayes: Benoit, Berkson, Buffington, Dutrey, Henderson, McCallon, Yamarone
   Noes: None
   Action: No further action is required.

2. Summary of Final Report by MSRC Contractor
Moved by Berkson; seconded by McCallon; under approval of Consent Calendar Items #1 through #5, item unanimously approved.

Ayes: Benoit, Berkson, Buffington, Dutrey, Henderson, McCallon, Yamarone
Noes: None
Action: No further action is required.

Information Only – Receive and File

3. MSRC Contracts Administrator's Report
The MSRC AB 2766 Contracts Administrator's Report for December 2, 2021 through January 5, 2022 was included in the agenda package.

Moved by Berkson; seconded by McCallon; under approval of Consent Calendar Items #1 through #5, item unanimously approved.

Ayes: Benoit, Berkson, Buffington, Dutrey, Henderson, McCallon, Yamarone
Noes: None
Action: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the February 4, 2022 South Coast AQMD Board meeting.

4. Financial Report on AB 2766 Discretionary Fund
A financial report on the AB 2766 Discretionary Fund for December 2021 was included in the agenda package.

Moved by Berkson; seconded by McCallon; under approval of Consent Calendar Items #1 through #5, item unanimously approved.

Ayes: Benoit, Berkson, Buffington, Dutrey, Henderson, McCallon, Yamarone
Noes: None
Action: No further action is required.

For Approval – As Recommended

5. Consider a 24-Month Term Extension by Long Beach Transit, Contract #MS16121 ($600,000 - Repower 39 Buses and Purchase 1 New Bus with Near-Zero Engines)
Long Beach Transit indicated that the authorized vendor working on the repowers intermittently suspended its operations due to the COVID-19 pandemic, thus delaying anticipated work and delivery of vehicles. Long Beach Transit requested a 24-month term extension to allow them to complete the work. The MSRC-TAC

recommended approval contingent upon Long Beach Transit providing quarterly status reports.

Moved by Berkson; seconded by McCallon; under approval of Consent Calendar Items #1 through #5, item unanimously approved.

Ayes: Benoit, Berkson, Buffington, Dutrey, Henderson, McCallon, Yamarone
Noes: None
Action: MSRC Staff will amend the above contract accordingly.

ACTION ITEM (Item 6)

MSRC Member Alternate Lisa Bartlett joined the meeting.

FYs 2018-21 Work Program

6. Consider $6,751,000 Contingency List and 18-Month Term Extension by Southern California Association of Governments (SCAG), Contract #MS21005 ($10,000,000 – Implement Last Mile Goods Movement Program)

Scott Strelecki with SCAG presented on the Last Mile Freight Program (LMFP) and the selected contingency list projects. In August 2020, the MSRC approved a sole-source contract award to SCAG in an amount not to exceed $10,000,000 to implement LMFP on behalf of the MSRC. Contract #MS21005 was executed to effectuate the award, and in November 2021, the MSRC approved SCAG's proposed project list awarding the original $10,000,000 to 26 projects across the region. Fourteen (14) other projects were deemed meritorious by the LMFP Review Panel and were included on a contingency list of projects should more funding be made available. The MSRC had questions relative to the Contingency List, and directed that SCAG address these questions and return with the Contingency List at a future meeting. SCAG is requesting MSRC consideration of the updated $6,751,000 recommended Contingency List. Additionally, increasing challenges related to supply chain constraints have further impacted procurement delays for near-zero and zero emission vehicles and supporting infrastructure. As such, SCAG is requesting an 18-month term extension for all projects and for Contract #MS21005.

Chair McCallon commented that instead of rolling over the $6.7 million into the new Work Program, using that for these projects would be more beneficial.

MSRC Member Alternate Mark Henderson supported this recommendation and inquired what the 18-month time frame was based on. Mr. Strelecki stated the 18-month time frame was based on information and feedback received from specific companies, but it was based on a best case scenario and perhaps a 24-month time frame would be more conservative.

MSRC Member Brian Berkson recommended keeping the 18-month time frame.

Chair McCallon asked if there's a progress report required from the recipients. Mr. Strelecki confirmed that there are strict requirements and MOUs in place for each project so they will have to report all their progress on a quarterly basis. Chair McCallon asked if they could get a quarterly update. Mr. Strelecki said yes.

Moved by Benoit; seconded by Bartlett; item unanimously approved.

Ayes: Bartlett, Benoit, Berkson, Buffington, Dutrey, Henderson, McCallon, Yamarone
Noes: None
Action: MSRC Staff will amend the above contract accordingly.

INFORMATION ITEM (Item 7)

7. Update on the FYs 2021-24 Work Program Development Process
The first two Work Program Development Subcommittees, Goods Movement and Innovative Transportation, have been formed and are conducting their initial meetings. The TAC will hear any updates available from the Subcommittees and continue to discuss ideas related to potential project categories under the FYs 2021-24 Work Program.

OTHER BUSINESS

8. Other Business
There was no other business.

PUBLIC COMMENT PERIOD

No comments were made on non-agenda items.

ADJOURNMENT

The meeting adjourned at 2:30 p.m.

NEXT MEETING

Thursday, February 17, 2022 at 2:00 p.m.

[Prepared by Alejandra Vega]

Clean Transportation Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

MSRC Agenda Item No. 4

DATE: August 18, 2022

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 May 26 to July 27, 2022.

RECOMMENDATION: Receive and file report

WORK PROGRAM IMPACT: None

Contract Execution Status

2018-21 Work Program

On April 5, 2019, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This contract is executed.

On September 6, 2019, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This contract is executed.

On December 6, 2019, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This contract is executed.

On September 4, 2020, the SCAQMD Governing Board approved an award under the Last Mile component of the MSRC's Regional Goods Movement Program. This contract is executed.

On April 2, 2021, the SCAQMD Governing Board approved five awards under the Zero and Near-Zero Emission Cargo Handling Equipment at Warehouse, Distribution and Intermodal Facilities in Riverside and San Bernardino Counties Program and ten awards under the Zero and Near-Zero Emission Trucking to Warehouse, Distribution and Intermodal Facilities in Riverside and San Bernardino Counties Program. These contracts are under development, undergoing internal review, with the prospective contractor for signature, with the SCAQMD Board Chair for signature, or executed.

On June 4, 2021, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This award has been declined.

Work Program Status

Contract Status Reports for Work Program years with open and/or pending contracts are attached.

FY 2010-11 Work Program Contracts
One contract from this Work Program year is open. One contract closed during this period: County of Los Angeles, Department of Public Works, Contract #ML11024 – Purchase of Three Heavy-duty Natural Gas Vehicles.

FY 2010-11 Invoices Paid
No invoices were paid during this period.

FY 2011-12 Work Program Contracts
2 contracts from this Work Program year are open, and 3 are in "Open/Complete" status, having completed all obligations except operations. 3 contracts closed during this period: City of Santa Ana, Contract #ML12014 – Purchase of Nine Heavy-duty Natural Gas and LPG Trucks and Installation of EV Charging; City of Palm Springs, Contract #ML12090 – Installation of EV Charging; and Ware Disposal, Contract #MS12034 – Purchase Eight Medium-Heavy-duty Vehicles.

FY 2011-12 Invoices Paid
One invoice in the amount of $14,470.50 was paid during this period.

FYs 2012-14 Work Program Contracts
6 contracts from this Work Program year are open, and 13 are in "Open/Complete" status. One contract closed during this period: City of Cathedral City, Contract #ML14072 - Install Bicycle Racks & Implement Bicycle Education Program.

FYs 2012-14 Invoices Paid
No invoices were paid during this period.

FYs 2014-16 Work Program Contracts
19 contracts from this Work Program year are open, and 31 are in "Open/Complete" status. 3 contracts moved into "Open/Complete" status during this period: City of Hermosa Beach, Contract #ML16018 – Purchase 2 medium-duty natural gas vehicles & conduct bicycle outreach; City of Santa Monica, Contract #MS16115 – Repower 30 Transit Buses; and Los Angeles County Metropolitan Transportation Authority, Contract #MS16127 – Expansion of the Willowbrook/Rosa Parks Transit Station. 2 contracts closed during this period: City of Claremont, Contract #ML16011 – Purchase 3 Heavy-Duty Natural Gas Vehicles; and City of Westminster, Contract #ML16050 – Install EV Charging.

FYs 2014-16 Invoices Paid
2 invoices totaling $42,750.00 were paid during this period.

FYs 2016-18 Work Program Contracts
77 contracts from this Work Program year are open, and 55 are in "Open/Complete" status. 2 contracts closed during this period: City of Agoura Hills, Contract #ML18040 – Install EV Charging; and City of Lomita, Contract #ML18070 – Install Bicycle Racks and Lanes.

FYs 2016-18 Invoices Paid
4 invoices totaling $87,374.41 were paid during this period.

FYs 2018-21 Work Program Contracts
14 contracts from this Work Program year are open.

FYs 2018-21 Invoices Paid
6 invoices totaling $15,215.40 were paid during this period.

Administrative Scope Changes
4 administrative scope changes were initiated during the period from May 26 to July 27, 2022:

- City of Glendale, Contract #ML18059 (Install Electric Vehicle Charging Infrastructure) – Reduce dual-port Level II stations from 11 to 6, add 22 single-port Level II stations, and change station locations
- City of Eastvale, Contract #ML16040 (Install Electric Vehicle Charging Infrastructure) – Reduce value from $110,000 to $53,909 because costs associated with proprietary charging stations are not eligible for reimbursement
- City of Orange, Contract #ML18136 (Procure Four Light-Duty ZEVs and Install Electric Vehicle Charing Infrastructure) – Remove tasks associated with EV charging and reduce value from $42,500 to $40,000 because City says they do not have the capacity to install an additional charger at this time.
- City of Fullerton, Contract #ML16010 (Install Electric Vehicle Charging Infrastructure) – Reduce value from $78,222 to $27,897, and reduce from 14 stations to 10 ports

Attachments
- FY 2008-09 through FYs 2018-21 (except FY 2009-10) Contract Status Reports

Clean Transportation Funding Database

AB2766 Discretionary Fund Program Invoices

May 26 to July 27, 2022

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
2011-2012 Work Program							
7/19/2022	8/5/2022	8/11/2022		ML12091	City of Bellflower	002	$14,470.50
Total: $14,470.50							
2014-2016 Work Program							
7/5/2022	7/20/2022	7/22/2022		MS16121	Long Beach Transit	10	$28,500.00
5/26/2022	5/27/2022	5/31/2022	6/7/2022	MS16121	Long Beach Transit	9	$14,250.00
Total: $42,750.00							
2016-2018 Work Program							
7/14/2022	7/20/2022	7/22/2022	7/27/2022	ML18051	City of Rancho Cucamonga	AR131888	$22,500.00
6/16/2022	6/22/2022	6/23/2022		MS18024	Riverside County Transportation Commission	02808	$3,820.00
6/30/2022	7/20/2022	7/22/2022	7/27/2022	ML18020	City of Colton	2	$32,214.00
6/3/2022	6/22/2022	6/23/2022	6/24/2022	ML18055	City of Long Beach	22-010	$28,840.41
Total: $87,374.41							
2018-2021 Work Program							
7/21/2022	8/5/2022			MS21002	Better World Group Advisors	WG-MSRC2	$2,808.30
7/13/2022	7/20/2022	7/22/2022		MS21006	Geographics	22-22868	$373.00
6/21/2022	6/22/2022	6/23/2022		MS21002	Better World Group Advisors	WG-MSRC2	$2,081.20
6/16/2022	6/22/2022	6/23/2022		MS21006	Geographics	22-22839	$373.00
5/26/2022	5/27/2022	5/31/2022		MS21002	Better World Group Advisors	WG-MSRC2	$5,576.45
5/26/2022	5/27/2022	5/31/2022		MS21002	Better World Group Advisors	WG-MSRC2	$4,003.45
Total: $15,215.40							

Total This Period: $159,810.31

Clean Transportation Funding Database

FYs 2008-09 Through 2018-21 AB2766 Contract Status Report

8/11/2022

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2008-2009 Contracts									
Declined/Cancelled Contracts									
ML09017	County of San Bernardino Public Wo	1/28/2010	7/27/2016		$200,000.00	$0.00	8 Nat. Gas Heavy-Duty Vehicles	$200,000.00	No
ML09018	Los Angeles Department of Water an	7/16/2010	9/15/2012		$850,000.00	$0.00	Retrofit 85 Off-Road Vehicles w/DECS	$850,000.00	No
ML09019	City of San Juan Capistrano Public	12/4/2009	11/3/2010		$10,125.00	$0.00	Remote Vehicle Diagnostics/45 Vehicles	$10,125.00	No
ML09022	Los Angeles County Department of P				$8,250.00	$0.00	Remote Vehicle Diagnostics/15 Vehicles	$8,250.00	No
ML09025	Los Angeles County Department of P	10/15/2010	12/14/2012	6/14/2013	$50,000.00	$0.00	Remote Vehicle Diagnostics/85 Vehicles	$50,000.00	No
ML09028	Riverside County Waste Manageme				$140,000.00	$0.00	Retrofit 7 Off-Road Vehicles w/DECS	$140,000.00	No
ML09039	City of Inglewood				$310,000.00	$0.00	Purchase 12 H.D. CNG Vehicles and Remot	$310,000.00	No
ML09040	City of Cathedral City				$83,125.00	$0.00	Purchase 3 H.D. CNG Vehicles and Remote	$83,125.00	No
ML09044	City of San Dimas				$425,000.00	$0.00	Install CNG Station and Purchase 1 CNG S	$425,000.00	No
ML09045	City of Orange				$125,000.00	$0.00	Purchase 5 CNG Sweepers	$125,000.00	No
Total: 10									
Closed Contracts									
ML09007	City of Rancho Cucamonga	2/26/2010	4/25/2012		$117,500.00	$62,452.57	Maintenance Facility Modification	$55,047.43	Yes
ML09008	City of Culver City Transportation De	1/19/2010	7/18/2016	7/18/2017	$175,000.00	$175,000.00	8 Nat. Gas Heavy-Duty Vehicles	$0.00	Yes
ML09009	City of South Pasadena	11/5/2010	12/4/2016	3/4/2019	$125,930.00	$125,930.00	CNG Station Expansion	$0.00	Yes
ML09010	City of Palm Springs	1/8/2010	2/7/2016		$25,000.00	$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	$0.00	Yes
ML09011	City of San Bernardino	2/19/2010	5/18/2016		$250,000.00	$250,000.00	10 Nat. Gas Heavy-Duty Vehicles	$0.00	Yes
ML09012	City of Gardena	3/12/2010	11/11/2015		$25,000.00	$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	$0.00	Yes
ML09013	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	$144,470.00	$128,116.75	Traffic Signal Synchr./Moreno Valley	$16,353.25	Yes
ML09014	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	$113,030.00	$108,495.94	Traffic Signal Synchr./Corona	$4,534.06	Yes
ML09015	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	$80,060.00	$79,778.52	Traffic Signal Synchr./Co. of Riverside	$281.48	Yes
ML09016	County of San Bernardino Public Wo	1/28/2010	3/27/2014		$50,000.00	$50,000.00	Install New CNG Station	$0.00	Yes
ML09020	County of San Bernardino	8/16/2010	2/15/2012		$49,770.00	$49,770.00	Remote Vehicle Diagnostics/252 Vehicles	$0.00	Yes
ML09021	City of Palm Desert	7/9/2010	3/8/2012		$39,450.00	$38,248.87	Traffic Signal Synchr./Rancho Mirage	$1,201.13	Yes
ML09023	Los Angeles County Department of P	12/10/2010	12/9/2017		$50,000.00	$50,000.00	2 Heavy-Duty Alternative Fuel Transit Vehicl	$0.00	Yes
ML09026	Los Angeles County Department of P	10/15/2010	10/14/2017	4/14/2019	$150,000.00	$80,411.18	3 Off-Road Vehicles Repowers	$69,588.82	Yes
ML09027	Los Angeles County Department of P	7/23/2010	3/22/2012	6/22/2012	$150,000.00	$150,000.00	Freeway Detector Map Interface	$0.00	Yes
ML09029	City of Whittier	11/6/2009	4/5/2016		$25,000.00	$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	$0.00	Yes
ML09030	City of Los Angeles GSD/Fleet Servi	6/18/2010	6/17/2011		$22,310.00	$22,310.00	Remote Vehicle Diagnostics/107 Vehicles	$0.00	Yes
ML09031	City of Los Angeles Dept of General	10/29/2010	10/28/2017		$825,000.00	$825,000.00	33 Nat. Gas Heavy-Duty Vehicles	$0.00	Yes
ML09032	Los Angeles World Airports	4/8/2011	4/7/2018		$175,000.00	$175,000.00	7 Nat. Gas Heavy-Duty Vehicles	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML09033	City of Beverly Hills	3/4/2011	5/3/2017	1/3/2019	$550,000.00	$550,000.00	10 Nat. Gas Heavy-Duty Vehicles & CNG St	$0.00	Yes
ML09034	City of La Palma	11/25/2009	6/24/2015		$25,000.00	$25,000.00	1 LPG Heavy-Duty Vehicle	$0.00	Yes
ML09035	City of Fullerton	6/17/2010	6/16/2017	6/16/2018	$450,000.00	$450,000.00	2 Heavy-Duty CNG Vehicles & Install CNG	$0.00	Yes
ML09037	City of Redondo Beach	6/18/2010	6/17/2016		$50,000.00	$50,000.00	Purchase Two CNG Sweepers	$0.00	Yes
ML09038	City of Chino	9/27/2010	5/26/2017		$250,000.00	$250,000.00	Upgrade Existing CNG Station	$0.00	Yes
ML09041	City of Los Angeles, Bureau of Sanit	10/1/2010	9/30/2017		$875,000.00	$875,000.00	Purchase 35 H.D. Nat. Gas Vehicles	$0.00	Yes
ML09042	Los Angeles Department of Water an	12/10/2010	12/9/2017		$1,400,000.00	$1,400,000.00	Purchase 56 Dump Trucks	$0.00	Yes
ML09043	City of Covina	10/8/2010	4/7/2017	10/7/2018	$179,591.00	$179,591.00	Upgrade Existing CNG Station	$0.00	Yes
ML09046	City of Newport Beach	5/20/2010	5/19/2016		$162,500.00	$162,500.00	Upgrade Existing CNG Station, Maintenance	$0.00	Yes
ML09047	Los Angeles County Department of P	8/13/2014	8/12/2015	11/12/2015	$400,000.00	$272,924.53	Maintenance Facility Modifications	$127,075.47	Yes
Total: 29									
Closed/Incomplete Contracts									
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
Total: 1									
Open/Complete Contracts									
ML09036	City of Long Beach	5/7/2010	5/6/2017	11/6/2022	$875,000.00	$875,000.00	Purchase 35 Natural Gas Refuse Trucks	$0.00	Yes
Total: 1									

FY 2010-2011 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
ML11029	City of Santa Ana	9/7/2012	3/6/2020	3/6/2023	$262,500.00	$75,000.00	Expansion of Existing CNG Station, Install N	$187,500.00	No
Total: 1									
Declined/Cancelled Contracts									
ML11038	City of Santa Monica	5/18/2012	7/17/2018		$400,000.00	$0.00	Maintenance Facility Modifications	$400,000.00	No
MS11013	Go Natural Gas, Inc.				$150,000.00	$0.00	New CNG Station - Huntington Beach	$150,000.00	No
MS11014	Go Natural Gas, Inc.				$150,000.00	$0.00	New CNG Station - Santa Ana	$150,000.00	No
MS11015	Go Natural Gas, Inc.				$150,000.00	$0.00	New CNG Station - Inglewood	$150,000.00	No
MS11046	Luis Castro				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11047	Ivan Borjas				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11048	Phase II Transportation				$1,080,000.00	$0.00	Repower 27 Heavy-Duty Vehicles	$1,080,000.00	No
MS11049	Ruben Caceras				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11050	Carlos Arrue				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11051	Francisco Vargas				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11053	Jose Ivan Soltero				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11054	Albino Meza				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11059	Go Natural Gas				$150,000.00	$0.00	New Public Access CNG Station - Paramou	$150,000.00	No
MS11063	Standard Concrete Products				$310,825.00	$0.00	Retrofit Two Off-Road Vehicles under Showc	$310,825.00	No
MS11070	American Honda Motor Company				$100,000.00	$0.00	Expansion of Existing CNG Station	$100,000.00	No
MS11072	Trillium USA Company DBA Californi				$150,000.00	$0.00	New Public Access CNG Station	$150,000.00	No
MS11077	DCL America Inc.				$263,107.00	$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	$263,107.00	No
MS11083	Cattrac Construction, Inc.				$500,000.00	$0.00	Install DECS on Eight Off-Road Vehicles	$500,000.00	No
MS11084	Ivanhoe Energy Services and Develo				$66,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$66,750.00	No
MS11088	Diesel Emission Technologies				$32,750.00	$0.00	Retrofit Three H.D. Off-Road Vehicles Under	$32,750.00	No
MS11089	Diesel Emission Technologies				$9,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$9,750.00	No
MS11090	Diesel Emission Technologies				$14,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$14,750.00	No
Total: 22									
Closed Contracts									
ML11007	Coachella Valley Association of Gov	7/29/2011	7/28/2012		$250,000.00	$249,999.96	Regional PM10 Street Sweeping Program	$0.04	Yes
ML11020	City of Indio	2/1/2013	3/31/2019	9/30/2020	$15,000.00	$9,749.50	Retrofit one H.D. Vehicles w/DECS, repower	$5,250.50	Yes
ML11021	City of Whittier	1/27/2012	9/26/2018	6/26/2019	$210,000.00	$210,000.00	Purchase 7 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11022	City of Anaheim	3/16/2012	7/15/2018		$150,000.00	$150,000.00	Purchase of 5 H.D. Vehicles	$0.00	Yes
ML11023	City of Rancho Cucamonga	4/20/2012	12/19/2018	9/19/2020	$260,000.00	$260,000.00	Expand Existing CNG Station, 2 H.D. Vehicl	$0.00	Yes
ML11024	County of Los Angeles, Dept of Publi	12/5/2014	6/4/2022		$90,000.00	$90,000.00	Purchase 3 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11025	County of Los Angeles Department o	3/14/2014	9/13/2021		$150,000.00	$150,000.00	Purchase 5 Nat. Gas H.D. Vehicles	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML11026	City of Redlands	3/2/2012	10/1/2018		$90,000.00	$90,000.00	Purchase 3 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11027	City of Los Angeles, Dept. of General	5/4/2012	7/3/2015	1/3/2016	$300,000.00	$300,000.00	Maintenance Facility Modifications	$0.00	Yes
ML11028	City of Glendale	1/13/2012	5/12/2018		$300,000.00	$300,000.00	Purchase 10 H.D. CNG Vehicles	$0.00	Yes
ML11030	City of Fullerton	2/3/2012	3/2/2018		$109,200.00	$109,200.00	Purchase 2 Nat. Gas H.D. Vehicles, Retrofit	$0.00	Yes
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
ML11032	City of Gardena	3/2/2012	9/1/2018	10/1/2020	$102,500.00	$102,500.00	Purchase Heavy-Duty CNG Vehicle, Install S	$0.00	Yes
ML11033	City of Los Angeles, Bureau of Sanit	3/16/2012	1/15/2019		$1,080,000.00	$1,080,000.00	Purchase 36 LNG H.D. Vehicles	$0.00	Yes
ML11034	City of Los Angeles Dept of General	5/4/2012	1/3/2019		$630,000.00	$630,000.00	Purchase 21 H.D. CNG Vehicles	$0.00	Yes
ML11035	City of La Quinta	11/18/2011	11/17/2012		$25,368.00	$25,368.00	Retrofit 3 On-Road Vehicles w/DECS	$0.00	Yes
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
ML11045	City of Newport Beach	2/3/2012	8/2/2018	3/2/2021	$30,000.00	$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle	$0.00	Yes
MS11001	Mineral LLC	4/22/2011	4/30/2013	4/30/2015	$111,827.00	$103,136.83	Design, Develop, Host and Maintain MSRC	$8,690.17	Yes
MS11002	A-Z Bus Sales, Inc.	7/15/2011	12/31/2011	6/30/2013	$1,705,000.00	$1,705,000.00	Alternative Fuel School Bus Incentive Progra	$0.00	Yes
MS11003	BusWest	7/26/2011	12/31/2011	12/31/2012	$1,305,000.00	$1,305,000.00	Alternative Fuel School Bus Incentive Progra	$0.00	Yes
MS11004	Los Angeles County MTA	9/9/2011	2/29/2012		$450,000.00	$299,743.34	Clean Fuel Transit Service to Dodger Stadiu	$150,256.66	Yes
MS11006	Orange County Transportation Autho	10/7/2011	2/29/2012	8/31/2012	$268,207.00	$160,713.00	Metrolink Service to Angel Stadium	$107,494.00	Yes
MS11008	USA Waste of California, Inc.	10/24/2013	4/23/2020		$125,000.00	$125,000.00	Expansion of Existing LCNG Station	$0.00	Yes
MS11009	USA Waste of California, Inc.	10/24/2013	4/23/2020		$125,000.00	$125,000.00	Expansion of Existing LCNG Station	$0.00	Yes
MS11010	Border Valley Trading	8/26/2011	10/25/2017	4/25/2020	$150,000.00	$150,000.00	New LNG Station	$0.00	Yes
MS11011	EDCO Disposal Corporation	12/30/2011	4/29/2019		$100,000.00	$100,000.00	New CNG Station - Signal Hill	$0.00	Yes
MS11012	EDCO Disposal Corporation	12/30/2011	4/29/2019		$100,000.00	$100,000.00	New CNG Station - Buena Park	$0.00	Yes
MS11016	CR&R Incorporated	4/12/2013	10/11/2019		$100,000.00	$100,000.00	New CNG Station - Perris	$0.00	Yes
MS11017	CR&R, Inc.	3/2/2012	2/1/2018		$100,000.00	$100,000.00	Expansion of existing station - Garden Grove	$0.00	Yes
MS11018	Orange County Transportation Autho	10/14/2011	1/31/2012		$211,360.00	$211,360.00	Express Bus Service to Orange County Fair	$0.00	Yes
MS11019	City of Corona	11/29/2012	4/28/2020		$225,000.00	$225,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS11052	Krisda Inc	9/27/2012	6/26/2013		$120,000.00	$120,000.00	Repower Three Heavy-Duty Vehicles	$0.00	Yes
MS11055	KEC Engineering	2/3/2012	8/2/2018	8/2/2019	$200,000.00	$200,000.00	Repower 5 H.D. Off-Road Vehicles	$0.00	Yes
MS11056	Better World Group Advisors	12/30/2011	12/29/2013	12/29/2015	$206,836.00	$186,953.46	Programmatic Outreach Services	$19,882.54	Yes
MS11057	Riverside County Transportation Co	7/28/2012	3/27/2013		$100,000.00	$89,159.40	Develop and Implement 511 "Smart Phone"	$10,840.60	Yes
MS11058	L A Service Authority for Freeway E	5/31/2013	4/30/2014		$123,395.00	$123,395.00	Implement 511 "Smart Phone" Application	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS11060	Rowland Unified School District	8/17/2012	1/16/2019	1/16/2020	$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes
MS11061	Eastern Municipal Water District	3/29/2012	5/28/2015		$11,659.00	$1,450.00	Retrofit One Off-Road Vehicle under Showc	$10,209.00	Yes
MS11062	Load Center	9/7/2012	1/6/2016	12/6/2016	$175,384.00	$169,883.00	Retrofit Six Off-Road Vehicles under Showc	$5,501.00	Yes
MS11065	Temecula Valley Unified School Distr	8/11/2012	1/10/2019		$50,000.00	$48,539.62	Expansion of Existing CNG Station	$1,460.38	Yes
MS11066	Torrance Unified School District	11/19/2012	9/18/2018		$42,296.00	$42,296.00	Expansion of Existing CNG Station	$0.00	Yes
MS11067	City of Redlands	5/24/2012	11/23/2018	11/23/2019	$85,000.00	$85,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS11068	Ryder System Inc.	7/28/2012	10/27/2018		$175,000.00	$175,000.00	New Public Access L/CNG Station (Fontana)	$0.00	Yes
MS11069	Ryder System Inc.	7/28/2012	8/27/2018		$175,000.00	$175,000.00	New Public Access L/CNG Station (Orange)	$0.00	Yes
MS11071	City of Torrance Transit Department	12/22/2012	1/21/2019	1/21/2020	$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes
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
MS11074	SunLine Transit Agency	5/11/2012	7/31/2012		$41,849.00	$22,391.00	Transit Service for Coachella Valley Festival	$19,458.00	Yes
MS11079	Bear Valley Unified School District	2/5/2013	10/4/2019		$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes
MS11080	Southern California Regional Rail Aut	4/6/2012	7/31/2012		$26,000.00	$26,000.00	Metrolink Service to Auto Club Speedway	$0.00	Yes
MS11086	DCL America Inc.	6/7/2013	10/6/2016		$500,000.00	$359,076.96	Retrofit Eight H.D. Off-Road Vehicles Under	$140,923.04	Yes
MS11087	Cemex Construction Material Pacific,	10/16/2012	2/15/2016		$448,766.00	$448,760.80	Retrofit 13 H.D. Off-Road Vehicles Under Sh	$5.20	Yes
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	Yes
Total: 60									
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	8/23/2013	12/22/2016		$159,012.00	$0.00	Retrofit Seven H.D. Off-Road Vehicles Unde	$159,012.00	No
MS11091	California Cartage Company, LLC	4/5/2013	8/4/2016	2/4/2018	$55,000.00	$0.00	Retrofit Two H.D. Off-Road Vehicles Under	$55,000.00	No
Total: 6									

FY 2011-2012 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
ML12045	City of Baldwin Park DPW	2/14/2014	12/13/2020	12/13/2026	$400,000.00	$0.00	Install New CNG Station	$400,000.00	No
ML12091	City of Bellflower	10/5/2018	10/4/2019	6/30/2022	$100,000.00	$49,230.44	EV Charging Infrastructure	$50,769.56	Yes
Total: 2									
Declined/Cancelled Contracts									
ML12016	City of Cathedral City	1/4/2013	10/3/2019		$60,000.00	$0.00	CNG Vehicle & Electric Vehicle Infrastructur	$60,000.00	No
ML12038	City of Long Beach Public Works				$26,000.00	$0.00	Electric Vehicle Charging Infrastructure	$26,000.00	No
ML12040	City of Duarte				$30,000.00	$0.00	One Heavy-Duty Nat. Gas Vehicle	$30,000.00	No
ML12044	County of San Bernardino Public Wo				$250,000.00	$0.00	Install New CNG Station	$250,000.00	No
ML12048	City of La Palma	1/4/2013	11/3/2018		$20,000.00	$0.00	Two Medium-Duty LPG Vehicles	$20,000.00	No
ML12052	City of Whittier	3/14/2013	7/13/2019		$165,000.00	$0.00	Expansion of Existing CNG Station	$165,000.00	No
ML12053	City of Mission Viejo				$60,000.00	$0.00	EV Charging Infrastructure	$60,000.00	No
ML12090	City of Palm Springs	10/9/2015	10/8/2021	9/8/2025	$21,163.00	$0.00	EV Charging Infrastructure	$21,163.00	No
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: 13									
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
ML12014	City of Santa Ana	11/8/2013	8/7/2020	2/7/2022	$338,000.00	$255,977.50	9 H.D. Nat. Gas & LPG Trucks, EV Charging	$82,022.50	Yes
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
ML12019	City of Palm Springs	9/6/2013	7/5/2015		$38,000.00	$16,837.00	EV Charging Infrastructure	$21,163.00	Yes
ML12020	City of Los Angeles Dept of General	9/27/2012	3/26/2019	3/26/2020	$450,000.00	$450,000.00	15 H.D. Nat. Gas Vehicles	$0.00	Yes
ML12021	City of Rancho Cucamonga	9/14/2012	1/13/2020		$40,000.00	$40,000.00	Four Medium-Duty Nat. Gas Vehicles	$0.00	Yes
ML12022	City of La Puente	12/6/2013	6/5/2020		$110,000.00	$110,000.00	2 Medium-Duty and Three Heavy-Duty CNG	$0.00	Yes
ML12023	County of Los Angeles Internal Servi	8/1/2013	2/28/2015		$250,000.00	$192,333.00	EV Charging Infrastructure	$57,667.00	Yes
ML12037	Coachella Valley Association of Gov	3/14/2013	3/13/2014		$250,000.00	$250,000.00	Street Sweeping Operations	$0.00	Yes
ML12039	City of Redlands	2/8/2013	10/7/2019		$90,000.00	$90,000.00	Three Heavy-Duty Nat. Gas Vehicles	$0.00	Yes
ML12041	City of Anaheim Public Utilities Depa	4/4/2014	11/3/2015	11/3/2017	$68,977.00	$38,742.16	EV Charging Infrastructure	$30,234.84	Yes
ML12042	City of Chino Hills	1/18/2013	3/17/2017		$87,500.00	$87,500.00	Expansion of Existing CNG Station	$0.00	Yes
ML12043	City of Hemet	6/24/2013	9/23/2019	11/23/2021	$30,000.00	$30,000.00	One Heavy-Duty Nat. Gas Vehicles	$0.00	Yes
ML12046	City of Irvine	8/11/2013	3/10/2021		$30,000.00	$30,000.00	One Heavy-Duty Nat. Gas Vehicle	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML12047	City of Orange	2/1/2013	1/31/2019		$30,000.00	$30,000.00	One Heavy-Duty Nat. Gas Vehicle	$0.00	Yes
ML12049	City of Rialto Public Works	7/14/2014	9/13/2015		$30,432.00	$3,265.29	EV Charging Infrastructure	$27,166.71	Yes
ML12050	City of Baldwin Park	4/25/2013	4/24/2014	10/24/2014	$402,400.00	$385,363.00	EV Charging Infrastructure	$17,037.00	Yes
ML12054	City of Palm Desert	9/30/2013	2/28/2015		$77,385.00	$77,385.00	EV Charging Infrastructure	$0.00	Yes
ML12055	City of Manhattan Beach	3/1/2013	12/31/2018		$10,000.00	$10,000.00	One Medium-Duty Nat. Gas Vehicle	$0.00	Yes
ML12056	City of Cathedral City	3/26/2013	5/25/2014		$25,000.00	$25,000.00	Regional Street Sweeping Program	$0.00	Yes
ML12057	City of Coachella	8/28/2013	8/27/2019	1/27/2022	$57,456.00	$57,456.00	Purchase One Nat. Gas H.D. Vehicle/Street	$0.00	Yes
ML12066	City of Manhattan Beach	1/7/2014	4/6/2015		$5,900.00	$5,900.00	Electric Vehicle Charging Infrastructure	$0.00	Yes
MS12001	Los Angeles County MTA	7/1/2012	4/30/2013		$300,000.00	$211,170.00	Clean Fuel Transit Service to Dodger Stadiu	$88,830.00	Yes
MS12002	Orange County Transportation Autho	9/7/2012	4/30/2013		$342,340.00	$333,185.13	Express Bus Service to Orange County Fair	$9,154.87	Yes
MS12003	Orange County Transportation Autho	7/20/2012	2/28/2013		$234,669.00	$167,665.12	Implement Metrolink Service to Angel Stadiu	$67,003.88	Yes
MS12004	USA Waste of California, Inc.	10/24/2013	11/23/2019		$175,000.00	$175,000.00	Construct New Limited-Access CNG Station	$0.00	Yes
MS12005	USA Waste of California, Inc.	10/19/2012	8/18/2013		$75,000.00	$75,000.00	Vehicle Maintenance Facility Modifications	$0.00	Yes
MS12006	Waste Management Collection & Re	10/19/2012	8/18/2013		$75,000.00	$75,000.00	Vehicle Maintenance Facility Modifications	$0.00	Yes
MS12008	Bonita Unified School District	7/12/2013	12/11/2019	4/11/2021	$175,000.00	$175,000.00	Construct New Limited-Access CNG Station	$0.00	Yes
MS12009	Sysco Food Services of Los Angeles	1/7/2014	4/6/2020		$150,000.00	$150,000.00	Construct New Public-Access LNG Station	$0.00	Yes
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
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
MS12024	Southern California Gas Company	6/13/2013	12/12/2019	11/12/2020	$150,000.00	$150,000.00	Construct New Public-Access CNG Station -	$0.00	Yes
MS12025	Silverado Stages, Inc.	11/2/2012	7/1/2018		$150,000.00	$150,000.00	Purchase Six Medium-Heavy Duty Vehicles	$0.00	Yes
MS12026	U-Haul Company of California	3/14/2013	3/13/2019		$500,000.00	$353,048.26	Purchase 23 Medium-Heavy Duty Vehicles	$146,951.74	Yes
MS12028	Dy-Dee Service of Pasadena, Inc.	12/22/2012	1/21/2019		$45,000.00	$40,000.00	Purchase 2 Medium-Duty and 1 Medium-He	$5,000.00	Yes
MS12029	Community Action Partnership of Or	11/2/2012	11/1/2018		$25,000.00	$14,850.00	Purchase 1 Medium-Heavy Duty Vehicle	$10,150.00	Yes
MS12031	Final Assembly, Inc.	11/2/2012	11/1/2018		$50,000.00	$32,446.00	Purchase 2 Medium-Heavy Duty Vehicles	$17,554.00	Yes
MS12032	Fox Transportation	12/14/2012	12/13/2018		$500,000.00	$500,000.00	Purchase 20 Medium-Heavy Duty Vehicles	$0.00	Yes
MS12033	Mike Diamond/Phace Management	12/22/2012	12/21/2018	6/21/2021	$148,900.00	$148,900.00	Purchase 20 Medium-Heavy Duty Vehicles	$0.00	Yes
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	Yes
MS12035	Disneyland Resort	1/4/2013	7/3/2019		$25,000.00	$18,900.00	Purchase 1 Medium-Heavy Duty Vehicle	$6,100.00	Yes
MS12036	Jim & Doug Carter's Automotive/VSP	1/4/2013	11/3/2018		$50,000.00	$50,000.00	Purchase 2 Medium-Heavy Duty Vehicles	$0.00	Yes
MS12058	Krisda Inc	4/24/2013	1/23/2019		$25,000.00	$25,000.00	Repower One Heavy-Duty Off-Road Vehicle	$0.00	Yes
MS12059	Orange County Transportation Autho	2/28/2013	12/27/2014		$75,000.00	$75,000.00	Maintenance Facilities Modifications	$0.00	Yes
MS12060	City of Santa Monica	4/4/2014	8/3/2017	8/3/2019	$500,000.00	$434,202.57	Implement Westside Bikeshare Program	$65,797.43	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
MS12063	Custom Alloy Light Metals, Inc.	8/16/2013	2/15/2020		$100,000.00	$100,000.00	Install New Limited Access CNG Station	$0.00	Yes
MS12064	Anaheim Transportation Network	3/26/2013	12/31/2014		$127,296.00	$56,443.92	Implement Anaheim Circulator Service	$70,852.08	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS12065	Orange County Transportation Autho	7/27/2013	11/30/2013		$43,933.00	$14,832.93	Ducks Express Service to Honda Center	$29,100.07	Yes
MS12068	Southern California Regional Rail Aut	3/1/2013	9/30/2013		$57,363.00	$47,587.10	Implement Metrolink Service to Autoclub Sp	$9,775.90	Yes
MS12069	City of Irvine	8/11/2013	2/28/2014		$45,000.00	$26,649.41	Implement Special Transit Service to Solar	$18,350.59	Yes
MS12071	Transit Systems Unlimited, Inc.	5/17/2013	12/16/2018		$21,250.00	$21,250.00	Expansion of Existing CNG Station	$0.00	Yes
MS12072	99 Cents Only Stores	4/5/2013	9/4/2019		$100,000.00	$100,000.00	Construct New CNG Station	$0.00	Yes
MS12073	FirstCNG, LLC	7/27/2013	12/26/2019		$150,000.00	$150,000.00	Construct New CNG Station	$0.00	Yes
MS12074	Arcadia Unified School District	7/5/2013	9/4/2019		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
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	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
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
MS12081	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		$75,000.00	$75,000.00	Maintenance Facility Modifications - Santa A	$0.00	Yes
MS12085	Bear Valley Unified School District	4/25/2013	6/24/2014		$75,000.00	$75,000.00	Maintenance Facility Modifications	$0.00	Yes
MS12086	SuperShuttle International, Inc.	3/26/2013	3/25/2019		$225,000.00	$225,000.00	Purchase 23 Medium-Heavy Duty Vehicles	$0.00	Yes
MS12087	Los Angeles County MTA	8/29/2013	11/28/2015		$125,000.00	$125,000.00	Implement Rideshare Incentives Program	$0.00	Yes
MS12088	Orange County Transportation Autho	12/6/2013	3/5/2016		$125,000.00	$18,496.50	Implement Rideshare Incentives Program	$106,503.50	Yes
MS12089	Riverside County Transportation Co	10/18/2013	9/17/2015		$249,136.00	$105,747.48	Implement Rideshare Incentives Program	$143,388.52	Yes
MS12Hom	Mansfield Gas Equipment Systems				$296,000.00	$0.00	Home Refueling Apparatus Incentive Progra	$296,000.00	Yes
Total: 70									
Closed/Incomplete Contracts									
ML12051	City of Bellflower	2/7/2014	2/6/2016	5/6/2018	$100,000.00	$0.00	EV Charging Infrastructure	$100,000.00	No
MS12077	City of Coachella	6/14/2013	6/13/2020		$225,000.00	$0.00	Construct New CNG Station	$225,000.00	No
MS12079	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		$75,000.00	$0.00	Maintenance Facility Modifications - Boyle H	$75,000.00	No
MS12084	Airport Mobil Inc.	12/6/2013	5/5/2020		$150,000.00	$0.00	Install New CNG Infrastructure	$150,000.00	No
Total: 4									
Open/Complete Contracts									
ML12018	City of West Covina	10/18/2013	10/17/2020	8/17/2023	$300,000.00	$300,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS12082	City of Los Angeles, Bureau of Sanit	11/20/2013	2/19/2021	2/19/2023	$175,000.00	$175,000.00	Install New CNG Infrastructure	$0.00	Yes
MS12083	Brea Olinda Unified School District	7/30/2015	2/29/2024		$59,454.00	$59,454.00	Install New CNG Infrastructure	$0.00	Yes
Total: 3									

FY 2012-2014 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
ML14012	City of Santa Ana	2/13/2015	10/12/2021	10/12/2022	$64,000.00	$0.00	EV Charging and 1 H.D. LPG Vehicle	$64,000.00	No
ML14021	Riverside County Regional Park and	7/24/2014	12/23/2016	9/30/2024	$250,000.00	$0.00	Bicycle Trail Improvements	$250,000.00	No
ML14027	County of Los Angeles Dept of Publi	10/2/2015	5/1/2023	12/1/2025	$492,000.00	$0.00	Construct New CNG Station in Canyon Coun	$492,000.00	No
MS14057	Los Angeles County MTA	11/7/2014	10/6/2019	10/6/2023	$1,250,000.00	$0.00	Implement Various Signal Synchronization P	$1,250,000.00	No
MS14059	Riverside County Transportation Co	9/5/2014	3/4/2018	4/4/2023	$1,250,000.00	$899,594.08	Implement Various Signal Synchronization P	$350,405.92	No
MS14072	San Bernardino County Transportatio	3/27/2015	3/26/2018	3/26/2024	$1,250,000.00	$1,148,376.17	Implement Various Signal Synchronization P	$101,623.83	No
Total: 6									
Declined/Cancelled Contracts									
ML14063	City of Hawthorne				$32,000.00	$0.00	Expansion of Existng CNG Infrastructure	$32,000.00	No
ML14068	City of South Pasadena	9/12/2014	10/11/2015	1/11/2020	$10,183.00	$0.00	Electric Vehicle Charging Infrastructure	$10,183.00	No
ML14069	City of Beaumont	3/3/2017	3/2/2025		$200,000.00	$0.00	Construct New CNG Infrastructure	$200,000.00	No
MS14035	Penske Truck Leasing Co., L.P.				$75,000.00	$0.00	Vehicle Maint. Fac. Modifications - Sun Valle	$75,000.00	No
MS14036	Penske Truck Leasing Co., L.P.				$75,000.00	$0.00	Vehicle Maint. Fac. Modifications - La Mirad	$75,000.00	No
MS14038	Penske Truck Leasing Co., L.P.				$75,000.00	$0.00	Vehicle Maint. Fac. Modifications - Fontana	$75,000.00	No
MS14043	City of Anaheim				$175,000.00	$0.00	Expansion of Existing CNG Station	$175,000.00	No
MS14078	American Honda Motor Co., Inc.	9/4/2015	8/3/2022		$150,000.00	$0.00	New Public Access CNG Station	$150,000.00	No
MS14085	Prologis, L.P.				$100,000.00	$0.00	New Limited Access CNG Station	$100,000.00	No
MS14086	San Gabriel Valley Towing I				$150,000.00	$0.00	New Public Access CNG Station	$150,000.00	No
MS14091	Serv-Wel Disposal				$100,000.00	$0.00	New Limited-Access CNG Infrastructure	$100,000.00	No
Total: 11									
Closed Contracts									
ML14010	City of Cathedral City	8/13/2014	10/12/2015		$25,000.00	$25,000.00	Street Sweeping Operations	$0.00	Yes
ML14011	City of Palm Springs	6/13/2014	1/12/2016		$79,000.00	$78,627.00	Bicycle Racks, Bicycle Outreach & Educatio	$373.00	Yes
ML14014	City of Torrance	9/5/2014	12/4/2019		$56,000.00	$56,000.00	EV Charging Infrastructure	$0.00	Yes
ML14015	Coachella Valley Association of Gov	6/6/2014	9/5/2015		$250,000.00	$250,000.00	Street Sweeping Operations	$0.00	Yes
ML14016	City of Anaheim	4/3/2015	9/2/2021		$380,000.00	$380,000.00	Purchase 2 H.D. Vehicles, Expansion of Exi	$0.00	Yes
ML14022	County of Los Angeles Department o	10/2/2015	5/1/2022		$270,000.00	$270,000.00	Purchase 9 H.D. Nat. Gas Vehicles	$0.00	Yes
ML14023	County of Los Angeles Department o	10/2/2015	9/1/2017	3/1/2021	$230,000.00	$230,000.00	Maintenance Fac. Modifications-Westcheste	$0.00	Yes
ML14024	County of Los Angeles Department o	10/2/2015	9/1/2017	9/1/2021	$230,000.00	$230,000.00	Maintenance Fac. Modifications-Baldwin Par	$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
ML14029	City of Irvine	7/11/2014	6/10/2017		$90,500.00	$71,056.78	Bicycle Trail Improvements	$19,443.22	Yes
ML14030	County of Los Angeles Internal Servi	1/9/2015	3/8/2018	7/30/2021	$425,000.00	$216,898.02	Bicycle Racks, Outreach & Education	$208,101.98	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

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ML14033	City of Irvine	7/11/2014	2/10/2021	2/10/2022	$60,000.00	$60,000.00	Purchase 2 H.D. CNG Vehicles	$0.00	Yes
ML14034	City of Lake Elsinore	9/5/2014	5/4/2021		$56,700.00	$56,700.00	EV Charging Stations	$0.00	Yes
ML14049	City of Moreno Valley	7/11/2014	3/10/2021		$105,000.00	$101,976.09	One HD Nat Gas Vehicle, EV Charging, Bicy	$3,023.91	Yes
ML14051	City of Brea	9/5/2014	1/4/2017	7/4/2018	$450,000.00	$450,000.00	Installation of Bicycle Trail	$0.00	Yes
ML14054	City of Torrance	11/14/2014	4/13/2017	7/13/2017	$350,000.00	$319,908.80	Upgrade Maintenance Facility	$30,091.20	Yes
ML14055	City of Highland	10/10/2014	3/9/2018	3/9/2019	$500,000.00	$489,385.24	Bicycle Lanes and Outreach	$10,614.76	Yes
ML14056	City of Redlands	9/5/2014	5/4/2016	5/4/2018	$125,000.00	$125,000.00	Bicycle Lanes	$0.00	Yes
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
ML14065	City of Orange	9/5/2014	8/4/2015		$10,000.00	$10,000.00	Electric Vehicle Charging Infrastructure	$0.00	Yes
ML14070	City of Rancho Cucamonga	9/3/2016	12/2/2018		$365,245.00	$326,922.25	Bicycle Trail Improvements	$38,322.75	Yes
ML14071	City of Manhattan Beach	1/9/2015	11/8/2018		$22,485.00	$22,485.00	Electric Vehicle Charging Infrastructure	$0.00	Yes
ML14072	City of Cathedral City	8/13/2014	1/12/2021	7/12/2022	$41,000.00	$41,000.00	Install Bicycle Racks & Implement Bicycle E	$0.00	Yes
ML14094	City of Yucaipa	6/9/2017	6/8/2018		$84,795.00	$84,795.00	Installation of Bicycle Lanes	$0.00	Yes
ML14095	City of South Pasadena	1/10/2019	7/9/2019		$142,096.00	$134,182.09	Bicycle Trail Improvements	$7,913.91	Yes
ML14096	County of Los Angeles Dept of Pub	5/3/2019	12/2/2019	3/2/2020	$74,186.00	$74,186.00	San Gabriel BikeTrail Underpass Improveme	$0.00	Yes
ML14097	County of Los Angeles Internal Servi	9/6/2019	9/5/2020	9/5/2021	$104,400.00	$104,400.00	Electric Vehicle Charging Infrastructure	$0.00	Yes
MS14001	Los Angeles County MTA	3/6/2015	4/30/2015		$1,216,637.00	$1,199,512.68	Clean Fuel Transit Service to Dodger Stadiu	$17,124.32	Yes
MS14002	Orange County Transportation Autho	9/6/2013	4/30/2014		$576,833.00	$576,833.00	Clean Fuel Transit Service to Orange 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
MS14037	Penske Truck Leasing Co., L.P.	4/7/2017	6/6/2020		$75,000.00	$75,000.00	Vehicle Maint. Fac. Modifications - Carson	$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
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
MS14047	Southern California Regional Rail Aut	3/7/2014	9/30/2014		$49,203.00	$32,067.04	Special Metrolink Service to Autoclub Speed	$17,135.96	Yes
MS14048	BusWest	3/14/2014	12/31/2014	5/31/2015	$940,850.00	$847,850.00	Alternative Fuel School Bus Incentive Progra	$93,000.00	Yes
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	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
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	Yes
MS14084	US Air Conditioning Distributors	5/7/2015	9/6/2021		$100,000.00	$100,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
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 Aut	5/7/2015	9/30/2015		$79,660.00	$66,351.44	Special Metrolink Service to Autoclub Speed	$13,308.56	Yes
MS14089	Top Shelf Consulting, LLC	1/18/2017	8/4/2016	3/31/2017	$200,000.00	$200,000.00	Enhanced Fleet Modernization Program	$0.00	Yes
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: 60									
Closed/Incomplete Contracts									
ML14020	County of Los Angeles Dept of Pub	8/13/2014	1/12/2018		$150,000.00	$0.00	San Gabriel BikeTrail Underpass Improveme	$150,000.00	No
ML14050	City of Yucaipa	7/11/2014	9/10/2015	7/1/2016	$84,795.00	$0.00	Installation of Bicycle Lanes	$84,795.00	No
ML14060	County of Los Angeles Internal Servi	10/6/2017	1/5/2019		$104,400.00	$0.00	Electric Vehicle Charging Infrastructure	$104,400.00	No
ML14066	City of South Pasadena	9/12/2014	7/11/2016	2/11/2018	$142,096.00	$0.00	Bicycle Trail Improvements	$142,096.00	No
ML14093	County of Los Angeles Dept of Pub	8/14/2015	1/13/2019		$150,000.00	$0.00	San Gabriel BikeTrail Underpass Improveme	$150,000.00	No
MS14092	West Covina Unified School District	9/3/2016	12/2/2022		$124,000.00	$0.00	Expansion of Existing CNG Infrastructure	$124,000.00	No
Total: 6									
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
ML14018	City of Los Angeles Dept of General	3/6/2015	9/5/2021	2/5/2026	$810,000.00	$810,000.00	Purchase 27 H.D. Nat. Gas Vehicles	$0.00	Yes
ML14019	City of Corona Public Works	12/5/2014	6/4/2020	3/6/2023	$111,518.00	$111,517.18	EV Charging, Bicycle Racks, Bicycle Locker	$0.82	Yes
ML14025	County of Los Angeles Dept of Publi	10/2/2015	7/1/2018	7/1/2024	$300,000.00	$300,000.00	Construct New CNG Station in Malibu	$0.00	Yes
ML14026	County of Los Angeles Dept of Publi	10/2/2015	5/1/2023	5/1/2024	$300,000.00	$300,000.00	Construct New CNG Station in Castaic	$0.00	Yes
ML14062	City of San Fernando	3/27/2015	5/26/2021	10/31/2023	$325,679.00	$325,679.00	Expand Existing CNG Fueling Station	$0.00	Yes
ML14067	City of Duarte	12/4/2015	1/3/2023	6/3/2024	$60,000.00	$60,000.00	Purchase Two Electric Buses	$0.00	Yes
MS14075	Fullerton Joint Union High School Di	7/22/2016	11/21/2023		$300,000.00	$293,442.00	Expansion of Existing CNG Infrastructure/Ma	$6,558.00	Yes
MS14076	Rialto Unified School District	6/17/2015	2/16/2022	6/25/2023	$225,000.00	$225,000.00	New Public Access CNG Station	$0.00	Yes
MS14079	Waste Resources, Inc.	9/14/2016	8/13/2022	10/13/2024	$100,000.00	$100,000.00	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	Yes
MS14082	Grand Central Recycling & Transfer	12/4/2015	3/3/2023	3/3/2024	$150,000.00	$150,000.00	Construct New Public Access CNG Station	$0.00	Yes
MS14083	Hacienda La Puente Unified School	7/10/2015	3/9/2022	6/9/2023	$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes
Total: 13									

FY 2014-2016 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
ML16006	City of Cathedral City	4/27/2016	4/26/2022	4/26/2023	$25,000.00	$0.00	Bicycle Outreach	$25,000.00	No
ML16010	City of Fullerton	10/7/2016	4/6/2023	4/6/2024	$78,222.00	$27,896.71	Install EV Charging Stations	$50,325.29	No
ML16017	City of Long Beach	2/5/2016	8/4/2023	1/4/2026	$1,445,400.00	$1,415,400.00	Purchase 50 Medium-Duty, 17 H.D. Nat. Ga	$30,000.00	No
ML16022	Los Angeles Department of Water an	5/5/2017	3/4/2024	9/4/2027	$240,000.00	$0.00	Purchase 8 H.D. Nat. Gas Vehicles	$240,000.00	No
ML16025	City of South Pasadena	6/22/2016	4/21/2023	10/21/2024	$160,000.00	$0.00	Purchase H.D. Nat. Gas Vehicle, Expand Exi	$160,000.00	No
ML16038	City of Palm Springs	4/1/2016	7/31/2022	9/30/2022	$170,000.00	$60,000.00	Install Bicycle Lanes & Purchase 2 Heavy-D	$110,000.00	Yes
ML16039	City of Torrance Transit Department	1/6/2017	9/5/2022	9/5/2024	$32,000.00	$0.00	Install EV Charging Infrastructure	$32,000.00	No
ML16047	City of Fontana	1/6/2017	8/5/2019	8/5/2024	$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	12/25/2026	$80,000.00	$18,655.00	Install EV Charging Infrastructure	$61,345.00	No
ML16057	City of Yucaipa	4/27/2016	1/26/2019	1/26/2023	$380,000.00	$0.00	Implement a "Complete Streets" Pedestrian	$380,000.00	No
ML16071	City of Highland	5/5/2017	1/4/2020	1/4/2023	$264,500.00	$0.00	Implement a "Complete Streets" Pedestrian	$264,500.00	No
ML16075	City of San Fernando	10/27/2016	2/26/2019	8/26/2024	$354,000.00	$0.00	Install a Class 1 Bikeway	$354,000.00	No
ML16077	City of Rialto	5/3/2018	10/2/2021	2/2/2026	$463,216.00	$158,105.51	Pedestrian Access Improvements, Bicycle L	$305,110.49	No
MS16094	Riverside County Transportation Co	1/25/2017	1/24/2022	4/24/2023	$1,909,241.00	$0.00	MetroLink First Mile/Last Mile Mobility Strate	$1,909,241.00	No
MS16110	City of Riverside	10/6/2017	2/5/2025	2/5/2026	$300,000.00	$71,250.00	Expansion of Existing CNG Station and Main	$228,750.00	No
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	$826,500.00	Repower 63 Existing Buses	$118,500.00	No
MS16121	Long Beach Transit	11/3/2017	4/2/2024	11/30/2028	$600,000.00	$456,000.00	Repower 39 and Purchase 1 New Transit Bu	$144,000.00	No
MS16123	Orange County Transportation Autho	12/7/2018	11/6/2023		$91,760.00	$0.00	Install La Habra Union Pacific Bikeway	$91,760.00	No
Total: 19									
Declined/Cancelled Contracts									
ML16014	City of Dana Point				$153,818.00	$0.00	Extend an Existing Class 1 Bikeway	$153,818.00	No
ML16065	City of Temple City				$500,000.00	$0.00	Implement a "Complete Streets" Pedestrian	$500,000.00	No
ML16067	City of South El Monte				$73,329.00	$0.00	Implement an "Open Streets" Event	$73,329.00	No
ML16074	City of La Verne	7/22/2016	1/21/2023		$365,000.00	$0.00	Install CNG Fueling Station	$365,000.00	No
MS16043	LBA Realty Company LLC				$100,000.00	$0.00	Install Limited-Access CNG Station	$100,000.00	No
MS16080	Riverside County Transportation Co				$1,200,000.00	$0.00	Passenger Rail Service for Coachella and St	$1,200,000.00	No
MS16098	Long Beach Transit				$198,957.00	$0.00	Provide Special Bus Service to Stub Hub Ce	$198,957.00	No
MS16104	City of Perris				$175,000.00	$0.00	Expansion of Existing CNG Infrastructure	$175,000.00	No
MS16106	City of Lawndale	3/1/2019	11/30/2025		$175,000.00	$0.00	Expansion of Existing CNG Infrastructure	$175,000.00	No
MS16107	Athens Services				$100,000.00	$0.00	Construct a Limited-Access CNG Station	$100,000.00	No
MS16108	VNG 5703 Gage Avenue, LLC				$150,000.00	$0.00	Construct Public-Access CNG Station in Bell	$150,000.00	No
MS16109	Sanitation Districts of Los Angeles C				$275,000.00	$0.00	Expansion of an Existing L/CNG Station	$275,000.00	No
MS16111	VNG 925 Lakeview Avenue, LLC				$150,000.00	$0.00	Construct Public Access CNG Station in Pla	$150,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Total: 13									
Closed Contracts									
ML16009	City of Fountain Valley	10/6/2015	2/5/2018	5/5/2019	$46,100.00	$46,100.00	Install EV Charging Infrastructure	$0.00	Yes
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
ML16015	City of Yorba Linda	3/4/2016	11/3/2017		$85,000.00	$85,000.00	Install Bicycle Lanes	$0.00	Yes
ML16020	City of Pomona	4/1/2016	2/1/2018	8/1/2018	$440,000.00	$440,000.00	Install Road Surface Bicycle Detection Syste	$0.00	Yes
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
ML16026	City of Downey	5/6/2016	9/5/2017		$40,000.00	$40,000.00	Install EV Charging Infrastructure	$0.00	Yes
ML16028	City of Azusa	9/9/2016	4/8/2018		$25,000.00	$25,000.00	Enhance Existing Class 1 Bikeway	$0.00	Yes
ML16031	City of Cathedral City	12/19/2015	2/18/2017		$25,000.00	$25,000.00	Street Sweeping in Coachella Valley	$0.00	Yes
ML16032	City of Azusa	9/9/2016	4/8/2019	4/8/2021	$474,925.00	$474,925.00	Implement a "Complete Streets" Pedestrian	$0.00	Yes
ML16033	Coachella Valley Association of Gov	4/27/2016	4/26/2018		$250,000.00	$250,000.00	Street Sweeping Operations in Coachella Va	$0.00	Yes
ML16034	City of Riverside	3/11/2016	10/10/2018	7/10/2020	$500,000.00	$500,000.00	Implement a "Complete Streets" Pedestrian	$0.00	Yes
ML16036	City of Brea	3/4/2016	12/3/2018		$500,000.00	$500,000.00	Install a Class 1 Bikeway	$0.00	Yes
ML16042	City of San Dimas	4/1/2016	12/31/2019	12/31/2021	$55,000.00	$55,000.00	Install EV Charging Infrastructure	$0.00	No
ML16045	City of Anaheim	6/22/2016	8/21/2019		$275,000.00	$255,595.08	Maintenance Facility Modifications	$19,404.92	Yes
ML16049	City of Buena Park	4/1/2016	11/30/2018		$429,262.00	$429,262.00	Installation of a Class 1 Bikeway	$0.00	Yes
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	Yes
ML16051	City of South Pasadena	2/12/2016	1/11/2017	12/11/2017	$320,000.00	$258,691.25	Implement "Open Streets" Event with Variou	$61,308.75	Yes
ML16052	City of Rancho Cucamonga	9/3/2016	11/2/2019	3/31/2021	$315,576.00	$305,576.00	Install Two Class 1 Bikeways	$10,000.00	Yes
ML16053	City of Claremont	3/11/2016	7/10/2018	12/10/2020	$498,750.00	$498,750.00	Implement a "Complete Streets" Pedestrian	$0.00	Yes
ML16054	City of Yucaipa	3/26/2016	7/26/2018	10/25/2019	$120,000.00	$120,000.00	Implement a "Complete Streets" Pedestrian	$0.00	Yes
ML16055	City of Ontario	5/6/2016	5/5/2022		$270,000.00	$270,000.00	Purchase Nine Heavy-Duty Natural-Gas Veh	$0.00	Yes
ML16056	City of Ontario	3/23/2016	9/22/2020	9/22/2021	$106,565.00	$106,565.00	Expansion of an Existing CNG Station	$0.00	Yes
ML16059	City of Burbank	4/1/2016	2/28/2022		$180,000.00	$180,000.00	Purchase 6 H.D. Nat. Gas Vehicles	$0.00	Yes
ML16060	City of Cudahy	2/5/2016	10/4/2017		$73,910.00	$62,480.00	Implement an "Open Streets" Event	$11,430.00	Yes
ML16061	City of Murrieta	4/27/2016	1/26/2020		$11,642.00	$9,398.36	Installation of EV Charging Infrastructure	$2,243.64	Yes
ML16062	City of Colton	6/3/2016	7/2/2020		$21,003.82	$21,003.82	Installation of EV Charging Infrastructure	$0.00	Yes
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
ML16064	County of Orange, OC Parks	2/21/2017	10/20/2018		$204,073.00	$157,632.73	Implement "Open Streets" Events with Vario	$46,440.27	Yes
ML16066	City of Long Beach Public Works	1/13/2017	9/12/2018		$75,050.00	$63,763.62	Implement an "Open Streets" Event	$11,286.38	Yes
ML16068	Riverside County Dept of Public Heal	12/2/2016	8/1/2018		$171,648.00	$171,648.00	Implement "Open Streets" Events with Vario	$0.00	Yes
ML16069	City of West Covina	3/10/2017	6/9/2021		$54,199.00	$54,199.00	Installation of EV Charging Infrastructure	$0.00	Yes
ML16072	City of Palm Desert	3/4/2016	1/4/2020	1/3/2022	$56,000.00	$56,000.00	Installation of EV Charging Infrastructure	$0.00	Yes
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
ML16076	City of San Fernando	2/21/2017	8/20/2021		$43,993.88	$43,993.88	Install EV Charging Infrastructure	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16078	City of Moreno Valley	5/6/2016	11/5/2017	5/5/2018	$32,800.00	$31,604.72	Install Bicycle Infrastructure & Implement Bi	$1,195.28	Yes
ML16079	City of Yucaipa	4/1/2016	3/31/2020		$5,000.00	$5,000.00	Purchase Electric Lawnmower	$0.00	Yes
ML16122	City of Wildomar	6/8/2018	6/7/2019		$500,000.00	$500,000.00	Install Bicycle Lanes	$0.00	Yes
ML16126	City of Palm Springs	7/31/2019	7/30/2020	10/30/2020	$22,000.00	$19,279.82	Install Bicycle Racks, and Implement Bicycle	$2,720.18	Yes
MS16001	Los Angeles County MTA	4/1/2016	4/30/2017		$1,350,000.00	$1,332,039.84	Clean Fuel Transit Service to Dodger Stadiu	$17,960.16	Yes
MS16002	Orange County Transportation Autho	10/6/2015	5/31/2016		$722,266.00	$703,860.99	Clean Fuel Transit Service to Orange Count	$18,405.01	Yes
MS16003	Special Olympics World Games Los	10/9/2015	12/30/2015		$380,304.00	$380,304.00	Low-Emission Transportation Service for Sp	$0.00	Yes
MS16004	Mineral LLC	9/4/2015	7/3/2017	1/3/2018	$27,690.00	$9,300.00	Design, Develop, Host and Maintain MSRC	$18,390.00	Yes
MS16029	Orange County Transportation Autho	1/12/2018	6/11/2020		$836,413.00	$567,501.06	TCM Partnership Program - OC Bikeways	$268,911.94	Yes
MS16030	Better World Group Advisors	12/19/2015	12/31/2017	12/31/2019	$271,619.00	$245,355.43	Programmic Outreach Services to the MSR	$26,263.57	Yes
MS16084	Transit Systems Unlimited, Inc.	5/6/2016	2/28/2018		$565,600.00	$396,930.00	Implement Special Shuttle Service from Uni	$168,670.00	Yes
MS16085	Southern California Regional Rail Aut	3/11/2016	9/30/2016		$78,033.00	$64,285.44	Special MetroLink Service to Autoclub Spee	$13,747.56	Yes
MS16086	San Bernardino County Transportatio	9/3/2016	10/2/2021		$800,625.00	$769,021.95	Freeway Service Patrols	$31,603.05	Yes
MS16089	Orange County Transportation Autho	7/8/2016	4/30/2017		$128,500.00	$128,500.00	Implement Special Bus Service to Angel Sta	$0.00	Yes
MS16092	San Bernardino County Transportatio	2/3/2017	1/2/2019		$242,937.00	$242,016.53	Implement a Series of "Open Streets" Event	$920.47	Yes
MS16093	Orange County Transportation Autho	9/3/2016	3/2/2018	9/2/2018	$1,553,657.00	$1,499,575.85	Implement a Mobile Ticketing System	$54,081.15	Yes
MS16095	Orange County Transportation Autho	7/22/2016	5/31/2017		$694,645.00	$672,864.35	Implement Special Bus Service to Orange C	$21,780.65	Yes
MS16096	San Bernardino County Transportatio	10/27/2016	12/26/2019	6/30/2021	$450,000.00	$450,000.00	EV Charging Infrastructure	$0.00	Yes
MS16099	Foothill Transit	3/3/2017	3/31/2017		$50,000.00	$50,000.00	Provide Special Bus Service to the Los Ange	$0.00	Yes
MS16100	Southern California Regional Rail Aut	5/5/2017	9/30/2017		$80,455.00	$66,169.43	Provide Metrolink Service to Autoclub Speed	$14,285.57	Yes
MS16124	Riverside County Transportation Co	12/14/2018	12/14/2019	5/14/2020	$253,239.00	$246,856.41	Extended Freeway Service Patrols	$6,382.59	Yes
MS16125	San Bernardino County Transportatio	9/20/2019	11/19/2020		$1,000,000.00	$1,000,000.00	Traffic Signal Synchronization Projects	$0.00	Yes
Total: 57									
Closed/Incomplete Contracts									
ML16005	City of Palm Springs	3/4/2016	10/3/2017		$40,000.00	$0.00	Install Bicycle Racks, and Implement Bicycle	$40,000.00	No
ML16035	City of Wildomar	4/1/2016	11/1/2017		$500,000.00	$0.00	Install Bicycle Lanes	$500,000.00	No
MS16082	Riverside County Transportation Co	9/3/2016	8/2/2018		$590,759.00	$337,519.71	Extended Freeway Service Patrols	$253,239.29	No
MS16090	Los Angeles County MTA	10/27/2016	4/26/2020	10/26/2020	$2,500,000.00	$0.00	Expansion of the Willowbrook/Rosa Parks Tr	$2,500,000.00	No
MS16091	San Bernardino County Transportatio	10/7/2016	11/6/2018		$1,000,000.00	$0.00	Traffic Signal Synchronization Projects	$1,000,000.00	No
Total: 5									
Open/Complete Contracts									
ML16007	City of Culver City Transportation De	10/6/2015	4/5/2023		$246,000.00	$246,000.00	Purchase 7 H.D. Nat. Gas Vehicles, EV Cha	$0.00	Yes
ML16008	City of Pomona	9/20/2016	11/19/2022	5/19/2025	$60,000.00	$60,000.00	Purchase 3 Medium-Duty and 1 Heavy-Duty	$0.00	Yes
ML16012	City of Carson	1/15/2016	10/14/2022		$60,000.00	$60,000.00	Purchase 2 Heavy-Duty Nat. Gas Vehicles	$0.00	Yes
ML16013	City of Monterey Park	12/4/2015	7/3/2022	7/3/2024	$90,000.00	$90,000.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	$0.00	Yes
ML16016	City of Los Angeles Dept of General	2/5/2016	12/4/2022		$630,000.00	$630,000.00	Purchase 21 Heavy-Duty Nat. Gas Vehicles	$0.00	Yes
ML16018	City of Hermosa Beach	10/7/2016	1/6/2023		$29,520.00	$23,768.44	Purchase 2 M.D. Nat. Gas Vehicles, Bicycle	$5,751.56	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16019	City of Los Angeles, Dept of General	1/25/2017	3/24/2023		$102,955.00	$102,955.00	Install EV Charging Infrastructure	$0.00	Yes
ML16021	City of Santa Clarita	10/7/2016	6/6/2024		$49,400.00	$49,399.00	Install EV Charging Infrastructure	$1.00	Yes
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
ML16040	City of Eastvale	1/6/2017	7/5/2022	7/5/2026	$110,000.00	$53,908.85	Install EV Charging Infrastructure	$56,091.15	Yes
ML16041	City of Moreno Valley	9/3/2016	1/2/2021	4/2/2024	$20,000.00	$20,000.00	Install EV Charging Infrastructure	$0.00	Yes
ML16046	City of El Monte	4/1/2016	5/31/2021	5/31/2023	$20,160.00	$14,637.50	Install EV Charging Infrastructure	$5,522.50	Yes
ML16058	Los Angeles County Department of P	10/7/2016	4/6/2024		$371,898.00	$371,898.00	Purchase 11 H.D. Nat. Gas Vehicles and Ins	$0.00	Yes
ML16070	City of Beverly Hills	2/21/2017	6/20/2023		$90,000.00	$90,000.00	Purchase 3 H.D. Nat. Gas Vehicles	$0.00	Yes
ML16083	City of El Monte	4/1/2016	4/30/2021	4/30/2023	$57,210.00	$25,375.60	Install EV Charging Infrastructure	$31,834.40	No
MS16081	EDCO Disposal Corporation	3/4/2016	10/3/2022		$150,000.00	$150,000.00	Expansion of Existing Public Access CNG St	$0.00	Yes
MS16087	Burrtec Waste & Recycling Services,	7/8/2016	3/7/2023		$100,000.00	$100,000.00	Construct New Limited-Access CNG Station	$0.00	Yes
MS16088	Transit Systems Unlimited, Inc.	5/12/2017	1/11/2023		$17,000.00	$17,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS16097	Walnut Valley Unified School District	10/7/2016	11/6/2022		$250,000.00	$250,000.00	Expand CNG Station & Modify Maintenance	$0.00	Yes
MS16102	Nasa Services, Inc.	2/21/2017	4/20/2023		$100,000.00	$100,000.00	Construct a Limited-Access CNG Station	$0.00	Yes
MS16103	Arrow Services, Inc.	2/3/2017	4/2/2023		$100,000.00	$100,000.00	Construct a Limited-Access CNG Station	$0.00	Yes
MS16105	Huntington Beach Union High School	3/3/2017	7/2/2024		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS16112	Orange County Transportation Autho	4/14/2017	3/13/2024		$1,470,000.00	$1,470,000.00	Repower Up to 98 Transit Buses	$0.00	Yes
MS16113	Los Angeles County MTA	5/12/2017	4/11/2024		$1,875,000.00	$1,875,000.00	Repower Up to 125 Transit Buses	$0.00	Yes
MS16114	City of Norwalk	3/3/2017	6/2/2024		$32,170.00	$32,170.00	Purchase 3 Transit Buses	$0.00	Yes
MS16115	City of Santa Monica	4/14/2017	7/13/2025		$450,000.00	$450,000.00	Repower 30 Transit Buses	$0.00	Yes
MS16116	Riverside Transit Agency	3/3/2017	1/2/2023		$10,000.00	$9,793.00	Purchase One Transit Bus	$207.00	Yes
MS16117	Omnitrans	4/21/2017	6/20/2023		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS16118	Omnitrans	4/21/2017	6/20/2023		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS16127	Los Angeles County MTA	6/29/2021		6/28/2022	$2,500,000.00	$2,500,000.00	Expansion of the Willowbrook/Rosa Parks Tr	$0.00	Yes

Total: 31

FY 2016-2018 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
ML18030	City of Grand Terrace	6/28/2018	3/27/2022	3/27/2025	$45,000.00	$0.00	Install EVSE	$45,000.00	No
ML18031	City of Diamond Bar	9/7/2018	11/6/2025	11/6/2027	$58,930.00	$0.00	Install EVSE, Purchase up to 2-LD Vehicles	$58,930.00	No
ML18036	City of Indian Wells	8/8/2018	5/7/2023	5/7/2025	$50,000.00	$0.00	Install EV Charging Stations	$50,000.00	No
ML18041	City of West Hollywood	8/8/2018	12/7/2023	6/7/2024	$50,000.00	$50,000.00	Install EV Charging Infrastructure	$0.00	Yes
ML18046	City of Santa Ana	11/9/2018	7/8/2026		$385,000.00	$0.00	Purchase 6 Light-Duty ZEVs, 9 Heavy-Duty	$385,000.00	No
ML18047	City of Whittier	8/8/2018	4/7/2026		$113,910.00	$45,564.00	Purchase 5 Heavy-Duty Near-Zero Emission	$68,346.00	No
ML18050	City of Irvine	9/7/2018	8/6/2028		$330,490.00	$0.00	Purchase 1 Medium/Heavy-Duty ZEV and In	$330,490.00	No
ML18051	City of Rancho Cucamonga	3/1/2019	10/31/2025		$91,500.00	$52,500.00	Purchase 6 Light-Duty ZEVs, Install 3 Limite	$39,000.00	No
ML18053	City of Paramount	9/7/2018	3/6/2023		$64,675.00	$0.00	Install EV Charging Infrastructure	$64,675.00	No
ML18055	City of Long Beach	11/29/2018	11/28/2026		$622,220.00	$236,123.55	Install EV Charging Stations	$386,096.45	No
ML18057	City of Carson	10/5/2018	7/4/2023		$106,250.00	$50,000.00	Purchase 5 Zero-Emission Vehicles and Infr	$56,250.00	No
ML18058	City of Perris	10/12/2018	11/11/2024		$94,624.00	$0.00	Purchase 1 Medium-Duty ZEV and EV Char	$94,624.00	No
ML18059	City of Glendale Water & Power	2/1/2019	7/31/2026		$260,500.00	$0.00	Install Electric Vehicle Charging Infrastructur	$260,500.00	No
ML18060	County of Los Angeles Internal Servi	10/5/2018	8/4/2026	8/4/2028	$1,367,610.00	$599,306.31	Purchase 29 Light-Duty Zero Emission Vehi	$768,303.69	No
ML18063	City of Riverside	6/7/2019	1/6/2027		$383,610.00	$0.00	Expand Existing CNG Stations	$383,610.00	No
ML18064	City of Eastvale	11/29/2018	4/28/2026	4/28/2028	$80,400.00	$28,457.43	Purchase 2 Light-Duty, One Medium-Duty. Z	$51,942.57	No
ML18067	City of Pico Rivera	9/7/2018	11/6/2022	7/6/2025	$83,500.00	$0.00	Install EVSE	$83,500.00	No
ML18068	City of Mission Viejo	7/31/2019	6/30/2027		$125,690.00	$10,000.00	Purchase 2 Light-Duty ZEVs, Install EVSE &	$115,690.00	No
ML18069	City of Torrance	3/1/2019	7/31/2027		$187,400.00	$100,000.00	Purchase 4 Heavy-Duty Near-Zero Emission	$87,400.00	No
ML18078	County of Riverside	10/5/2018	10/4/2028		$375,000.00	$300,000.00	Purchase 15 Heavy-Duty Vehicles	$75,000.00	No
ML18080	City of Santa Monica	1/10/2019	12/9/2023	7/9/2025	$121,500.00	$14,748.62	Install EV Charging Stations	$106,751.38	No
ML18082	City of Los Angeles Bureau of Sanita	8/30/2019	8/29/2028		$900,000.00	$0.00	Purchase Medium-Duty Vehicles and EV Ch	$900,000.00	No
ML18083	City of San Fernando	11/2/2018	11/1/2022		$20,000.00	$0.00	Implement Traffic Signal Synchronization	$20,000.00	No
ML18084	City of South El Monte	10/18/2019	9/17/2023	9/17/2024	$30,000.00	$0.00	EV Charging Infrastructure	$30,000.00	No
ML18089	City of Glendora	7/19/2019	4/18/2025	4/18/2026	$50,760.00	$0.00	Purchase a medium-duty ZEV	$50,760.00	No
ML18091	City of Temecula	1/19/2019	7/18/2023		$141,000.00	$0.00	Install Sixteen EV Charging Stations	$141,000.00	No
ML18092	City of South Pasadena	2/1/2019	1/31/2025	4/30/2027	$50,000.00	$20,000.00	Procure Two Light-Duty ZEVs and Install EV	$30,000.00	No
ML18093	City of Monterey Park	2/1/2019	2/28/2026		$25,000.00	$0.00	Purchase Heavy-Duty Near-ZEV	$25,000.00	No
ML18094	City of Laguna Woods	7/12/2019	12/11/2024		$50,000.00	$0.00	Install Two EV Charging Stations	$50,000.00	No
ML18099	City of Laguna Hills	3/1/2019	5/31/2023		$32,250.00	$0.00	Install Six EV Charging Stations	$32,250.00	No
ML18100	City of Brea	10/29/2020	12/28/2024	7/28/2025	$56,500.00	$0.00	Install Twenty-Four Level II EV Charging Sta	$56,500.00	No
ML18101	City of Burbank	2/1/2019	4/30/2024	10/30/2024	$137,310.00	$0.00	Install Twenty EV Charging Stations	$137,310.00	No
ML18129	City of Yucaipa	12/14/2018	3/13/2023	3/13/2026	$63,097.00	$0.00	Install Six EV Charging Stations	$63,097.00	No
ML18132	City of Montclair	4/5/2019	9/4/2023		$40,000.00	$0.00	Install Eight EVSEs	$40,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18134	City of Los Angeles Dept of General	5/3/2019	5/2/2028		$290,000.00	$0.00	Purchase Five Medium-Duty ZEVs	$290,000.00	No
ML18135	City of Azusa	12/6/2019	12/5/2029		$55,000.00	$0.00	Purchase Three Light-Duty ZEVs and One H	$55,000.00	No
ML18136	City of Orange	4/12/2019	8/11/2024		$42,500.00	$40,000.00	Purchase Four Light-Duty ZEVs and Install	$2,500.00	No
ML18137	City of Wildomar	3/1/2019	5/31/2021	12/1/2022	$50,000.00	$0.00	Install Bicycle Trail	$50,000.00	No
ML18141	City of Rolling Hills Estates	2/14/2020	1/13/2024	1/13/2025	$40,000.00	$0.00	Purchase One Light-Duty ZEV and Install Tw	$40,000.00	No
ML18142	City of La Quinta	4/24/2019	2/23/2023	8/23/2023	$51,780.00	$0.00	Install Two EV Charging Stations	$51,780.00	No
ML18144	City of Fontana Public Works	10/4/2019	12/3/2023		$269,090.00	$0.00	Install Twelve EVSEs	$269,090.00	No
ML18145	City of Los Angeles Dept of Transpor	1/10/2020	4/9/2027		$1,400,000.00	$0.00	Provide One Hundred Rebates to Purchaser	$1,400,000.00	No
ML18146	City of South Gate	3/1/2019	11/30/2023	11/30/2025	$127,400.00	$50,000.00	Purchase Five Light-Duty ZEVs and Install T	$77,400.00	No
ML18147	City of Palm Springs	1/10/2019	1/9/2024	7/9/2026	$60,000.00	$0.00	Install Eighteen EV Charging Stations	$60,000.00	No
ML18148	City of San Dimas	1/21/2022	5/20/2023		$50,000.00	$0.00	Implement Bicycle Detection Measures	$50,000.00	No
ML18151	County of San Bernardino Departme	8/25/2020	10/24/2029		$200,000.00	$0.00	Purchase Eight Heavy-Duty Near Zero Emis	$200,000.00	No
ML18152	County of San Bernardino Flood Con	8/11/2020	10/10/2029		$108,990.00	$0.00	Purchase Five Heavy-Duty Near Zero Emissi	$108,990.00	No
ML18159	City of Rialto	12/13/2019	5/12/2024	5/12/2025	$135,980.00	$0.00	Purchase Nine Light-Duty ZEVs and EV Cha	$135,980.00	No
ML18161	City of Indio	5/3/2019	10/2/2025		$25,000.00	$25,000.00	Purchase 1 Light-Duty Zero Emission and E	$0.00	Yes
ML18163	City of San Clemente	3/8/2019	12/7/2024	12/7/2025	$85,000.00	$70,533.75	Purchase Four Light-Duty ZEVs and EV Cha	$14,466.25	No
ML18165	City of Baldwin Park	2/1/2019	1/30/2024		$49,030.00	$0.00	Expand CNG Station	$49,030.00	No
ML18166	City of Placentia	2/18/2021	5/17/2027		$25,000.00	$0.00	Purchase One Heavy-Duty Near-Zero Emiss	$25,000.00	No
ML18167	City of Beverly Hills	3/29/2019	6/28/2025		$50,000.00	$0.00	Purchase Two Heavy-Duty Near-Zero Emissi	$50,000.00	No
ML18168	City of Maywood	3/29/2019	11/28/2022		$7,059.00	$0.00	Purchase EV Charging Infrastructure	$7,059.00	No
ML18170	City of Laguna Niguel	1/10/2020	8/9/2028		$85,100.00	$0.00	Purchase Two Light-Duty ZEVs and EV Cha	$85,100.00	No
ML18172	City of Huntington Park	3/1/2019	2/28/2025		$65,450.00	$0.00	Purchase One Heavy-Duty ZEV	$65,450.00	No
ML18174	City of Bell	11/22/2019	7/21/2026		$25,000.00	$0.00	Purchase One Heavy-Duty ZEV	$25,000.00	No
ML18177	City of San Bernardino	6/7/2019	12/6/2026	12/6/2028	$279,088.00	$0.00	Purchase Medium- and Heavy-Duty Evs and	$279,088.00	No
ML18178	City of La Puente	11/1/2019	11/30/2025	11/30/2027	$25,000.00	$0.00	Purchase One Heavy-Duty Near-Zero Emiss	$25,000.00	No
MS18015	Southern California Association of G	7/13/2018	2/28/2021	5/31/2023	$2,000,000.00	$0.00	Southern California Future Communities Par	$2,000,000.00	No
MS18023	Riverside County Transportation Co	6/28/2018	6/27/2021	12/27/2022	$500,000.00	$384,345.12	Weekend Freeway Service Patrols	$115,654.88	No
MS18024	Riverside County Transportation Co	6/28/2018	8/27/2021	8/27/2023	$1,500,000.00	$723,860.00	Vanpool Incentive Program	$776,140.00	No
MS18027	City of Gardena	11/2/2018	9/1/2026	1/1/2028	$365,000.00	$0.00	Install New Limited Access CNG, Modify Mai	$365,000.00	No
MS18029	Irvine Ranch Water District	8/8/2018	10/7/2024		$185,000.00	$0.00	Install New Limited Access CNG Station & T	$185,000.00	No
MS18065	San Bernardino County Transportatio	3/29/2019	8/28/2023		$2,000,000.00	$2,000,000.00	Implement Metrolink Line Fare Discount Pro	$0.00	No
MS18073	Los Angeles County MTA	1/10/2019	2/9/2026		$2,000,000.00	$2,000,000.00	Purchase 40 Zero-Emission Transit Buses	$0.00	No
MS18106	R.F. Dickson Co., Inc.	7/19/2019	1/18/2026		$265,000.00	$250,000.00	Expansion of Existing Infrastructure/Mechani	$15,000.00	No
MS18108	Capistrano Unified School District	2/1/2019	5/30/2025		$116,000.00	$0.00	Expansion of Existing Infrastructure & Train	$116,000.00	No
MS18110	Mountain View Unified School Distric	2/1/2019	3/31/2025		$275,000.00	$0.00	Install New Limited-Access CNG Infrastructu	$275,000.00	No
MS18114	Los Angeles County Department of P	11/15/2019	11/14/2026		$175,000.00	$0.00	Install New Limited-Access CNG Infrastructu	$175,000.00	No
MS18115	City of Commerce	6/7/2019	12/6/2025		$275,000.00	$0.00	Expansion of Existing L/CNG Infrastructure	$275,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS18116	Los Angeles County Department of P	11/15/2019	11/14/2026		$175,000.00	$0.00	Install New Limited-Access CNG Infrastructu	$175,000.00	No
MS18118	City of Beverly Hills	3/29/2019	7/28/2025		$85,272.00	$0.00	Expansion of Existing CNG Infrastructure	$85,272.00	No
MS18122	Universal Waste Systems, Inc.	2/1/2019	3/31/2025	7/31/2027	$200,000.00	$0.00	Install New Limited Acess CNG Infrastructur	$200,000.00	No
MS18175	Regents of the University of Californi	6/7/2019	8/6/2025	8/6/2026	$1,000,000.00	$0.00	Expansion of Existing Hydrogen Station	$1,000,000.00	No
Total: 75									
Pending Execution Contracts									
MS18180	Omnitrans				$83,000.00	$0.00	Modify Vehicle Maintenance Facility and Trai	$83,000.00	No
MS18181	San Bernardino County Transportatio				$1,662,000.00	$0.00	Construct Hydrogen Fueling Station	$1,662,000.00	No
MS18182	Air Products and Chemicals Inc.				$1,000,000.00	$0.00	Install Publicly Accessible Hydrogen Fueling	$1,000,000.00	No
MS18183	Nikola-TA HRS 1, LLC				$1,660,000.00	$0.00	Install Publicly Accessible Hydrogen Fueling	$1,660,000.00	No
Total: 4									
Declined/Cancelled Contracts									
ML18044	City of Malibu	8/8/2018	10/7/2022	10/7/2023	$50,000.00	$0.00	Install EV Charging Infrastructure	$50,000.00	No
ML18075	City of Orange				$25,000.00	$0.00	One Heavy-Duty Vehicle	$25,000.00	No
ML18140	City of Bell Gardens	12/14/2018	12/13/2028		$50,000.00	$0.00	Purchase Two Heavy-Duty Near-ZEVs	$50,000.00	No
ML18149	City of Sierra Madre				$50,000.00	$0.00	Implement Bike Share Program	$50,000.00	No
ML18150	City of South El Monte				$20,000.00	$0.00	Implement Bike Share Program	$20,000.00	No
ML18153	City of Cathedral City	5/3/2019	4/2/2025		$52,215.00	$0.00	Install EV Charging Infrastructure	$52,215.00	No
ML18158	City of Inglewood				$146,000.00	$0.00	Purchase 4 Light-Duty Zero Emission, 4 Hea	$146,000.00	No
ML18164	City of Pomona				$200,140.00	$0.00	Purchase Three Heavy-Duty ZEVs	$200,140.00	No
MS18009	Penske Truck Leasing Co., L.P.	8/8/2018	12/7/2020		$82,500.00	$0.00	Modify Maintenance Facility & Train Technici	$82,500.00	No
MS18013	California Energy Commission				$3,000,000.00	$0.00	Advise MSRC and Administer Hydrogen Infr	$3,000,000.00	No
MS18017	City of Banning				$225,000.00	$0.00	Expansion of Existing CNG Infrastructure	$225,000.00	No
MS18018	City of Norwalk	6/8/2018	9/7/2019		$75,000.00	$0.00	Vehicle Maintenance Facility Modifications	$75,000.00	No
MS18107	Huntington Beach Union High School				$225,000.00	$0.00	Expansion of Existing Infrastructure	$225,000.00	No
MS18109	City of South Gate				$175,000.00	$0.00	Install New Limited-Access CNG Infrastructu	$175,000.00	No
MS18111	Newport-Mesa Unified School District				$175,000.00	$0.00	Expansion of Existing CNG Infrastructure	$175,000.00	No
MS18112	Banning Unified School District	11/29/2018	11/28/2024	11/28/2025	$275,000.00	$0.00	Install New CNG Infrastructure	$275,000.00	No
MS18113	City of Torrance				$100,000.00	$0.00	Expansion of Existing CNG Infrastructure	$100,000.00	No
MS18119	LBA Realty Company XI LP				$100,000.00	$0.00	Install New Limited-Access CNG Infrastructu	$100,000.00	No
MS18121	City of Montebello				$70,408.00	$0.00	Expansion of Existing CNG Infrastructure	$70,408.00	No
MS18184	Clean Energy				$1,000,000.00	$0.00	Install Publicly Accessible Hydrogen Fueling	$1,000,000.00	No
Total: 20									
Closed Contracts									
ML18021	City of Signal Hill	4/6/2018	1/5/2022		$49,661.00	$46,079.31	Install EV Charging Stations	$3,581.69	Yes
ML18022	City of Desert Hot Springs	5/3/2018	1/2/2020	1/2/2021	$50,000.00	$50,000.00	Traffic Signal and Synchronization Project	$0.00	Yes
ML18040	City of Agoura Hills	7/13/2018	6/12/2022		$17,914.00	$17,914.00	Install EV Charging Infrastructure	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18054	City of La Habra Heights	8/8/2018	4/7/2022		$9,200.00	$9,200.00	Purchase 1 L.D. ZEV	$0.00	Yes
ML18070	City of Lomita	11/29/2018	6/28/2022		$6,250.00	$6,250.00	Purchase 1 Light-Duty ZEV	$0.00	Yes
ML18088	City of Big Bear Lake	11/29/2018	8/28/2020	8/28/2021	$50,000.00	$50,000.00	Install Bicycle Trail	$0.00	Yes
ML18097	City of Temple City	11/29/2018	7/28/2022		$16,000.00	$12,000.00	Purchase Two Light-Duty ZEVs	$4,000.00	Yes
ML18126	City of Lomita	12/7/2018	1/6/2020		$26,500.00	$13,279.56	Install bicycle racks and lanes	$13,220.44	Yes
ML18139	City of Calimesa	8/30/2019	7/29/2020	11/29/2021	$50,000.00	$50,000.00	Install Bicycle Lane	$0.00	Yes
ML18179	City of Rancho Mirage	8/20/2021	2/19/2022		$50,000.00	$50,000.00	Traffic Signal Synchronization	$0.00	Yes
MS18001	Los Angeles County MTA	6/29/2017	4/30/2018		$807,945.00	$652,737.07	Provide Clean Fuel Transit Service to Dodge	$155,207.93	Yes
MS18002	Southern California Association of G	6/9/2017	11/30/2018	12/30/2021	$2,500,000.00	$2,276,272.46	Regional Active Transportation Partnership	$223,727.54	Yes
MS18003	Geographics	2/21/2017	2/20/2021	6/20/2021	$72,453.00	$65,521.32	Design, Host and Maintain MSRC Website	$6,931.68	Yes
MS18004	Orange County Transportation Autho	8/3/2017	4/30/2019		$503,272.00	$456,145.29	Provide Special Rail Service to Angel Stadiu	$47,126.71	Yes
MS18005	Orange County Transportation Autho	1/5/2018	4/30/2019		$834,222.00	$834,222.00	Clean Fuel Bus Service to OC Fair	$0.00	Yes
MS18006	Anaheim Transportation Network	10/6/2017	2/28/2020		$219,564.00	$9,488.22	Implement Anaheim Circulator Service	$210,075.78	Yes
MS18008	Foothill Transit	1/12/2018	3/31/2019		$100,000.00	$99,406.61	Special Transit Service to LA County Fair	$593.39	Yes
MS18010	Southern California Regional Rail Aut	12/28/2017	7/31/2019		$351,186.00	$275,490.61	Implement Special Metrolink Service to Unio	$75,695.39	Yes
MS18011	Southern California Regional Rail Aut	2/9/2018	6/30/2018		$239,565.00	$221,725.12	Special Train Service to Festival of Lights	$17,839.88	Yes
MS18014	Regents of the University of Californi	10/5/2018	12/4/2019	3/4/2020	$254,795.00	$251,455.59	Planning for EV Charging Infrastructure Inve	$3,339.41	Yes
MS18016	Southern California Regional Rail Aut	1/10/2019	3/31/2019		$87,764.00	$73,140.89	Special Train Service to Auto Club Speedwa	$14,623.11	Yes
MS18025	Los Angeles County MTA	11/29/2018	5/31/2019		$1,324,560.00	$961,246.86	Special Bus and Train Service to Dodger Sta	$363,313.14	Yes
MS18102	Orange County Transportation Autho	10/4/2019	5/31/2020		$1,146,000.00	$1,146,000.00	Implement OC Flex Micro-Transit Pilot Proje	$0.00	Yes
MS18103	Orange County Transportation Autho	2/8/2019	9/7/2020		$642,000.00	$613,303.83	Install Hydrogen Detection System	$28,696.17	Yes
MS18104	Orange County Transportation Autho	2/21/2020	3/31/2021	3/31/2022	$212,000.00	$165,235.92	Implement College Pass Transit Fare Subsid	$46,764.08	Yes
MS18105	Southern California Regional Rail Aut	1/10/2019	6/30/2019		$252,696.00	$186,830.04	Special Train Service to the Festival of Light	$65,865.96	Yes
Total: 26									
Closed/Incomplete Contracts									
ML18133	City of Rancho Mirage	12/7/2018	11/6/2020		$50,000.00	$0.00	Traffic Signal Synchronization	$50,000.00	No
MS18026	Omnitrans	10/5/2018	1/4/2020		$83,000.00	$0.00	Modify Vehicle Maintenance Facility and Trai	$83,000.00	No
Total: 2									
Open/Complete Contracts									
ML18019	City of Hidden Hills	5/3/2018	5/2/2022	5/2/2023	$49,999.00	$49,999.00	Purchase Two Light-Duty ZEVs and EVSE	$0.00	Yes
ML18020	City of Colton	5/3/2018	4/2/2024	4/2/2027	$67,881.00	$67,881.00	Purchase One Medium-Duty and One Heavy	$0.00	Yes
ML18028	City of Artesia	6/28/2018	3/27/2025		$50,000.00	$50,000.00	Install EVSE	$0.00	Yes
ML18032	City of Arcadia	2/1/2019	4/30/2025		$24,650.00	$24,650.00	Purchase 1 Heavy-Duty Near-ZEV	$0.00	Yes
ML18033	City of Duarte	8/8/2018	2/7/2025		$50,000.00	$50,000.00	Purchase 1-HD ZEV	$0.00	Yes
ML18034	City of Calabasas	6/8/2018	3/7/2022	3/7/2023	$50,000.00	$50,000.00	Install EVSE	$0.00	Yes
ML18035	City of Westlake Village	8/8/2018	11/7/2022		$50,000.00	$50,000.00	Install EVSE	$0.00	Yes
ML18037	City of Westminster	6/28/2018	6/27/2024	12/27/2026	$120,900.00	$120,900.00	Install EVSE, Purchase up to 3-LD ZEV & 1-	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18038	City of Anaheim	10/5/2018	5/4/2025	5/4/2026	$151,630.00	$147,883.27	Purchase 5 Light-Duty ZEVs and Install EVS	$3,746.73	Yes
ML18039	City of Redlands	6/28/2018	7/27/2024	1/27/2025	$63,191.00	$63,190.33	Purchase 1 Medium/Heavy-Duty ZEV and In	$0.67	Yes
ML18042	City of San Fernando	6/28/2018	2/27/2024		$10,000.00	$10,000.00	Purchase 1 Light-Duty ZEV	$0.00	Yes
ML18043	City of Yorba Linda	9/7/2018	12/6/2023	12/6/2024	$87,990.00	$87,990.00	Install EV Charging Infrastructure	$0.00	Yes
ML18045	City of Culver City Transportation De	6/28/2018	6/27/2025		$51,000.00	$51,000.00	Purchase Eight Near-Zero Vehicles	$0.00	Yes
ML18048	City of Lynwood	6/28/2018	10/27/2024		$93,500.00	$44,505.53	Purchase Up to 3 Medium-Duty Zero-Emissi	$48,994.47	Yes
ML18049	City of Downey	7/6/2018	5/5/2023		$148,260.00	$148,116.32	Install EV Charging Stations	$143.68	Yes
ML18052	City of Garden Grove	8/8/2018	10/7/2022		$53,593.00	$46,164.28	Purchase 4 L.D. ZEVs and Infrastructure	$7,428.72	Yes
ML18056	City of Chino	3/29/2019	9/28/2023		$103,868.00	$103,868.00	Install EV Charging Infrastructure	$0.00	Yes
ML18061	City of Moreno Valley	4/9/2019	2/8/2025		$25,000.00	$25,000.00	Purchase 1 Heavy-Duty Near-ZEV	$0.00	Yes
ML18062	City of Beaumont	8/8/2018	9/7/2024		$25,000.00	$25,000.00	Purchase 1 Heavy-Duty Near-ZEV	$0.00	Yes
ML18071	City of Chino Hills	9/7/2018	10/6/2022		$20,000.00	$20,000.00	Purchase 2 Light-Duty ZEVs	$0.00	Yes
ML18072	City of Anaheim	12/18/2018	11/17/2026		$239,560.00	$239,560.00	Purchase 9 Light-Duty ZEVs & 2 Med/Hvy-D	$0.00	Yes
ML18074	City of Buena Park	12/14/2018	6/13/2026		$107,960.00	$107,960.00	EV Charging Infrastructure	$0.00	Yes
ML18076	City of Culver City Transportation De	10/5/2018	10/4/2023		$1,130.00	$1,130.00	Purchase Light-Duty ZEV	$0.00	Yes
ML18077	City of Orange	11/2/2018	10/1/2022		$59,776.00	$59,776.00	Four Light-Duty ZEV and EV Charging Infras	$0.00	Yes
ML18079	City of Pasadena	12/7/2018	11/6/2023		$183,670.00	$183,670.00	EV Charging Infrastructure	$0.00	Yes
ML18081	City of Beaumont	10/5/2018	10/4/2022	10/4/2025	$31,870.00	$31,870.00	EV Charging Infrastructure	$0.00	Yes
ML18085	City of Orange	4/12/2019	10/11/2026		$50,000.00	$50,000.00	Purchase Two Heavy-Duty Near-Zero Emissi	$0.00	Yes
ML18086	City of Los Angeles Bureau of Street	2/8/2019	4/7/2023		$300,000.00	$300,000.00	Install Sixty EV Charging Stations	$0.00	Yes
ML18087	City of Murrieta	3/29/2019	3/28/2025		$143,520.00	$143,520.00	Install Four EV Charging Stations	$0.00	Yes
ML18090	City of Santa Clarita	5/9/2019	2/8/2023	2/8/2024	$122,000.00	$118,978.52	Install Nine EV Charging Stations	$3,021.48	Yes
ML18095	City of Gardena	11/9/2018	12/8/2024		$25,000.00	$25,000.00	Purchase Heavy-Duty Near-ZEV	$0.00	Yes
ML18096	City of Highland	12/13/2019	8/12/2024		$10,000.00	$9,918.84	Purchase Light-Duty Zero Emission Vehicle	$81.16	Yes
ML18098	City of Redondo Beach	2/1/2019	3/31/2023	3/31/2025	$89,400.00	$89,400.00	Install Six EV Charging Stations	$0.00	Yes
ML18127	City of La Puente	2/1/2019	2/28/2023		$10,000.00	$7,113.70	Purchase Light-Duty Zero Emission Vehicle	$2,886.30	Yes
ML18128	City of Aliso Viejo	8/30/2019	11/29/2023		$65,460.00	$65,389.56	Purchase Two Light-Duty ZEVs and Install S	$70.44	Yes
ML18130	City of Lake Forest	3/1/2019	9/30/2022		$106,480.00	$106,480.00	Install Twenty-One EVSEs	$0.00	Yes
ML18131	City of Los Angeles, Police Departm	5/3/2019	12/2/2022		$19,294.00	$19,294.00	Purchase Three Light-Duty ZEVs	$0.00	Yes
ML18138	City of La Canada Flintridge	2/8/2019	5/7/2023		$50,000.00	$32,588.07	Install Four EVSEs and Install Bicycle Racks	$17,411.93	Yes
ML18143	City of La Habra	10/18/2019	9/17/2025	9/17/2027	$80,700.00	$80,700.00	Install Two EV Charging Stations	$0.00	Yes
ML18154	City of Hemet	11/22/2019	9/21/2023	3/21/2024	$30,000.00	$30,000.00	Purchase Two Light-Duty ZEVs and EV Cha	$0.00	Yes
ML18155	City of Claremont	7/31/2019	9/30/2023		$35,609.00	$35,608.86	Install EV Charging Infrastructure	$0.14	Yes
ML18156	City of Covina	2/1/2019	3/31/2023	12/31/2023	$63,800.00	$62,713.00	Purchase Four Light-Duty ZEVs and EV Cha	$1,087.00	Yes
ML18157	City of Los Angeles Bureau of Street	6/21/2019	5/20/2027		$85,000.00	$85,000.00	Purchase One Medium-Duty ZEV	$0.00	Yes
ML18160	City of Irwindale	3/29/2019	12/28/2022		$14,263.00	$14,263.00	Purchase Two Light-Duty ZEVs	$0.00	Yes
ML18162	City of Costa Mesa	1/10/2020	7/9/2026		$148,210.00	$148,210.00	Purchase Three Light-Duty ZEVs and EV Ch	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18169	City of Alhambra	6/14/2019	8/13/2024		$111,980.00	$111,980.00	Install EV Charging Infrastructure	$0.00	Yes
ML18171	City of El Monte	3/1/2019	4/30/2025		$68,079.00	$68,077.81	Purchase One Heavy-Duty ZEVs and EV Ch	$1.19	Yes
ML18173	City of Manhattan Beach	3/29/2019	2/28/2023		$49,000.00	$49,000.00	Purchase Two Light-Duty ZEVs and EV Cha	$0.00	Yes
ML18176	City of Coachella	3/1/2019	11/30/2024		$58,020.00	$58,020.00	Install EV Charging Stations	$0.00	Yes
MS18012	City of Hermosa Beach	2/2/2018	2/1/2024		$36,000.00	$36,000.00	Construct New Limited-Access CNG Station	$0.00	Yes
MS18066	El Dorado National	12/6/2019	2/5/2026		$100,000.00	$100,000.00	Install New Limited-Access CNG Station	$0.00	Yes
MS18117	City of San Bernardino	6/7/2019	11/6/2025		$240,000.00	$240,000.00	Expansion of Existing CNG Infrastructure/Me	$0.00	Yes
MS18120	City of Redondo Beach	2/1/2019	9/30/2025		$275,000.00	$275,000.00	Install New Limited-Access CNG Infrastructu	$0.00	Yes
MS18123	City Rent A Bin DBA Serv-Wel Dispo	12/14/2018	2/13/2025		$200,000.00	$200,000.00	Install New Limited-Access CNG Infrastructu	$0.00	Yes
MS18124	County Sanitation Districts of Los An	7/31/2019	2/28/2027		$275,000.00	$275,000.00	Install New Limited-Access CNG Infrastructu	$0.00	Yes
MS18125	U.S. Venture	5/9/2019	8/8/2025		$200,000.00	$200,000.00	Install New Limited-Access CNG Infrastructu	$0.00	Yes

Total: 56

FY 2018-2021 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
MS21002	Better World Group Advisors	11/1/2019	12/31/2022		$265,079.00	$133,633.35	Programmatic Outreach Services	$131,445.65	No
MS21004	Los Angeles County MTA	1/7/2021	5/31/2023		$2,188,899.00	$0.00	Clean Fuel Bus Service to Dodger Stadium	$2,188,899.00	No
MS21005	Southern California Association of G	5/5/2021	1/31/2024		###########	$0.00	Implement Last Mile Goods Movement Progr	###########	No
MS21006	Geographics	4/1/2021	6/20/2023		$12,952.00	$5,105.00	Hosting & Maintenance of the MSRC Websit	$7,847.00	No
MS21007	Penske Truck Leasing Co., L.P.	4/1/2022	3/31/2028		$1,000,000.00	$0.00	Deploy 5 Zero-Emission Yard Tractors	$1,000,000.00	No
MS21009	ITS Technologies & Logistics, LLC	7/15/2022	7/14/2028		$1,686,900.00	$0.00	Deploy 12 Zero-Emission Yard Tractors	$1,686,900.00	No
MS21010	MHX, LLC	9/29/2021	1/28/2028		$569,275.00	$0.00	Deploy One Zero-Emission Overhead Crane	$569,275.00	No
MS21011	RDS Logistics Group	1/21/2022	7/20/2028		$808,500.00	$0.00	Deploy 3 Zero-Emission Yard Tractors and	$808,500.00	No
MS21013	4 Gen Logistics	3/27/2022	5/26/2028		$7,000,000.00	$0.00	Deploy 40 Zero Emssion Trucks	$7,000,000.00	No
MS21014	Green Fleet Systems, LLC	8/31/2021	8/30/2027		$500,000.00	$0.00	Deploy up to 5 Near Zero Emission Trucks	$500,000.00	No
MS21015	Premium Transportation Services, In	9/22/2021	5/21/2027		$1,500,000.00	$0.00	Deploy up to 15 Near-Zero Emissions Truck	$1,500,000.00	No
MS21017	MHX, LLC	9/29/2021	9/28/2030		$1,900,000.00	$0.00	Deploy up to 10 Zero-Emission Trucks & Infr	$1,900,000.00	No
MS21018	Pac Anchor Transportation, Inc.	8/17/2021	8/16/2027		$2,300,000.00	$0.00	Deploy up to 23 Near Zero Emission Trucks	$2,300,000.00	No
MS21019	Volvo Financial Services	3/31/2022	3/30/2030		$3,930,270.00	$0.00	Lease up to 14 Zero-Emission Trucks and Pr	$3,930,270.00	No
MS21023	BNSF Railway Company	4/22/2022	4/21/2028		$1,313,100.00	$0.00	Install EV Charging Infrastructure	$1,313,100.00	No
Total: 15									
Pending Execution Contracts									
MS21012	Amazon Logistics, Inc.				$4,157,710.00	$0.00	Deploy up to 10 Zero-Emission and 100 Nea	$4,157,710.00	No
MS21016	Ryder Integrated Logistics, Inc.				$3,169,746.00	$0.00	Procure Two Integrated Power Centers and	$3,169,746.00	No
MS21025	Costco Wholesale				$160,000.00	$0.00	Install EV Charging Infrastructure	$160,000.00	No
Total: 3									
Declined/Cancelled Contracts									
MS21008	CMA CGM (America) LLC				$3,000,000.00	$0.00	Deploy 2 Zero-Emission Rubber Tire Gantry	$3,000,000.00	No
MS21020	Sea-Logix, LLC				$2,300,000.00	$0.00	Deploy up to 23 Near-Zero Emssions Trucks	$2,300,000.00	No
MS21021	CMA CGM (America) LLC				$1,946,463.00	$0.00	Deploy up to 13 Near Zero Emission Trucks	$1,946,463.00	No
MS21022	Orange County Transportation Autho				$289,054.00	$0.00	Implement Special Transit Service to the Or	$289,054.00	No
Total: 4									
Closed Contracts									
MS21001	Los Angeles County MTA	8/30/2019	7/29/2020		$1,148,742.00	$285,664.87	Implement Special Transit Service to Dodger	$863,077.13	Yes
MS21003	Orange County Transportation Autho	7/8/2020	5/31/2021		$468,298.00	$241,150.48	Provide Express Bus Service to the Orange	$227,147.52	Yes
Total: 2									

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 28

REPORT: California Air Resources Board Monthly Meeting

SYNOPSIS: The California Air Resources Board held a meeting on August 25, 2022. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Gideon Kracov, Member
South Coast AQMD Governing Board

ft

The California Air Resources Board (CARB or Board) held a public meeting on August 25, 2022 in Sacramento, California at the California Environmental Protection Agency Headquarters Building. The key items presented are summarized below.

DISCUSSION ITEMS

22-10-1: Public Hearing to Consider the Proposed Advanced Clean Cars II Regulations

The Board adopted the Advanced Clean Cars II Regulations (ACCII) which amended a suite of regulations and test procedures under the umbrella of the Low Emission Vehicle (LEV) and Zero Emission Vehicle (ZEV) regulatory programs. Mobile sources are the greatest contributor to emissions of criteria pollutants and greenhouse gases (GHG) in California, accounting for about 80 percent of ozone precursor emissions and approximately 50 percent of statewide GHG emissions. Amendments to the LEV portion of ACCII include new requirements for internal combustion engine vehicles which will ensure emissions of these vehicles are reduced under real-world operating conditions. The ZEV element of ACCII accelerates requirements for automakers to deliver an increasing number of zero-emission light-duty vehicles each year beginning in model year 2026. In that year, 35% of new light-duty vehicle sales in California must be ZEVs and plug-in electric hybrid vehicles (PHEVs), increasing to 68% in 2030. By 2035, ACCII will require nearly 100% of new light-duty vehicle sales in California be ZEVs and the cleanest-possible plug-in hybrid-electric vehicles as directed by Governor Newsom's Executive Order N-79-20. In addition, ACCII will require battery-electric and fuel cell vehicles have a minimum range of 150 miles, have fast-charging ability, come equipped with a charging cord to facilitate charging, and meet new warranty and durability requirements.

22-10-2: Public Meeting to Consider Assembly Bill 617 Community Air Protection Program - South Los Angeles Community Emissions Reduction Program

The Board adopted the South Los Angeles Community Emissions Reduction Plan (SLACERP) and directed CARB staff to work with the South Coast Air Quality Management District (South Coast AQMD) to take additional actions to strengthen implementation of the SLACERP. The South Coast AQMD, with the co-leadership of Physicians for Social Responsibility-Los Angeles, Strategic Concepts in Organizing and Policy Education, and Watts Clean Air and Energy, worked with the South Los Angeles Community Steering Committee to develop the SLACERP to reduce emissions and exposure to air pollution in the community. CARB staff reviewed the SLACERP and determined it meets the criteria established in Assembly Bill 617 (AB 617) (C. Garcia, Stats. 2017, ch. 136) and CARB's Community Air Protection Program Blueprint, reflects community priorities, and is likely to reduce emissions and exposure to air pollution in the community. The CARB Staff Report also identified specific actions for SCAQMD and CARB staff to take, in collaboration with the Community Steering Committee, to strengthen implementation in two key areas: refining details in the SLACERP and ensuring continued collaboration amongst the different stakeholder groups.

South Coast AQMD Staff Comments/Testimony: Staff presented an overview of the Assembly Bill (AB) 617 South Los Angeles (SLA) Community Emissions Reduction Plan (CERP). Key highlights of the staff presentations included the SLA CERP development process, community identified air quality priorities, strategies to address these air quality priorities, estimated emissions reductions, and overall AB 617 program highlights and challenges. Staff responded to comments on emissions reduction strategies. The CARB Board directed South Coast AQMD and CARB staffs to continue implementing CERP actions to reduce emissions and exposure to air pollution in SLA and to provide updates in annual reports.

Attachment
CARB August 25, 2022 Meeting Agenda

www.arb.ca.gov/ma082522

CALIFORNIA AIR RESOURCES BOARD

Public Meeting Agenda

Thursday, August 25, 2022

California Environmental Protection Agency
1001 I Street, Sacramento, California 95814
Byron Sher Auditorium, 2nd Floor

Webcast (Livestream/Watch Only)
Zoom Webinar Register Here

Phone Number: (669) 900-6833
Webinar ID: 839 8167 7287

The August 25, 2022, meeting of the California Air Resources Board (CARB or Board) will be held at 1001 I Street in Sacramento, with remote participation available to the public and Board members in accordance with *Senate Bill 189* (Gov. Code § 11133). This facility is accessible to persons with disabilities and by public transit. For transit information, call (916) 321-BUSS (2877) or visit *http://sacrt.com/.*

To only watch the Board Meeting and not provide verbal comments, please view the ***webcast***. If you do not wish to provide verbal comments, we strongly recommend watching the webcast as this will free up space on the webinar for those who are providing verbal comments. Please do not view the webcast and then switch over to the webinar to comment as the webcast will have a time delay; instead, register to participate via the Zoom webinar.

Public Comment Guidelines and Information

- *In-Person Public Testimony* ***(NEW)***
- *Remote Public Participation* ***(UPDATED)***

In-person speakers signed up to comment will be called upon first, followed by public Zoom and phone participants wishing to comment.

The Chair will close speaker sign-ups 30 minutes after the public comment portion of an item has begun.

Spanish interpretation will be available for the August 25 Board Meeting.

- *Agenda de la Reunión Pública* – Coming Soon
- *Spanish Webcast*

Thursday, August 25, 2022 @ 9:00 a.m.

Discussion Items:

The following agenda items may be heard in a different order at the Board meeting.

Hardcopies of the Public Agenda and Proposed Resolutions (when applicable) will be provided at the meeting; all other documents linked below will only be available upon request.

22-10-1: Public Hearing to Consider the Proposed Advanced Clean Cars II Regulations

The Board will consider the proposed Advanced Clean Cars II Regulations. This is the second of two Board hearings on this item. The Board will also consider certifying the Final Environmental Analysis and approving the written response to comments received on the Draft Environmental Analysis. If adopted, the regulations will be submitted to the United States Environmental Protection Agency for approval as a revision to the California state implementation plan required by the federal Clean Air Act.

- Formal Rulemaking Page
- Item Summary
- Meeting Presentation
- Proposed Resolution
- Submit Written Comments
- View Public Comments

The following item will not be heard prior to 4:00 p.m.

22-10-2: Public Meeting to Consider Assembly Bill 617 Community Air Protection Program - South Los Angeles Community Emissions Reduction Program

The Board will consider the South Los Angeles Community Emissions Reduction Program as required by Assembly Bill 617 and will also consider invoking a California Environmental Quality Act exemption in connection with its action.

- More Information
- Staff Report
- Public Meeting Notice
- Item Summary
- Meeting Presentation
- Proposed Resolution
- Submit Written Comments
- View Public Comments

Closed Session

The Board may hold a closed session, as authorized by Government Code section 11126(a)(1), and as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation:

Alliance for California Business v. California State Transportation Agency, et al., Sacramento County Superior Court, Case No. 34-2016-80002491.

American Lung Association, et al. v. United States Environmental Protection Agency, et al. (D.C. Cir. 2021) 985 F.3d 914, *cert. granted sub nom. Westmoreland Mining Holdings v. EPA* (U.S., Oct. 29, 2021, No. 20-1778).

Best Energy Solutions & Technology Corp., et al v. California Air Resources Board, et al., Kern County Superior Court, Case No. BCV-20-102198.

California v. Stout, et al., United States District Court, Central District of California, Case No. 2:20-cv-00371.

California v. Wheeler, et al., United States Court of Appeals, District of Columbia Circuit, Case No. 19-1239.

California, et al. v. United States Environmental Protection Agency, United States Court of Appeals for the District of Columbia Circuit, Case No. 21-1024.

California, et al. v. United States Environmental Protection Agency, et al., United States Court of Appeals, District of Columbia Circuit, Case No. 21-1014.

California Natural Gas Vehicle Coalition v. California Air Resources Board, et al., Fresno County Superior Court, Case No. 20CECG02250.

Clean Energy Renewable Fuels, LLC v. California Air Resources Board, Orange County Superior Court, Case No. 30-2020-01167039-CU-WM-CJC.

Competitive Enterprise Inst. v. NHTSA, United States Court of Appeals, District of Columbia Circuit, Case No. 20-1145 (consolidated with No. 20-1167).

Environmental Defense Fund, et al., v. Andrew Wheeler, et al., United States Court of Appeals, District of Columbia Circuit, Case No. 20-1360.

Friends of Oceano Dunes, Inc. v. California Coastal Commission, et al., U.S. District Court for the Central District of California, Case No. 2:17-cv-8733.

South Coast Air Quality Management District v. City of Los Angeles, et al., Los Angeles County Superior Court, Case No. 20STCP02985.

State of California v. United States Environmental Protection Agency, United States Court of Appeals, District of Columbia Circuit, Case No. 18-1096.

State of California v. Wheeler et. al., District of Columbia Circuit, Case No. 19-1239, consolidated under No. 19-1230 along with Nos. 19-1241, 19-1242, 19-1243, 19-1245, 19-1246, and 19-1249.

State of California, et al., v. Andrew Wheeler, et al., United States Court of Appeals, District of Columbia Circuit, Case No. 20-1359.

State of California, et al. v. David Bernhardt, et al., United States District Court, Northern District of California, Case No. 3:18-cv-5712-DMR; United States Court of Appeals, Ninth Circuit, Case No. 20-16793.

State of California, et al. v. United States Environmental Protection Agency, United States Court of Appeals, District of Columbia Circuit, Case No. 21-1018.

State of New York, et al. v. United States Environmental Protection Agency, United States Court of Appeals, District of Columbia Circuit, Case No. 21-1026.

State of New York, et al. v. United States Environmental Protection Agency, et al., United States Court of Appeals, District of Columbia Circuit, Case No. 21-1028.

State of Massachusetts v. EPA, United States Court of Appeals, District of Columbia Circuit, Case No. 20-1265.

State of New York, et al. v. Andrew Wheeler and the United States Environmental Protection Agency, U.S. District Court, District of Columbia, Case No. 1:18-cv-00773.

State of North Dakota v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1381.

State of North Dakota, et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 16-1242.

State of Wyoming, et al. v. United States Department of the Interior, et al., U.S. District Court, District of Wyoming, Case No. 16-CV-285-SWS; United States Court of Appeals, Tenth Circuit, Case No. 20-8073.

*Truck Trailer Manufacturers Association, Inc. v. United States Environmental Protection Agency, et al., U.S. Court of Appeals, D*istrict of Columbia Circuit, Case No. 16-1430.

People v. Southern California Gas Company, Los Angeles Superior Court, Case No. BC 602973.

The Two Hundred, et al. v. California Air Resources Board, et al., Fresno County Superior Court, Case No. 18CECG01494.

Western States Petroleum Association v. California Air Resources Board, Los Angeles County Superior Court, Case No. 20STCP03138x.

Westmoreland Mining v. EPA, United States Court of Appeals, District of Columbia Circuit, Case No. 20-1160.

W.O. Stinson & Son LTD. v. Western Climate Initiative, Inc., Ontario Canada Superior Court, Case No. CV-20-00083726-0000.

Opportunity for Members of the Board to Comment on Matters of Interest

Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.

Open Session to Provide an Opportunity for Members of the Public to Address the Board on Subject Matters within the Jurisdiction of the Board

Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but that do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak. The public will also have an opportunity to submit written comments for open session the morning of the Board Meeting.

Other Information

Submit Comments Electronically the Day of the Board Meeting

View Submitted Comments

Please Note: PowerPoint presentations to be displayed during public comment at the Board meeting must be electronically submitted via email to the Clerks' Office at *cotb@arb.ca.gov* no later than noon on the business day prior to the scheduled Board meeting.

If you have any questions, please contact the Clerks' Office:

1001 I Street, 23rd Floor, Sacramento, California 95814
cotb@arb.ca.gov or (916) 322-5594
CARB Homepage: *www.arb.ca.gov*

Special Accommodation Request

Consistent with California Government Code section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerks' Office at *cotb@arb.ca.gov* or at (916) 322-5594 as soon as possible, but no later than 7 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Acomodación Especial

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia;
- Documentos disponibles en un formato alterno u otro idioma;
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor contacte la oficina del Consejo al (916) 322-5594 o por correo electronico al *cotb@arb.ca.gov* lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 30

PROPOSAL: Determine That Proposed Amendments to BACT Guidelines Are Exempt from CEQA and Amend BACT Guidelines

SYNOPSIS: This item is to add new and amended listings to South Coast AQMD's BACT Guidelines. Periodically, after consultation with stakeholders through the BACT Scientific Review Committee, staff proposes amendments to the BACT Guidelines to make them consistent with recent changes to South Coast AQMD rules and regulations as well as state requirements. Staff is proposing to add new and amended listings to Part B: Lowest Achievable Emission Rate Determinations for Major Polluting Facilities, Part D: BACT Determinations for Non-Major Polluting Facilities and to update the Overview, Parts A and C: Policy for Major and Non-Major Polluting Facilities, respectively.

COMMITTEE: Stationary Source, June 17, 2022; Recommended for Approval

RECOMMENDED ACTIONS:
1. Determine the proposed amendments to the BACT Guidelines are exempt from the requirements of the California Environmental Quality Act; and
2. Amend the BACT Guidelines.

Wayne Nastri
Executive Officer

JA:JW:BC:BF

Background

Under Regulation XIII – New Source Review BACT is required for new, relocated, and modifications to existing permitted sources that may result in an emission increase of any nonattainment air contaminant or any ozone depleting compound. Regulation XIII also requires the Executive Officer to periodically publish BACT Guidelines that establish the procedures and the requirements for applying BACT to commonly permitted equipment.

The BACT Guidelines include an Overview, which provides an introduction to the BACT Guidelines and a summary of how BACT and LAER are implemented in the South Coast AQMD, and a technical portion separated into three parts: major polluting facilities (Parts A and B), non-major polluting facilities (Parts C and D), and facilities subject to prevention of significant deterioration (PSD) for GHGs (Parts E and F). A facility is a major polluting facility if it emits, or has the potential to emit, a criteria air pollutant at a level that equals or exceeds the emission thresholds in South Coast AQMD's Regulation XXX – Title V Permits. Major polluting facilities that are subject to NSR are required by the federal Clean Air Act (CAA) to have the Lowest Achievable Emission Rate (LAER). South Coast AQMD implements the federal CAA requirement for LAER using BACT determinations that are incorporated in the BACT Guidelines.

In accordance with Health and Safety Code Section 40440.11, in updating Part D with new, more stringent minor source BACT (MSBACT), South Coast AQMD must follow a more rigorous process than for major polluting facilities, including a cost-effectiveness analysis, notification to the public, presentation at the BACT Scientific Review Committee (SRC) meeting, and Board approval. GHG BACT applies to new or modified facilities subject to PSD requirements for GHG. In general, GHG BACT determinations are project specific with a focus on options that improve energy efficiency.

Proposed Amendments to the BACT Guidelines

The proposed amendments are to update the Overview, Parts A, B, C, and D of the BACT Guidelines and to maintain consistency with recent changes to South Coast AQMD rules and state requirements. No amendments are proposed to Parts E and F.

Staff is proposing to add a section to Overview, Part A, and Part C describing the November 2021 amendments to Rule 1304 - Exemptions which provided a limited BACT exemption for new or modified permit unit located at RECLAIM or former RECLAIM facilities for PM10 and SOx emission increases associated with the installation or modification of add-on air pollution control equipment for controlling NOx emissions to comply with BARCT emission limits for NOx.

In accordance with the BACT Guidelines policy, staff is proposing to update the Maximum Cost-Effectiveness values consistent with the second quarter 2022 Marshall and Swift equipment index. Details regarding the proposed amendments to the Overview, Part A and Part C is included in Attachment A and the complete proposed amended Overview, Part A and Part C is included in Attachment B, C and E, respectively.

The proposed LAER determinations for Major Polluting Facilities (Part B) are summarized in Table 1 below with the complete proposed determinations included in Attachment D. The other portions of Part B are not included in this Board package because they are not being updated at this time.

Table 1 – Summary of Proposed Part B LAER Determinations

Equipment Category	Current LAER Limit	Proposed LAER Limit
Boiler, Fire-Tube, Natural Gas Fired <20 MMBTU/HR	NOx: 12 ppmv @ 3% O_2 dry	NOx: 7 ppmv @ 3% O_2 dry
Rotary Dryer, Aggregate Facility	NOx: 33 ppmv @ 3% O_2 dry	NOx: 33 ppmv @ 3% O_2 dry
Roller Coater – Paper and Film, with RTO	RTO overall control eff.: 95%	RTO overall control eff.: 97%
I.C. Engine – Stationary, Non-Emergency with SCR, NG Fired	Not established	Ammonia Slip: 10 ppm @ 15% O_2
Fumigation – Methyl Bromide Fumigation Chamber ≥ 100,000 lbs CH_3Br/year	Not established	Carbon Adsorption and Chemical Scrubber overall control eff.: 86%
I.C. Engine – Compression Ignition ≥1,000 BHP, Stationary Emergency	U.S. EPA' s Tier 2 emissions standards	U.S. EPA' s Tier 4 Final emissions standards

The proposed BACT Determinations for Non-Major Polluting Facilities (Part D) are summarized in Table 2 below with the complete proposed determinations included in Attachment F. All proposed Part D amendments and updates, except for the proposed new I.C. Engine – Stationary, Non-Emergency listing, will not result in more stringent requirements than would otherwise occur through current SIP-approved rule compliance, which constitutes MSBACT under Part C – Policy Guidance. The proposed amendments comply with the requirements of Health and Safety Code Section 40440.11.

Table 2 – Summary of Proposed Part D BACT Determinations

Equipment Category	Current BACT Limit	Proposed BACT Limit
I.C. Engine – Stationary, Non-Emergency, Electrical with SCR, NG Fired	Not established	Ammonia Slip: 10 ppm @ 15% O_2
Updated Listings		
Composting	Relist the applicability of BACT based on the annual capacity of the unit	
I.C. Engine, Stationary, Emergency	Add the diesel PM requirement for a sensitive receptor	
Open Process Tanks: Chemical Milling (Etching) and Plating	Relist "Chemical Milling Tanks" which was omitted in the last revision	
Printing (Graphic Arts)	Add “Compliance with BACT requirements for Other Dryers and Ovens” for NOx emissions	

Health and Safety Code Section 40440.11
In amending the BACT Guidelines for non-major polluting facilities to be more stringent, South Coast AQMD must comply with Health and Safety Code Section 40440.11 for the proposed new BACT determination for I.C. Engine – Stationary, Non-Emergency, Electrical with SCR, Natural Gas Fired. The proposed new BACT determination complies with the Health and Safety Code because:

- Installing a SCR system which reduces NOx emissions is a commercially viable achieved in practice control alternative that constitutes BACT;
- A Stationary, Non-Emergency, I.C. engine with SCR that can meet a 10 ppm ammonia limit has been commercially available for several years; and
- The results of the cost-effectiveness analysis performed to assess the incremental equipment and operating cost of the SCR show that the proposed control technology is cost effective. More details are included in Attachment A and cost-effectiveness calculations are included in Attachment G.

Public Process
The BACT SRC was established as a standing committee by the Board to enhance the public participation process with technical review and comments by a focused committee at periodic intervals, prior to updating the BACT Guidelines. The BACT SRC meetings included a variety of stakeholders such as affected facilities, industry associations, equipment vendors, public agencies, and environmental and community groups. The proposed amendments to the BACT Guidelines were presented to the BACT SRC on June 24, 2021, November 3, 2021 and February 23, 2022. A 30-day comment period was provided to the BACT SRC and general public to review and submit comments. Comments by BACT SRC members and the general public along with staff responses are included in Attachment H. As part of this BACT determination process, staff had individual meetings with affected stakeholders and industry groups.

Key Issues
Through the BACT determination process, staff has worked with stakeholders to address and resolve all issues. There was a concern over source testing requirements for non-Certified Tier 4 Final emergency engines. Although source testing is not a component of the BACT determination, source testing of the non-Certified Tier 4 Final engine is needed to ensure compliance with the emissions limits. Therefore, staff is finalizing permitting guidance for non-Certified Tier 4 Final engines to address source testing concerns, while ensuring compliance with the emission standards. Staff is not aware of any other remaining key issues.

California Environmental Quality Act
Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) and 15308. Further, there is no substantial evidence indicating that any of the exceptions set forth in CEQA Guidelines Section 15300.2 apply to the proposed project. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and is included as Attachment I to this Board letter. If

the proposed project is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor's Office of Planning and Research.

Socioeconomic Analysis
The proposed amendments to the BACT Guidelines are to update the BACT Guidelines and to maintain consistency with recent changes to South Coast AQMD rules and state requirements. These proposed amendments represent achieved in practice emission control equipment and/or processes in addition to other amendments which are administrative in nature and will therefore not result in more stringent requirements than would otherwise occur and would not result in significant socioeconomic impacts.

Benefits to South Coast AQMD
Emission reductions realized through new, modified and relocated permitted sources that apply the latest BACT will benefit air quality, achieve emissions reductions needed to attain state and federal air quality standards and help improve public health in the South Coast AQMD's jurisdiction. In addition, the successful implementation of BACT for permitted stationary sources will contribute towards achieving the air quality objectives of South Coast AQMD's Air Quality Management Plan.

Resource Impacts
Existing South Coast AQMD resources will be sufficient to implement the proposed changes to the BACT Guidelines.

Recommendation
Staff recommends that the Board determine that the proposed amendments to the BACT Guidelines are exempt from the requirements of CEQA and approve the proposed amendments to Overview, Parts A, B, C, and D.

The updated BACT Guidelines with these proposed amendments will be made available at South Coast AQMD's website after Governing Board approval.

Attachments
A. Overview of Proposed Amendments to BACT Guidelines
B. Proposed Amended BACT Guidelines, Overview
C. Proposed Amended BACT Guidelines, Part A
D. Proposed Amended BACT Guidelines, Part B
E. Proposed Amended BACT Guidelines, Part C
F. Proposed Amended BACT Guidelines, Part D
G. Cost-effectiveness Calculations
H. Comments and Responses
I. Notice of Exemption from CEQA
J. Board Presentation

ATTACHMENT A

OVERVIEW OF PROPOSED AMENDMENTS TO BACT GUIDELINES

Background

South Coast AQMD's Regulation XIII – New Source Review, requires permit applicants to use BACT for new sources, relocated sources and modifications to existing sources that may result in an emission increase of any nonattainment air contaminant, any ozone depleting compound. Regulation XIII also requires the Executive Officer to periodically publish BACT Guidelines that establish the procedures and the requirements for applying BACT to commonly permitted equipment.

The BACT Guidelines include an Overview, which provides an introduction to the BACT Guidelines and a summary of how BACT and LAER are implemented in the South Coast AQMD, and a technical portion separated into three parts: major polluting facilities (Parts A and B), non-major polluting facilities (Parts C and D), and facilities subject to prevention of significant deterioration (PSD) for GHGs (Parts E and F). A facility is a major polluting facility if it emits, or has the potential to emit, a criteria air pollutant at a level that equals or exceeds the emission thresholds in South Coast AQMD's Regulation XXX – Title V Permits. Major polluting facilities that are subject to NSR are required by the federal Clean Air Act (CAA) to have the Lowest Achievable Emission Rate (LAER). South Coast AQMD implement the federal CAA requirement for LAER using BACT determinations that are incorporated in the BACT Guidelines. The Part B LAER determinations for major polluting facilities are only examples of past determinations that help in determining LAER for new permit applications. At the state level, Health and Safety Code Section 40405 defines BACT in a similar manner to federal LAER and requires the application of BACT for all new and modified permitted sources subject to NSR.

For non-major polluting facilities, minor source BACT (MSBACT) is as specified in Part D of the BACT Guidelines and determined in accordance with Health and Safety Code Section 40440.11 at the time an application is deemed complete. In updating Part D with new, more stringent MSBACT, South Coast AQMD must follow a more rigorous process than for major polluting facilities, including a cost-effectiveness analysis, notification to the public, presentation at the BACT Scientific Review Committee (SRC) meeting, and Board approval. GHG BACT applies to new or modified facilities subject to PSD requirements for GHG. Requirements for determining applicability of new or modified sources are promulgated in Chapter 40 of the Code of Federal Regulations Section 52.21. In general, GHG BACT determinations are project specific with a focus on options that improve energy efficiency.

The BACT SRC was established as a standing committee by the Board to enhance the public participation process with technical review and comments by a focused committee at periodic intervals, prior to updating the BACT Guidelines.

Proposed Amendments to the BACT Guidelines

The proposed amendments are to update the Overview, Parts A, B, C, and D of the BACT Guidelines and to maintain consistency with recent changes to South Coast AQMD rules and state requirements. No amendments are proposed to Parts E and F. The BACT SRC and other interested parties were provided with detailed descriptions of the proposed amendments to the BACT Guidelines at three scheduled publicly noticed meetings. The proposed amendments to the BACT Guidelines were posted on South Coast AQMD's website and a 30-day public comment period was provided after the third public meeting. Comments by BACT SRC members, the public, and staff responses are included in Attachment H.

Overview

The Overview provides an introduction to the BACT Guidelines and a summary of how BACT and LAER are implemented in the South Coast AQMD.

In September 2021, the Board approved the move of the BACT team from the Science and Technology Advancement division to the Engineering and Permitting division to streamline communication and information sharing. Consistent with this change, amendments to the entire BACT Guidelines to reflect this change from Science and Technology Advancement to Engineering and Permitting are proposed.

The proposed amendments to the Overview include adding a section describing the November 2021 amendments to Rule 1304 which provided a limited BACT exemption for new or modified permit unit located at RECLAIM or former RECLAIM facilities for PM10 and SOx emission increases associated with the installation or modification of add-on air pollution control equipment for controlling nitrogen oxide (NOx) emissions to comply with BARCT emission limits for NOx.

The hyperlink to the list of current BACT SRC members was updated.

The complete proposed amended Overview section is included in Attachment B.

Part A – Policy and Procedures for Major Polluting Facilities

Part A describes the policy and procedures for major polluting facilities and explains what LAER is, why it is required, when it is required, and how it is determined for major polluting facilities.

The proposed amendment to Part A is to include the same section added to Overview to address the limited BACT exemption for new or modified permit unit located at a RECLAIM or former RECLAIM facilities in Rule 1304 - Exemptions. A summary of the proposed Part A amendments is included in Attachment A with the complete proposed amended Part A included in Attachment C.

New and Updated Listings, Part B – LAER Determinations for Major Polluting Facilities

Part B consists of three sections: Section I contains listings of LAER determinations made by South Coast AQMD; Section II contains listings of LAER determinations in other air districts; and Section III contains listings of emerging technologies which have been in operation with an air quality permit but do not yet qualify as LAER. The proposed Part B LAER determinations of Sections I are summarized below with the complete proposed determinations included in Attachment D.

The other portions of Sections I, II, and III are not included in this Board package because they are not being updated at this time.

Section I – South Coast AQMD LAER/BACT Determinations

Three updated listings and one new listing are proposed, as summarized below.

Boiler, Fire-tube, Natural Gas Fired (update)

The current boiler category is being updated with a Group III unit fire-tube boiler with maximum heat input rate of 8.4 mmBTU/hr which is fired on natural gas and equipped with a low NOx burner. The boiler has been permitted at 7 parts per million (ppm) NOx and 50 ppm CO on a dry basis corrected to 3 percent oxygen (O_2). The existing LAER/BACT limit for NOx is 12 ppm and will be replaced by the updated determination at 7 ppm NOx at 3 percent O_2. The boiler has been operating since April 2020 and demonstrated compliance with permit emission limits through source testing.

Rotary Dryer-Aggregate Facility, Natural Gas Fired (update)

Aggregate rotary dryers have been used to reduce or minimize the moisture content from various aggregate materials such as recycled asphalt, recycled concrete, and gravel. Since the existing listing was established in 2003, staff updated the current LAER/BACT listing with a most recent achieved in practice case with 33 ppm NOx limit at 3 percent O_2. This rotary dryer has been in operation for several years. The dryer is equipped with a low NOx burner fired on natural gas at maximum heat input rate of 135 mmBTU/hr. In order to remove moisture, raw aggregate is fed into the rotary dryer and is heated to temperature per specification. Asphalt oil is fed directly into the dryer and mixed with raw aggregate. The asphaltic concrete is discharged into an incline slat conveyor which feeds silo loading batches via a series of drag slat conveyors. The exhaust

from the dryer and conveyor is vented to a hot baghouse. It has been source tested in 2016 and has been operating in compliance.

Roller Coater – Paper and Film, with Regenerative Thermal Oxidizer (RTO) for VOC Control (update)

The current "Roller Coater" category is being updated with an achieved in practice case. The manufacturing process involves casting of a vinyl film and application of the adhesive on the film. Coatings are applied in a permanent total enclosure (PTE) meeting the requirements of U.S. EPA's Method 204. The PTEs, one around each coating head and roller coaters, are vented to the RTO. The RTO burner is used to pre-heat the ceramic beds to establish an initial temperature of 1500 degrees Fahrenheit (°F) and it has 97% overall control efficiency. The equipment has been in operation for five years and showed compliance with permitted limits through source test results.

Internal Combustion (I.C.) Engine– Stationary, Non-Emergency with Selective Catalytic Reduction (SCR), Natural Gas Fired (new)

This listing is to bring guidance to ammonia emissions generated from SCR on Stationary, Non-Emergency I.C. Engine. The SCR system chemically reduces NOx emissions from a prime engine (an engine providing a primary source of electricity) by injecting urea into the engine exhaust. Unreacted ammonia resulting from incomplete reaction of the NOx and the urea is called ammonia slip. Current SCR serving prime engines have a permit condition to limit the ammonia slip to 10 ppm. The achieved in practice case is an I.C. engine, lean-burn with SCR. The engine is rated at 1,573 brake horsepower (BHP) and driving an electrical generator. Source test results confirm compliance with 10 ppm ammonia permit limit corrected to 15 percent O_2.

Section II – Other LAER/BACT Determinations

One new and one updated listing are proposed, as summarized below.

Fumigation - Methyl Bromide (CH_3Br) Fumigation Chamber Greater than or Equal to (≥) 100,000 pounds per year (lbs/yr) of CH_3Br (new)

This listing is a new entry to establish a new LAER/BACT determination based on a *CH_3Br* fumigation facility located in San Luis Obispo County Air Pollution Control District (APCD). The facility fumigates vegetables with methyl bromide prior to cooling and shipping. A carbon adsorption control device with onsite reactivation using a chemical scrubber is utilized to control VOC emissions. After completing the fumigation cycle the carbon bed is re-activated in a chemical scrubber. The facility has been operating the carbon adsorption control device since 2014. The source test results confirm the 86% capture and control efficiency for carbon adsorption and chemical scrubber.

I.C. Engine-Compression Ignition ≥1,000 BHP, Stationary Emergency including Non-Agricultural and Non-Direct Drive Fire Pump (new)

Bay Area AQMD, Sacramento Metropolitan AQMD, and San Joaquin Valley APCD have established LAER Guidance that requires the stationary emergency I.C. engines to meet the U.S. EPA Tier 4 Final emissions standards. The update to the LAER/BACT listing is based on Tier 4 compliant engines at a Microsoft MWH Datacenter in Quincy, which have been in operation since 2019. The engines are equipped with SCR and catalyzed diesel particulate filter to meet the emission requirements of U.S. EPA Tier 4 Final certified engines. The results of source tests performed on three engines with capacity of 1.0, 1.5 and 3.0 megawatts show compliance with Tier 4 Final emission standards. Tests have been performed at each of the five engine torque load levels (10%, 25%, 50%, 75%, and 100%) and data was reduced to a single-weighted average value. Proposed LAER/BACT applies to stationary emergency diesel engines ≥1,000 BHP located in Major Source facilities. Compliance can be achieved through installing a Tier 4 Final certified or Tier 4 Final compliant I.C. engine.

Part C – Policy and Procedures for Non-Major Polluting Facilities

Part C describes the policy and procedures for non-major polluting facilities and explains what BACT is, why it is required, when it is required and how it is determined for non-major polluting facilities.

To be consistent with the update to Overview and Part A, staff is proposing to add a new section to include the Rule 1304 limited BACT exemption for new or modified permit unit located at a RECLAIM or former RECLAIM facilities.

Staff is proposing to update the Maximum Cost-Effectiveness Values on Table 5 consistent with the second quarter 2022 Marshall and Swift equipment index in accordance with the BACT Guidelines policy. A summary of the proposed Part C amendments is included in Attachment A with the complete proposed amended Part C included in Attachment E.

Proposed Amendments to Part D BACT Determinations for Non-Major Polluting Facilities

Part D consists of BACT determinations for minor sources which are established in accordance with state law at the time an application is deemed complete.

The proposed new and updated amendments to Part D are for equipment and processes which have been achieved in practice and to maintain consistency with recent changes to South Coast AQMD rules and state requirements. All proposed Part D amendments and updates, except for the proposed new I.C. Engine – Stationary, Non-Emergency listing, will not result in more stringent requirements than would otherwise occur through current SIP-approved rule compliance, which constitutes MSBACT under Part

C – Policy Guidance. In addition, staff has concluded through the implementation of these SIP-approved rules that these MSBACT determinations are achieved in practice and cost effective. The proposed amendments comply with the requirements of Health and Safety Code Section 40440.11. The proposed amended Part D BACT determinations are summarized below with the complete proposed amended Part D included in Attachment F.

Composting

--Current Language

Footnote (b) for VOC and inorganic emissions from co-composting is missing in the last two revisions of the guidelines.

--Proposal

Staff is proposing to relist footnote (b) which defines the applicability of BACT based on the annual capacity of the unit: "Not required for design capacity of less than (<) 1,000 tons per year"

I.C. Engine, Stationary, Emergency

--Current Language

There is no reference to sensitive receptors for particulate matter (PM) emissions.

--Proposal

To ensure the I.C. Engine located at a sensitive receptor or 50 meters or less from a sensitive receptor meets the diesel PM standard required in Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines, staff is proposing to add a new footnote to highlight this requirement in the BACT Guidelines as: "BACT PM emission standard requirement for new Stationary Emergency Standby Diesel-Fueled I.C. Engines located at a sensitive receptor or 50 meters or less from a sensitive receptor."

I.C. Engine– Stationary, Non-Emergency, Electrical with SCR, NG Fired (new)

--Current Language

There is no ammonia slip limit in the BACT Guidelines for this category.

--Proposal

The goal is to formalize the existing permitted ammonia limit and list it in the BACT Guidelines. The achieved in practice case is an internal combustion engine has been described in Part B. Source test results confirm compliance with 10 ppm ammonia permit limit corrected to 15 percent O_2. If too much ammonia is injected, the unreacted ammonia results in ammonia slip downstream of the catalyst and forms ammonium sulfate. Ammonium sulfate is a precursor for PM2.5 and used for cost effectiveness evaluation. Cost for additional catalyst layer to reduce ammonia slip from 20 ppm baseline to 10 ppm was provided by catalyst manufacturer with no change on the maintenance costs. A cost-effectiveness analysis was done to assess the incremental capital and operating

costs in accordance with Health and Safety Code 40440.11, which is further discussed in the "Compliance with the Health and Safety Code" section. The cost effectiveness evaluation shows installing SCR on Stationary, Non-Emergency I.C. engine is cost effective. Staff is proposing to add 10 ppmv ammonia limit corrected to 15 percent O_2 for I.C. engines greater than (>) 50 BHP.

Open Process Tanks: Chemical Milling (Etching) and Plating

--Current Language

"Chemical Milling Tanks" category left out inadvertently in the previous revision.

--Proposal

Staff is proposing to relist "Chemical Milling Tanks" which was left out in the last revision. This category addresses aluminum and magnesium as well as nickel alloys, stainless steel, and titanium subcategories. There are no proposed changes from the previous listing.

Printing (Graphic Arts)

--Current Language

For "Lithographic or Offset, Heatset" subcategory, the emissions of NOx from oven need to comply with BACT requirements listed under "Other Dryers and Ovens" category.

--Proposal

For clarification, staff is proposing to modify the table for NOx emissions by adding "Compliance with BACT requirements for Other Dryers and Ovens".

<u>Compliance with the Health and Safety Code</u>

In amending the BACT Guidelines for non-major polluting facilities to be more stringent, South Coast AQMD must comply with Health and Safety Code Section 40440.11. Staff is proposing new BACT determination in Part D for I.C. Engine– Stationary, Non-Emergency, Electrical with SCR, Natural Gas Fired. The following paragraphs identify the applicable requirements in Health and Safety Code Section 40440.11 and demonstrate compliance with each requirement:

(c)(1) Identify one or more potential control alternatives that may constitute the Best Available Control Technology as defined in Health and Safety Code Section 40405.
I.C. Engine– Stationary, Non-Emergency, Electrical with SCR, Natural Gas Fired
Commercially viable achieved in practice control alternatives that may constitute BACT would be installing a SCR system which chemically reduces NOx emissions from a prime engine by injecting urea into the engine exhaust.

(c)(2) Determine that the proposed emission limitation has been met by production equipment, control equipment, or a process that is commercially available for sale, and has achieved the best available control technology in practice on a comparable

commercial operation for at least one year, or a period longer than one year if a longer period is reasonably necessary to demonstrate the operating and maintenance reliability, and costs, for an operating cycle of the production or control equipment, or process.

Stationary, Non-Emergency, I.C. engine with SCR that can meet a 10 ppm ammonia limit has been commercially available for several years. Staff has included in Attachment F proposed BACT determinations citing applications of SCR controlling NOx emissions. This equipment has been in commercial operation for over one year, source tested, and verified compliance with the 10 ppm ammonia corrected to 15 percent O_2. The cost-effectiveness analysis also has been conducted based on the cost data provided by the catalyst manufacturer.

(c)(3) Review the information developed to assess the cost-effectiveness (annual cost of control divided by annual emission reduction potential) of each potential control alternative.

A cost-effectiveness analysis was performed to assess the incremental equipment and operating cost of the SCR for additional catalyst layer to achieve 10 ppm ammonia versus 20 ppm ammonia, both corrected to 15 percent O_2. Staff reviewed source test data to calculate ammonia mass emission reduction and reviewed the manufacturer's cost data to assess the cost-effectiveness of installing additional layer of catalyst. See calculations spreadsheet in Attachment G.

(c)(4) Calculate the incremental cost-effectiveness for each potential control option (difference in cost divided by difference in emissions for each progressively more stringent control option)

The incremental cost-effectiveness analysis included calculations of incremental cost per ton of PM10 reduced using additional layer of catalyst in SCR. The results show that the proposed control technology is cost effective. See calculations spreadsheet in Attachment G.

(c)(5) Place the Best Available Control Technology revision proposed on the calendar of a regular meeting agenda of the South Coast AQMD Governing Board for its acceptance or further action as the board determines.
The proposed revisions to the BACT Guidelines were placed on the agenda of the September 2, 2022 meeting of the South Coast AQMD Governing Board.

OVERVIEW

Chapter 1 - Introduction

The South Coast Air Quality Management District (South Coast AQMD) Regulation XIII – New Source Review (NSR) and Regulation XX – RECLAIM, require applicants to use Best Available Control Technology (BACT) for new sources, relocated sources, and modifications to existing sources that may result in an emission increase of any nonattainment air contaminant, any ozone depleting compound (ODC), or ammonia. Regulation XIII requires the Executive Officer to periodically publish BACT Guidelines that establish the procedures and the BACT requirements for commonly permitted equipment.

South Coast AQMD Regulation XIV – Toxics and Other Non-Criteria Pollutants, requires applicants to use Best Available Control Technology for Toxics (T-BACT) for new, relocated or modified permit units that result in a cumulative increase in Maximum Individual Cancer Risk (MICR) of greater than one in a million (1.0×10^{-6}) at any receptor location. Additionally, Regulation XVII – Prevention of Significant Deterioration (PSD) also sets forth BACT requirements for new sources, relocated sources and modifications to existing sources that emit attainment air contaminants. PSD BACT is incorporated into these BACT Guidelines. As of the publication date of these guidelines, there is currently no requirement for South Coast AQMD to publish T-BACT guidelines and T-BACT must be established during the permitting process.

Historically, the BACT Guidelines were first published in May 1983, and later revised in October 1988. The Guidelines consisted of two parts: Part A – Policy and Procedures, and Part B – BACT Determinations. Part A provided an overview and general guidance while Part B contained specific BACT information by source category and pollutant. Since the October 1988 revision, Part A was amended once in 1995, and Part B was updated with six LAER determinations between 1997 and 1998.

On December 11, 1998, the Governing Board approved a new format for listing BACT determinations in Part B of the Guidelines. While the previous Part B of the BACT Guidelines specified BACT requirements and set out source category determinations which could be interpreted as definitive, the new format simply provides listings of recent BACT determinations by South Coast AQMD permitting staff and others as well as information on new and emerging technologies. Part B of the South Coast AQMD BACT Guidelines now follows the same outline as the permit listings in the California Air Resources Board State BACT Clearinghouse Database, which is managed under the direction of the California Air Pollution Control Officers Association's (CAPCOA) Engineering Managers Committee. In addition, BACT determinations made by South Coast AQMD are submitted to the U.S. Environmental Protection Agency (USEPA) RACT/BACT/LAER Clearinghouse by ARB staff. Further information on the format of the Guidelines, including reasons for the change in direction, may be found in Board Letters presented at the October 1998 Board Meeting, Agenda No. 41, and the December 1998 Board Meeting, Agenda No. 28.

The public participation process includes technical review and comments by a focused BACT Scientific Review Committee (BACT SRC) at periodic intervals, prior to the updates of the South Coast AQMD BACT Guidelines. The Board established a 30-day notice period for the BACT SRC and interested persons to review and comment

on South Coast AQMD BACT determinations that result in BACT requirements that are more stringent than previously imposed BACT.

As a result of amendments to South Coast AQMD's NSR regulations in September 2000, the BACT Guidelines were separated into two sections: one for major polluting facilities and another for non-major (minor) polluting facilities. (See Chapter 2 in the Overview for how to determine if a facility is major or minor).

The BACT Guidelines for major polluting facilities include:

- Part A: Policy and Procedures for Major Polluting facilities; and
- Part B: LAER/BACT Determinations for Major Polluting Facilities.

The BACT Guidelines for non-major polluting facilities include:

- Part C: Policy and Procedures for Non-Major Polluting Facilities; and
- Part D: BACT Guidelines for Non-Major Polluting Facilities.

Both the format of the guidelines and the process for determining BACT are significantly different between major and non-major polluting facilities. Major polluting facilities that are subject to NSR are required by the Clean Air Act to have the Lowest Achievable Emission Rate (LAER). LAER is determined at the time the permit is issued, with little regard for cost, and pursuant to USEPA's LAER policy as to what is achieved in practice. The Part B BACT and LAER determinations for major polluting facilities are only examples of past determinations that help in determining LAER for new permit applications.

For non-major polluting facilities, BACT will be determined in accordance with state law at the time an application is deemed complete unless a more stringent rule requirement becomes applicable prior to permit issuance. For the most part, it will be as specified in Part D of the BACT Guidelines. Changes to Part D for minor source BACT (MSBACT) to make them more stringent will be subject to public review and South Coast AQMD Board approval, for consideration of cost.

For the 2016 amendment to the Guidelines, additional parts have been added to address PSD requirements for greenhouse gas (GHG) emissions established by U.S. EPA in 40 CFR 52.21 in 2011. The requirements are incorporated by reference in South Coast AQMD Rule 1714. The BACT Guidelines for GHG requirements include:

- Part E: Policy and Procedures for Facilities Subject to Prevention of Significant Deterioration for Greenhouse Gases; and
- Part F: BACT Determinations for Facilities Subject to Prevention of Significant Deterioration for Greenhouse Gases.

In order to distinguish between BACT for various sources, this document will use the following nomenclature for BACT:

LAER for BACT at major polluting facilities

MSBACT for BACT at non-major polluting facilities

PSD BACT for BACT at facilities subject to BACT requirements for criteria pollutants

Written comments about the BACT Guidelines are welcome at any time and will be evaluated by South Coast AQMD staff and included in the BACT Docket at the South Coast AQMD library. These comments should be addressed to:

South Coast Air Quality Management District
BACT ~~Docket~~Team
~~Science and Technology Advancement~~ Engineering and Permitting
21865 Copley Dr.
Diamond Bar, CA 91765-0934

Comments may also be submitted via email to BACTTeam@aqmd.gov, and should include BACT Docket in the subject line.

The BACT Guidelines are available without charge from South Coast AQMD's web site at www.aqmd.gov/home/permits/bact. A hardcopy of the BACT Guidelines may be obtained for a fee by submitting a request to Subscription Services at www.aqmd.gov/contact/subscription-services or by calling (909) 396-3720. Revisions to the Guidelines will be mailed to all persons that have purchased annual updates to the BACT Guidelines.

Chapter 2 – Applicability Determination

This chapter explains how to determine whether a facility is a major or minor polluting facility, and how a facility can become a minor polluting facility.

MAJOR POLLUTING FACILITY EMISSION THRESHOLDS

A facility is a major polluting facility (or a major stationary source as it is called in the federal Clean Air Act [CAA]) if it emits, or has the potential to emit (PTE), a criteria air pollutant at a level that equals or exceeds emission thresholds specified in the CAA[1] based on the attainment or nonattainment status. Table 1 presents those emission thresholds for each criteria air pollutant for each air basin in South Coast AQMD. The map in Figure 1 shows the location of the three air basins in South Coast AQMD. If a threshold for any one criteria pollutant is equaled or exceeded, the facility is a major polluting facility, and will be subject to LAER for all pollutants subject to NSR. Table 1 does not include emission thresholds that trigger GHG BACT for South Coast AQMD Rule 1714 and 40 CFR 52.21. Part E of the BACT Guidelines should be referenced for a detailed explanation of how GHG BACT emission thresholds are determined.

A facility includes all sources located within contiguous properties owned or operated by the same person, or persons under common control. Contiguous means in actual contact or separated only by a public roadway or other public right-of-way. However, on-shore crude oil and gas production facilities under the same ownership or use entitlement must be included with offshore crude oil and gas production facilities located in Southern California Coastal or Outer Continental Shelf waters.

The following mobile source emissions are also considered as part of the facility[2]:

1. Emissions from in-plant vehicles; and
2. All emissions from ships during the loading or unloading of cargo and while at berth where the cargo is loaded or unloaded; and
3. Non-propulsion ship emissions within Coastal Waters under South Coast AQMD jurisdiction.

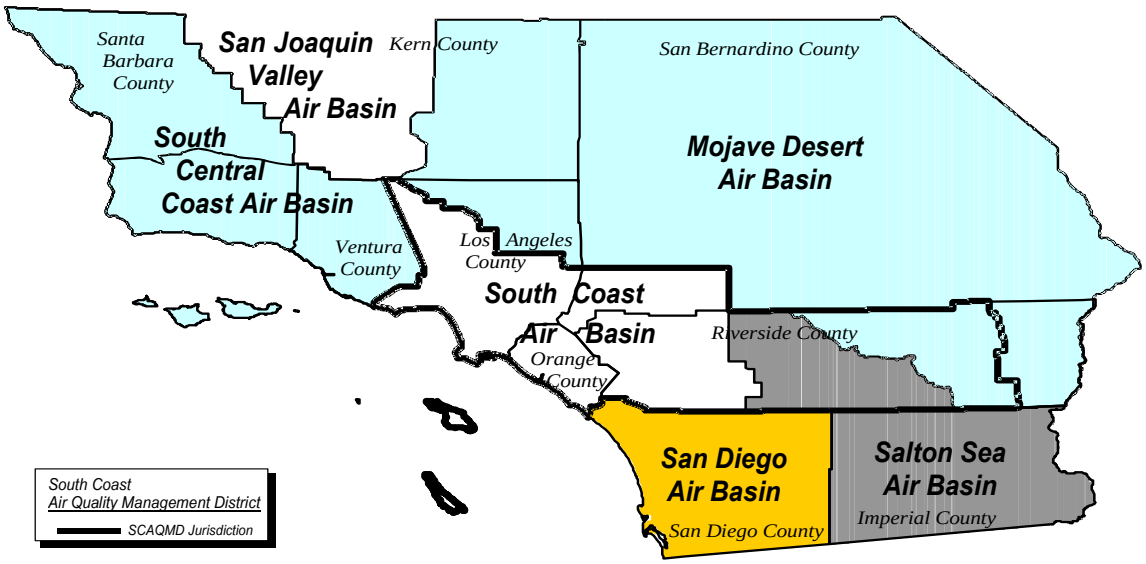
[1] The major source emission thresholds are higher for air basins that comply with the national ambient air quality standard and lower depending on how far an air basin is from compliance with the standard for a pollutant. The lowest thresholds apply to extreme non-attainment air basins, the only ones which are the South Coast Air Basin and San Joaquin Valley Air Basin for ozone (VOC and NOx).

[2] In accordance with Rule 1306(g).

Table 1
Actual or Potential Emission Threshold Levels (Tons per Year)
for Major Polluting Facilities

Pollutant	South Coast Air Basin	Riverside County Portion of Salton Sea Air Basin	Non-Palo Verde, Riverside County Portion of Mojave Desert Air Basin
VOC	10	25	100
NOx	10	25	100
SOx[3]	70	70	100
CO	50	100	100
PM_{10}	70	70	100
$PM_{2.5}$	70	---	---

Figure 1: Map of South Coast AQMD



[3] The threshold for SOx, as a precursor for PM, is 70 tons per year for serious PM_{10} areas, which the SCAB previously was, and 70 tons per year for serious $PM_{2.5}$ areas, which the SCAB currently is. Rule 1302 previously specified 100 tons per year, which was in error, and was changed at the November 2016 Board Meeting.

POTENTIAL TO EMIT

Potential to emit is based on permit conditions that limit emissions or throughput. If there are no such permit conditions, PTE is based on:

- the maximum rated capacity; and
- the maximum daily hours of operation; and
- physical characteristics of the materials processed.

The PTE must include fugitive emissions associated with the source. RECLAIM emission allocations are not considered emission limits because RECLAIM facilities may purchase RTCs and increase their emissions without modifying their permit. For PSD purposes, as well as Rule 1325 for $PM_{2.5}$, which incorporates federal requirements, fugitive emissions are included only for major source categories specifically identified in 40 CFR 52.21.

LIMITING POTENTIAL TO EMIT

A facility's PTE can be capped by an enforceable permit condition that limits emissions. This condition will likely involve monitoring, recordkeeping and reporting to ensure that emissions remain below the permit limit.

Chapter 3 - When is BACT Required?

This chapter explains when BACT is required by identifying the air pollutants subject to BACT, the permit actions that trigger BACT review, and the calculation procedures to determine emission increases.

POLLUTANTS SUBJECT TO NSR, PSD AND BACT

The South Coast AQMD's New Source Review (NSR) programs include *Regulation XIII - New Source Review* and *Rule 2005 - New Source Review for RECLAIM*. Rule 2005 applies only to NOx and SOx emissions from RECLAIM facilities, while Regulation XIII applies to other non-attainment air pollutants from RECLAIM facilities, all non-attainment air pollutants from all other facilities, and ammonia and ozone-depleting compound (ODC) emissions from all facilities. ODCs are defined as Class I substances listed in 40 CFR, Part 82, Appendix A, Subpart A, and are listed in Table 2. Rule 1325 specifically applies to $PM_{2.5}$.

Although the South Coast AQMD is in attainment with the ambient air quality standards for SO_2 and NO_2, NOx is a precursor to ozone, and both SOx and NOx are precursors to PM_{10} and $PM_{2.5}$, which are non-attainment air pollutants. Therefore, SOx and NOx are treated as non-attainment air pollutants as well. The net result is that VOC, NOx, SOx, PM_{10} and $PM_{2.5}$ are subject to NSR in all of South Coast AQMD.

The South Coast Air Basin has historically been designated nonattainment for CO. However, there has been considerable improvement in CO air quality in the Basin from 1976 to 2005. In 2001, the Basin met both the federal and state 8-hour CO standards for the first time at all monitoring stations. The 2003 AQMP revision to the CO plan served a dual purpose; it replaced the 1997 attainment demonstration that lapsed at the end of 2000, and it provided the basis for a CO maintenance plan in the future. The Basin was designated as attainment for CO in 2007. Therefore, CO is in attainment with state and federal ambient air quality standards.

The South Coast AQMD's Regulation XVII – Prevention of Significant Deterioration sets forth BACT requirements for stationary sources that emit attainment air contaminants. The BACT requirement applies to any net emission increase of a criteria pollutant from a permit unit at any source. As explained in the South Coast AQMD Staff Report for Regulation XVII dated September 28, 1988 for the October 7, 1988 Board meeting, the PSD BACT requirement is applicable to all permit units regardless if the source is classified as a minor or major facility.

Lead (Pb) is a criteria air pollutant and is subject to BACT in areas of non-attainment, or is subject to PSD in areas of attainment. Pb can be a component of a source's PM_{10} emissions and is therefore subject to BACT for PM_{10}. BACT for Pb will be BACT for PM_{10} or compliance with Rules 1420, 1420.1 or 1420.2, whichever is more stringent.

The applicability of the various pollutants to NSR in the various air basins is summarized in Table 3. See Figure 1 in the previous chapter for a map of South Coast AQMD that shows the location of the three air basins in South Coast AQMD.

Table 2
Class I Substances (ODCs)*

A. Group I:
$CFCl_3$ Trichlorofluoromethane (CFC-11)
CF_2Cl_2 Dichlorodifluoromethane (CFC-12)
$C_2F_3Cl_3$ Trichlorotrifluoroethane (CFC-113)
$C_2F_4Cl_2$ Dichlorotetrafluoroethane (CFC-114)
C_2F_5Cl Monochloropentafluoroethane (CFC-115)
All isomers of the above chemicals

B. Group II:
CF_2ClBr Bromochlorodifluoromethane (Halon-1211)
CF_3Br Bromotrifluoromethane (Halon-1301)
$C_2F_4Br_2$ Dibromotetrafluoroethane (Halon-2402)
All isomers of the above chemicals

C. Group III:
CF_3Cl Chlorotrifluoromethane (CFC-13)
C_2FCl_5 Pentachlorofluoroethane (CFC-111)
$C_2F_2Cl_4$ Tetrachlorodifluoroethane (CFC-112)
C_3FCl_7 Heptachlorofluoropropane (CFC-211)
$C_3F_2Cl_6$ Hexachlorodifluoropropane (CFC-212)
$C_3F_3Cl_5$ Pentachlorotrifluoropropane (CFC-213)
$C_3F_4Cl_4$ Tetrachlorotetrafluoropropane (CFC-214)
$C_3F_5Cl_3$ Trichloropentafluoropropane (CFC-215)
$C_3F_6Cl_2$ Dichlorohexafluoropropane (CFC-216)
C_3F_7Cl Chloroheptafluoropropane (CFC-217)
All isomers of the above chemicals

D. Group IV:
CCl_4 Carbon Tetrachloride

E. Group V:
$C_2H_3Cl_3$ 1,1,1 Trichloroethane (Methyl chloroform)
All isomers of the above chemical except 1,1,2-trichloroethane

F. Group VI:
CH_3Br Bromomethane (Methyl Bromide)

H. Group VIII:
CH_2BrCl (Chlorobromomethane)

G. Group VII:
$CHFBr_2$
CHF_2Br (HBFC-2201)
CH_2FBr
C_2HFBr_4
$C_2HF_2Br_3$
$C_2HF_3Br_2$
C_2HF_4Br
$C_2H_2FBr_3$
$C_2H_2F_2Br_2$
$C_2H_2F_3Br$
$C_2H_2FBr_2$
$C_2H_3F_2Br$
C_2H_4FBr
C_3HFBr_6
$C_3HF_2Br_5$
$C_3HF_3Br_4$
$C_3HF_4Br_3$
$C_3HF_5Br_2$
C_3HF_6Br
$C_3H_2FBr_5$
$C_3H_2F_2Br_4$
$C_3H_2F_3Br_3$
$C_3H_2F_4Br_2$
$C_3H_2F_5Br$
$C_3H_3FBr_4$
$C_3H_3F_2Br_3$
$C_3H_3F_3Br_2$
$C_3H_3F_4Br$
$C_3H_4FBr_3$
$C_3H_4F_2Br_2$
$C_3H_4F_3Br$
$C_3H_5FBr_2$
$C_3H_5F_2Br$
C_3H_6FBr

* 40 CFR, Part 82, Appendix A, Subpart A

Table 3
Applicability of NSR to Various Pollutants in
South Coast Air Basin (SOCAB), Salton Sea Air Basin (SSAB),
and Mojave Desert Air Basin (MDAB)

Air Basin	VOC	NOx	SOx	CO	PM_{10}	$PM_{2.5}$	NH_3	Pb	ODC
SOCAB	√	√	√		√	√	√	√	√
SSAB	√	√	√		√		√	√	√
MDAB	√	√	√		√		√	√	√

PERMIT ACTIONS SUBJECT TO NSR, PSD AND BACT

South Coast AQMD's NSR and PSD regulations are preconstruction permit review programs that require the Executive Officer to deny a permit to construct unless the proposed equipment includes BACT when:

- new equipment is installed;
- existing stationary permitted equipment is relocated; or
- existing permitted equipment is modified such that there is an emission increase.

If the new equipment is to replace the same kind of equipment, NSR[4] still requires BACT unless it is an identical replacement, which does not require a new permit according to *Rule 219 -Equipment Not Requiring a Written Permit Pursuant to Regulation II.*

BACT is not required for a change of operator, provided the facility is a continuing operation at the same location, without modification or change in operating conditions.

In case of relocation of a non-major facility, the facility operator may opt out of installing MSBACT, provided that the owner/operator meets the conditions specified in Rule 1302 (ai) and Rule 1306 (d)(3).[5]

PSD applies to GHG if the source is otherwise subject to PSD for another regulated NSR pollutant and the source is new with a GHG PTE ≥ 75,000 tons per year CO_2e, or an existing source with a modification resulting in a similar GHG emissions increase.

It is South Coast AQMD policy that BACT is required only for emission increases greater than or equal to one (1.0) pound per day.

In accordance with policy established by South Coast AQMD's Engineering and Permitting division in June 2018, for the purpose of preventing circumvention of triggering a BACT requirement, a period of 5 years prior to the date of application submittal shall be used to accumulate all previous permitting actions allowing emission increases for that specific permit unit to determine if emission increases exceed or

[4] See Rules 1303(a) and 1304(a).

[5] USEPA has expressed concerns with this provision of the NSR Rules for minor polluting facilities as of September 2000. Staff will continue to work with USEPA to resolve this issue.

equal 1.0 pound per day for any nonattainment air contaminant, any ozone depleting compound, or ammonia.

LIMITED BACT EXEMPTION

Rule 1304 (Exemptions) was amended in November 2021 to add subdivision (f) to include a limited BACT exemption for RECLAIM and former RECLAIM facilities. This limited BACT exemption is available to new or modified permit unit located at a RECLAIM or former RECLAIM facility, for PM10 and SOx emission increases associated with the installation or modification of add-on air pollution control equipment for controlling NOx emissions to comply with NOx Best Available Retrofit Control Technology (BARCT) emission limits. The objective of the proposed narrow BACT exemption is to address the co-pollutant issue associated with the installation or modification of add-on air pollution controls and the replacement of equipment that is combined with an installation or modification of add-on air pollution control required to transition NOx RECLAIM facilities. This limited BACT exemption is available only to projects at qualified facilities that meet all the requirements listed under Rule 1304 subparagraphs (f)(1)(A) through (E) [6].

CALCULATION PROCEDURES FOR EMISSION INCREASES

The calculation procedures for determining whether there is an increase in emissions from an equipment modification that triggers BACT are different for NOx and SOx pollutants from RECLAIM facilities than for all other cases. In general, the calculation procedures for RECLAIM facilities are less likely to result in an emission increase that requires BACT.

For NOx and SOx emissions from a source at a RECLAIM facility, there is an emission increase if the maximum hourly potential to emit is greater after the modification than it was before the modification.[7]

For modifications subject to Regulation XIII, there are two possible cases[8]:

1. If the equipment was previously subject to NSR, an emission increase occurs if the new potential to emit in one day is greater than the previous potential to emit in one day.
2. If the equipment was never previously subject to NSR, an emission increase occurs if the new potential to emit in one day exceeds the actual average daily emissions over the two-year period, or other appropriate period, prior to the permit application date. However, for the installation of air pollution controls on any source constructed prior to the adoption of the NSR on October 8, 1976 for the sole purpose of reducing emissions, Rule 1306(f) allows the emission change to be calculated as the post-modification potential to emit minus the pre-modification potential to emit.

[6] See Rule 1304 (f).
[7] See Rule 2005(d).
[8] See Rule 1306(d)(2).

The potential to emit is based on permit conditions that directly limit the emissions, or, if there are none, then the potential to emit is based on:

- maximum rated capacity; and
- the maximum daily hours of operation; and
- the physical characteristics of the materials processed.

Chapter 4 - What is BACT?

This chapter explains the definitions of BACT found in South Coast AQMD rules, state law and federal law.

NSR RULES (REGULATION XIII)

New sources, relocations, and modifications of existing sources that increase nonattainment air contaminant emissions are subject to New Source Review (NSR) regulations which require BACT, among other requirements. Both federal and state laws require this strategy. The federal Clean Air Act (CAA) requirement for Lowest Achievable Emission Rate (LAER) is implemented through BACT in the South Coast AQMD. Federal LAER applies to major sources only. Although federal LAER applies to any emissions increase at a major stationary source of ozone precursors, South Coast AQMD has interpreted this provision as a 1.0 lb/day increase in emissions from all sources subject to NSR. According to South Coast AQMD's rules, BACT requirements may not be less stringent than federal LAER for major polluting facilities. The California Health & Safety Code (H&SC) Section 40405 defines state BACT similar to federal LAER and requires the application of BACT for all new and modified permitted sources subject to NSR.

PSD RULES (REGULATION XVII)

New sources, relocations, and modifications of existing sources that emit attainment air contaminant emissions and certain other specified pollutants are subject to Prevention of Significant Deterioration (PSD) regulations, which require BACT. Pursuant to Rule 1701, the BACT requirement applies to a net emission increase from a permit unit located at minor and major stationary sources. The intention of the PSD requirement is to implement a similar requirement as Regulation XIII to maintain national ambient air quality standards for attainment air contaminants.

DEFINITION OF BACT

Definitions of BACT are found in: Rule *1302 -Definitions* of *Regulation XIII - New Source Review*, which applies to all cases in general, except for *Rule 1702 – Definitions*, which applies only to attainment air contaminants, and *Rule 2000 - General*, which applies to NOx and SOx emissions from RECLAIM facilities. While the definitions are not identical, they are essentially the same. Section (h) of *Rule 1302 - Definitions* defines BACT as:

> *BEST AVAILABLE CONTROL TECHNOLOGY (BACT) means the most stringent emission limitation or control technique which:*
>
> *(1) has been achieved in practice for such category or class of source; or*
> *(2) is contained in any state implementation plan (SIP) approved by the United States Environmental Protection Agency (EPA) for such category or class of source. A specific limitation or control technique shall not apply if the owner or operator of the proposed source*

demonstrates to the satisfaction of the Executive Officer or designee that such limitation or control technique is not presently achievable; or

(3) is any other emission limitation or control technique, found by the Executive Officer or designee to be technologically feasible for such class or category of sources or for a specific source, and cost-effective as compared to measures as listed in the Air Quality Management Plan (AQMP) or rules adopted by the South Coast AQMD Governing Board.

The first two requirements in the BACT definition are required by federal law, as LAER for major sources. The third part of the definition is unique to South Coast AQMD and some other areas in California, and allows for more stringent controls than LAER.

Rule 1303(a)(2) requires that economic and technical feasibility be considered in establishing the class or category of sources and the BACT requirements for non-major polluting facilities.

REQUIREMENTS OF HEALTH & SAFETY CODE SECTION 40440.11

Senate Bill 456 (Kelley) was chaptered into state law in 1995 and became effective in 1996. H&SC Section 40440.11 specifies the criteria and process that must be followed by the South Coast AQMD to update its BACT Guidelines to establish more stringent BACT limits for listed source categories. After consultation with the affected industry, the CARB, and the U.S. EPA, and considerable legal review and analysis, staff concluded that the process specified in SB 456 to update the BACT Guidelines should be interpreted to apply only if the South Coast AQMD proposes to make BACT more stringent than LAER or to establish BACT for non-major sources. This is because the CAA requires the South Coast AQMD staff to apply current LAER for major polluting facilities, even if the proposed LAER determination has not gone through the SB456 process. Therefore, the SB 456 requirements do apply to BACT requirements for non-major polluting facilities, but do not apply to federal LAER determinations for major polluting facilities.

CLEAN FUEL GUIDELINES

In January 1988, the South Coast AQMD Governing Board adopted a Clean Fuels Policy that included a requirement to use clean fuels as part of BACT. The implementation of this policy is further described in Parts A and C of these guidelines.

Chapter 5 - Review of Staff BACT Determinations

New BACT determinations and guideline updates proposed by South Coast AQMD staff are subject to public notification requirements. In addition to allowing the public to comment on these items, the South Coast AQMD has established a BACT Scientific Review Committee (BACT SRC) to review and comment on technical matters of the proposals.

The South Coast AQMD has included provisions for an applicant to request a review of particular circumstances regarding a permit application and reconsideration of the BACT determination. Additional avenues are available to permit applicants for further review of staff BACT determinations through South Coast AQMD management, BACT Review Committee, Hearing Board, and the Governing Board.

BACT SCIENTIFIC REVIEW COMMITTEE (BACT SRC)

The BACT SRC was established as a standing committee by action of the South Coast AQMD Governing Board on September 8, 1995 to enhance the public participation process and include technical review and comments by a focused committee at periodic intervals, prior to the updates of the South Coast AQMD BACT Guidelines. A 30-day notice period applies for the BACT SRC and interested persons to review and comment on South Coast AQMD BACT determinations that result in BACT requirements that are more stringent than previously imposed. BACT SRC members, include but are not limited to, representatives from CARB, U.S. EPA, neighboring Air Pollution Control Districts (APCD), with the balance of the committee created by invitation of recognized experts from industry, public utilities, suppliers of air pollution control equipment and advocacy groups. Whenever a committee member resigns or is no longer able to serve, South Coast AQMD seeks out an appropriate replacement to join the committee. A list of current BACT SRC members can be accessed at

http://www.aqmd.gov/home/permits/bact/scientific-review-committee
~~www.aqmd.gov/home/permits/bact/scientific-review-committee/src-members~~.

The overall purpose of the BACT Scientific Review Committee is to:

- Comment on proposed new and more stringent BACT determinations in permit applications under 30-day public review.
- Comment on proposed BACT listings for all parts of the BACT Guidelines.

Except for the above, the BACT SRC's purpose is not to comment on past permitting decisions or change them. Specifically, the role of the BACT SRC is to review and comment in writing on the appropriateness of new BACT determinations under 30-Day public review. During this comment period, South Coast AQMD, State, and Federal required permit issuance timelines are still in effect. South Coast AQMD BACT staff will commit to sending the BACT SRC newly proposed BACT listings at least seven days prior to the next scheduled BACT SRC meeting. Meetings will typically consist of a presentation by BACT Team (BACTTeam@aqmd.gov) staff of new BACT forms and technical data and a general discussion of the proposed BACT listings, as well as addressing any preliminary written comments received from the public and BACT SRC

prior to the meeting. South Coast AQMD staff will respond in writing to preliminary comments about new BACT proposals within thirty days of the subject BACT SRC meeting. New issues raised during the BACT SRC meetings regarding newly proposed BACT listings will be addressed at the subsequent BACT SRC meeting to allow time for South Coast AQMD staff to research the comments. South Coast AQMD Engineering staff may also respond to specific issues raised at the following BACT SRC meeting.

In addition to newly proposed BACT listings, the BACT SRC will be tasked with reviewing and commenting on updates to the policy and procedure sections of the BACT Guidelines prior to the guidelines being presented to the South Coast AQMD Governing Board for approval.

MEETING WITH SOUTH COAST AQMD MANAGEMENT

South Coast AQMD management, starting with the Senior Engineering Manager of the permitting team, can consider unique and site-specific characteristics of an individual permit. The allowance for site-specific characteristics has been designed into the guidelines and can be reviewed with the manager of the section processing the permit. It is also possible to request review at the next level, with the Assistant Deputy Executive Officer of Engineering and Compliance. The Senior Engineering Managers and the Assistant Deputy Executive Officers are empowered to make case-by-case decisions on an individual permit. Further review can be obtained through a meeting with the Deputy Executive Officer (DEO) of Engineering and ~~Compliance~~Permitting. Ultimately, all permitting decisions are the responsibility of the Executive Officer.

THE BACT REVIEW COMMITTEE

Beyond meetings with South Coast AQMD management, an applicant may also request, prior to permit issuance or denial, that the proposed BACT for an individual permit be reviewed by the BACT Review Committee (BRC). The BRC is composed of five senior-level South Coast AQMD officials - the DEO of Legislative, Public Affairs/Media Office; the DEO of Science and Technology Advancement; the DEO of Engineering and Permitting; the DEO of Planning, Rule Development and ~~Area Sources~~Implementation; and General Counsel. This committee can review pending individual applications and decide if the BACT determination is appropriate. The BRC can be accessed without any fee or legal representation, and will meet upon demand.

THE SOUTH COAST AQMD HEARING BOARD

After the permit is issued or denied, the applicant can seek further independent review of an individual BACT determination through the South Coast AQMD Hearing Board. In order to access this venue, the permit applicant would need to submit a petition and fee to appeal the final BACT determination by South Coast AQMD (once the permit is denied or issued)[9]. The Hearing Board is an independent, quasi-judicial body composed of five members, who can review a permitting decision by the Executive

[9] Applicants must file an appeal petition with the Hearing Board within thirty days of the receipt of the permit or the notification of permit denial. See Rule 216 - *Appeals*, Regulation V - *Procedure Before the Hearing Board*, and Rule 303 - *Hearing Board Fees* for more information.

Officer. In this venue, legal counsel represents the South Coast AQMD. Although not required, many petitioners choose to have legal counsel to represent their position.

THE SOUTH COAST AQMD GOVERNING BOARD

Any applicant may petition the South Coast AQMD Governing Board to review a pending application pursuant to South Coast AQMD Regulation XII and Health and Safety Code Section 40509. While the Governing Board has the authority to hear and consider any pending permit application, it has rarely done so. It is important to note that this action must be taken while the permit application is pending with staff. Once staff reaches its decision, the only avenue of appeal is through the Hearing Board and ultimately to court.

PART A - POLICY AND PROCEDURES FOR MAJOR POLLUTING FACILITIES

Chapter 1 - How is LAER Determined for Major Polluting Facilities?

This chapter explains the criteria used for determining LAER[1] and the process for updating Part B of the BACT Guidelines for major polluting facilities.

CRITERIA FOR DETERMINING LAER FOR MAJOR POLLUTING FACILITIES

South Coast AQMD staff determines LAER requirements on a permit-by-permit basis based on the definition of LAER. In essence, LAER is the most stringent emission limit or control technology for a class or category of source that is:

- found in a state implementation plan (SIP) pursuant to Health and Safety Code Section 40405(a)(1), or
- achieved in practice (AIP), or
- is technologically feasible and cost effective.

For practical purposes, at this time, nearly all South Coast AQMD LAER determinations will be based on AIP LAER because it is generally more stringent than LAER based on SIP, and because state law constrains South Coast AQMD in using the third approach, as such a determination must go through the SB456 process, which may take more time than allowed for the permit decision.

Based on Governing Board policy, LAER also includes a requirement for the use of clean fuels. Terms such as “achieved in practice” and “technologically feasible” have not been defined in the rule, so the purpose of this section is to explain the criteria South Coast AQMD permitting staff uses to make a LAER determination.

LAER Based on a SIP

The most stringent emission limit found in an approved state implementation plan (SIP) might be the basis for LAER. This means that the most stringent emission limit adopted by any state as a rule, regulation or permit[2], and approved by USEPA, is eligible as a LAER requirement. No other parameters are required to be evaluated when this category is chosen. This does not include future emission limits that have not yet been implemented.

[1] In order to distinguish between BACT for major polluting facilities and BACT for minor polluting facilities, this document uses the term LAER when referring to BACT for major polluting facilities.

[2] Some states incorporate individual permits into their SIP as case-by-case Reasonably Available Control Technology requirements.

Achieved in Practice LAER

Regulatory Documents

An emission limit or control technology may be considered achieved in practice (AIP) for a category or class of source if it exists in any of the following regulatory documents or programs:

- South Coast AQMD BACT Guidelines
- CAPCOA BACT Clearinghouse
- USEPA RACT/BACT/LAER Clearinghouse
- Other districts' and states' BACT Guidelines
- BACT/LAER requirements in New Source Review permits issued by South Coast AQMD or other agencies

However, staff will check with the permitting authority (other than South Coast AQMD) on the status of the BACT or LAER requirement. If it is found that an emission limit is not being achieved or a control technology is not performing as expected in the equipment referenced in any of the above sources or in other equipment used as the basis for the BACT or LAER determination, then it will not be considered as AIP.

New Technologies/Emission Levels

New technologies and innovations of existing technologies occasionally evolve without a regulatory requirement, but still deserve consideration. They may have been voluntarily installed to reduce emissions, and may or may not be subject to an air quality permit or an emission limit. Therefore, in addition to the above means of being determined as AIP, a control technology or emission limit may also be considered as AIP if it meets all the following criteria:

Commercial Availability

At least one vendor must offer this equipment for regular or full-scale operation in the United States. A performance warranty or guaranty must be available with the purchase of the control technology, as well as parts and service.

Reliability

All control technologies must have been installed and operated reliably for at least six months. If the operator did not require the basic equipment to operate daily, then the equipment must have at least 183 cumulative days of operation. During this period, the basic and/or control equipment must have operated: 1) at a minimum of 50% design capacity; or 2) in a manner that is typical of the equipment in order to provide an expectation of continued reliability of the control technology.

Effectiveness

The control technology must be verified to perform effectively over the range of operation expected for that type of equipment. If the control technology will be allowed to operate at lesser effectiveness during certain modes of operation, then those modes of operation must be identified. The verification shall be based on a performance test or tests deemed to be acceptable by South Coast AQMD, when possible, or other performance data.

Technology Transfer

LAER is based on what is AIP for a category or class of source. However, USEPA guidelines require that technology that is determined to be AIP for one category of source be considered for transfer to other source categories. There are two types of potentially transferable control technologies: 1) exhaust stream controls, and 2) process controls and modifications. For the first type, technology transfer must be considered between source categories that produce similar exhaust streams. For the second type, technology transfer must be considered between source categories with similar processes.

Federal $PM_{2.5}$ New Source Review and South Coast AQMD Rule 1325

$PM_{2.5}$ NSR applies to a new major polluting facility, major modifications to a major polluting facility, and any modification to an existing facility that would constitute a major polluting facility. A major polluting facility would be a facility located in areas federally designated pursuant to 40 CFR 81.305 as non-attainment for $PM_{2.5}$ for the South Coast Air Basin (SOCAB) which has actual emissions of, or the potential to emit, 70 tons or more per year of $PM_{2.5}$, or its precursors for serious areas. For major modifications, LAER applies on a pollutant-specific basis to emissions of $PM_{2.5}$ and its precursors, for which (1) the source is major, (2) the modification results in a significant increase, and (3) the modification results in a significant net emissions increase.

Significant means in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates[3]:

Nitrogen oxides:	40 tons per year
Sulfur dioxide:	40 tons per year
Volatile organic compound (VOC):	40 tons per year[4]
$PM_{2.5}$:	10 tons per year
Ammonia:	40 tons per year[5]

A facility subject to the Federal $PM_{2.5}$ NSR will be required to comply with the following:

- Lowest Achievable Emission Rate (LAER)
- Emission increases offset
- Certification of compliance with Clean Air Act; and
- Analysis conducted of benefits of the proposed project outweigh the environmental and social costs associated with that project.

Please refer to South Coast AQMD Rule 1325 for specific requirements.

[3] South Coast AQMD Rule 1325(b)(12), as amended on January 4, 2019
[4] VOC was added to Rule 1325 as a precursor to $PM_{2.5}$ pursuant to EPA's 2016 $PM_{2.5}$ SIP implementation Rule
[5] Ammonia was added to Rule 1325 as a precursor to $PM_{2.5}$ pursuant to EPA's 2016 $PM_{2.5}$ SIP implementation Rule.

LIMITED BACT EXEMPTION

Rule 1304 - Exemptions was amended in November 2021 to add subdivision (f) to include a limited BACT exemption for RECLAIM and former RECLAIM facilities. This limited BACT exemption is available to new or modified permit unit located at a RECLAIM or former RECLAIM facilities, for PM10 and SOx emission increases associated with the installation or modification of add-on air pollution control equipment for controlling NOx emissions to comply with NOx Best Available Retrofit Control Technology (BARCT) emission limits. The objective of the proposed narrow BACT exemption is to address the co-pollutant issue associated with the installation or modification of add-on air pollution controls and the replacement of equipment that is combined with an installation or modification of add-on air pollution control required to transition NOx RECLAIM facilities. This limited BACT exemption is available only to projects at qualified facilities that meet all the requirements listed under Rule 1304 subparagraphs (f)(1)(A) through (E) [6].

Cost in LAER Determinations

USEPA guidelines do not allow for routine consideration of the cost of control in LAER determinations. However, USEPA guidelines say that LAER is not considered achievable if the cost of control is so great that a new source could not be built or operated with a particular control technology. If a facility in the same or comparable industry already uses the control technology, then such use constitutes evidence that the cost to the industry is not prohibitive.

State law (H&SC 40405) also defines BACT as the lowest achievable emission rate, which is the more stringent of either (i) the most stringent emission limitation contained in the SIP, or (ii) the most stringent emission limitation that is achieved in practice. There is no explicit reference or prohibition to cost considerations, and the applicability extends to all permitted sources. South Coast AQMD rules implement both state BACT and federal LAER requirements simultaneously, and furthermore specify that South Coast AQMD BACT must meet federal LAER requirements for major polluting facilities.

If a proposed LAER determination results in extraordinary costs to a facility, the applicant may bring the matter to South Coast AQMD management for consideration as described in Overview, Chapter 6.

Special Permitting Considerations

Although the most stringent, AIP LAER for a source category will most likely be the required LAER, South Coast AQMD staff may consider special technical circumstances that apply to the proposed equipment which may allow deviation from that LAER. The permit applicant should bring any pertinent facts to the attention of the South Coast AQMD permitting engineer for consideration.

[6] See Rule 1304 (f).

Case-Specific Situations

South Coast AQMD staff may consider unusual equipment-specific and site-specific characteristics of the proposed project that would warrant a reconsideration of the LAER requirement for new equipment. Here are some examples of what may be considered.

Technical infeasibility of the control technology

A particular control technology may not be required as LAER if the applicant demonstrates that it is not technically feasible to install and operate it to meet a specific LAER emission limitation in a specific permitting situation.

Operating schedule and project length

If the equipment will operate much fewer hours per year than what is typical, or for a much shorter project length, it can affect what is considered AIP.

Availability of fuel or electricity

Some LAER determinations may not be feasible if a project will be located in an area where natural gas or electricity is not available.

Process requirements

Some LAER determinations specify a particular type of process equipment. South Coast AQMD staff may consider requirements of the proposed process equipment that would make the LAER determination not technically feasible.

Equivalency

The permit applicant may propose alternative means to achieve the same emission reduction as required by LAER. For example, if LAER requires a certain emission limit or control efficiency to be achieved, the applicant may choose any control technology, process modification, or combination thereof that can meet the same emission limit or control efficiency.

Super Compliant Materials

South Coast AQMD will accept the use of super compliant materials in lieu of an add-on control device controlling VOC emissions from coating operations. For example, if a permit applicant uses only surface coatings that meet the super compliant material definition in South Coast AQMD Rule 109, an add-on control device would not be required for VOC LAER. This policy does not preclude any other LAER requirements for other contaminants.

Equipment Modifications

As a general rule, it is more difficult to retrofit existing equipment with LAER as a result of NSR modification when compared to a new source. The equipment being modified may not be compatible with some past LAER determinations that specify a particular process type. There may also be space restrictions that prevent installation of some add-on control technology.

Other Considerations

Although multiple process and control options may be available during the LAER determination process, considerations should be made for options that reduce the formation of air contaminants from the process, as well as ensuring that emissions are properly handled. In addition to evaluating the efficiency of the control stage, these additional considerations are needed to ensure that the system is capable of reducing or eliminating emissions from the facility on a consistent basis during the operational life of the equipment.

Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C. §§13101-13109) established a national policy that pollution should be prevented or reduced at the source whenever feasible. In many cases, air pollution control is a process that evaluates contaminants at the exhaust of the system. Pollution prevention is the reduction or elimination of waste at the source by the modification of the production process. Pollution prevention measures may consist of the use of alternate or reformulated materials, a modification of technology or equipment, or improvement of energy efficiency changes that result in an emissions reduction. These measures should be considered as part of the LAER determination process if the measures will result in the elimination or reduction of emissions, but are not required to include projects which are considered to fundamentally redefine the source. New and different emissions created by a process or material change will also need to be considered as part of the LAER determination process, in contrast to the overall emissions reductions from the implementation of pollution prevention measures. U.S. EPA policy defined pollution prevention as source reduction and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources, and protection of natural resources by conservation[7]. U.S. EPA further specifies that pollution prevention does not include recycling (except in-process recycling), energy recovery, treatment or disposal. For purposes of these BACT Guidelines, and to be consistent with federal definitions, source reduction and pollution prevention may include, but not be limited to, a consideration of the feasibility of:

- equipment or technology modifications,
- process or procedure modifications,
- reformulation or redesign of products,
- substitution of raw materials, or
- improvements in housekeeping, maintenance or inventory control,

that reduce the amount of air contaminants entering any waste stream or otherwise released into the environment, including fugitive emissions.

Monitoring and Testing

In order to ensure that LAER determinations continue to meet their initial emission and efficiency standards, periodic or continuous parameter monitoring and testing requirements may be required during the permitting process. Equipment and processes may experience some change over time, due to aging or operational methods of the

[7] U.S. EPA Pollution Prevention Law and Policies (www.epa.gov/p2/pollution-prevention-law-and-policies#define)

equipment, which may affect emission rates or control efficiencies. In addition to other rule requirements, additional monitoring and testing requirements may need to focus on aspects directly related to the BACT determination, and may be made enforceable by permit conditions. Monitoring and testing requirements should be specific to characterize operating conditions (e.g. temperatures, pressures, flows, production rates) and measurement techniques when LAER is established to ensure clarity and consistency with the standard.

Capture Efficiency

An integral part of controlling air pollutants emitted from a process with add-on air pollution control equipment is capturing those emissions and directing them to the air pollution control device. Emissions which are designed to be collected by an exhaust system but are vented uncontrolled into the atmosphere can have a much greater impact than controlled emissions. When applicable, the evaluation of a process and its associated control equipment should address the qualification and quantification of capture efficiency. By addressing capture efficiency during LAER determinations, a standard can be established to evaluate the capture efficiency of other systems, as well as ensure that the capture efficiency is maintained consistently over time.

If applicable, LAER determinations may include the percentage capture efficiency and the methods and measurements (e.g. EPA Method 204, capture velocity measurements, design using ACGIH's Industrial Ventilation, static pressures) used to determine and verify it. For various circumstances, several South Coast AQMD rules (Table 4) already require an assessment of collection efficiency of an emission control system following EPA Method 204, EPA's "Guidelines for Determining Capture Efficiency", South Coast AQMD's "," or other methods approved by the Executive Officer, and are appropriate to include as LAER requirements. The capture efficiency for any LAER Determination shall be no less stringent than any applicable rule requirement. Other considerations that may affect capture, such as cross-drafts, thermal drafts and the volume of combustion products, should also be addressed during this process.

Table 4
South Coast AQMD Regulation XI and XIV Rules with Capture Efficiency Requirements or Considerations

- 1103
- 1104
- 1106
- 1107
- 1115
- 1122
- 1124
- 1125
- 1126
- 1128
- 1130
- 1130.1
- 1131
- 1132
- 1136
- 1141
- 1141.2
- 1144
- 1145
- 1155
- 1156
- 1162
- 1164
- 1171
- 1175
- 1178
- 1407
- 1420
- 1420.1
- 1420.2
- 1425
- 1469
- 1469.1

LAER APPLICATION CUT-OFF DATES

For applications submitted by major polluting facilities, LAER requirements will be determined based on information available up to the date the permit to construct is issued. This requirement allows interested parties to comment on possible technologies that could provide lower emissions.

Applications for a Registration Permit for equipment issued a valid Certified Equipment Permit (CEP), which is valid for one year, will only be required to comply with LAER as determined at the time the CEP was issued. However, South Coast AQMD staff will reevaluate the LAER requirements for the CEP upon renewal of the Title V permit.

LAER UPDATE PROCESS

South Coast AQMD will update Section I – South Coast AQMD LAER/BACT Determinations of Part B of the BACT Guidelines on an ongoing basis with actual LAER determinations for South Coast AQMD permits issued to major polluting facilities. The process will depend on whether or not the LAER requirement is more stringent than previous South Coast AQMD LAER determinations for the same equipment category.

When South Coast AQMD permitting staff makes a LAER determination that is no more stringent than previous South Coast AQMD LAER determinations, the permitting team will issue the permit and forward information regarding this LAER determination to the BACT Team.[8] The BACT Team will review this LAER determination with the BACT SRC prior to listing in the BACT Guidelines.

Whenever permitting staff makes a LAER determination that is more stringent than what South Coast AQMD has previously required as LAER, the permit to construct may be subject to a public review. In any event depending on Rule 212, the permitting team will forward the preliminary LAER determination to the BACT Team, who will prepare and send a public notice of the preliminary determination to the BACT SRC, potentially interested persons, and anyone else requesting the information. Staff will consider all comments filed during the 30-day review period before making a permit decision. Staff will make every effort to conduct the public review consistent with the requirements of state law. However, if the 30-day review period conflicts with the deadline of the Permit Streamlining Act[9] for issuing the permit, the permit will be issued in accordance with state law. The 30-day public review may also be done in parallel with other public reviews mandated by *Rule 212 - Standards for Approving Permits and Issuing Public Notice* or *Regulation XXX - Title V Permits* in applicable cases.

On a periodic basis, the South Coast AQMD BACT Team will provide standing status reports to the South Coast AQMD Governing Board's Stationary Source Committee and to the Governing Board.

In summary, as technology advances, many categories in the South Coast AQMD's BACT Guidelines will be updated with new listings. This on-going process will reflect new lower emitting technologies not previously identified in the Guidelines.

CLEAN FUEL GUIDELINES

In January 1988, the South Coast AQMD Governing Board adopted a Clean Fuels Policy that included a requirement to use clean fuels as part of BACT/LAER. A clean fuel is one that produces air emissions equivalent to or lower than natural gas for NO_x, SO_x, ROG, and fine respirable particulate matter (PM_{10}). Besides natural gas, other clean fuels are liquid petroleum gas (LPG), hydrogen and electricity. Utilization of zero and near-zero emission technologies are also integrated into the Clean Fuels Policy. The burning of

[8] To reduce the burden on South Coast AQMD of preparing hundreds of LAER Determination Forms each month, forms will not be prepared for routine LAER determinations after Part B, Section I of the guidelines has sufficient entries to demonstrate typical LAER requirements.

[9] The requirements of the Permit Streamlining Act are also found in South Coast AQMD's Rule 210.

landfill, digester, refinery and other by-product gases is not subject to the clean fuels requirement. However, the combustion of these fuels must comply with other South Coast AQMD rules, including the sulfur content of the fuel.

The requirement of a clean fuel is based on engineering feasibility. Engineering feasibility considers the availability of a clean fuel and safety concerns associated with that fuel. Some state and local safety requirements limit the types of fuel, which can be used for emergency standby purposes. Some fire departments or fire marshals do not allow the storage of LPG near occupied buildings. Fire officials have, in some cases, vetoed the use of methanol in hospitals. If special handling or safety considerations preclude the use of the clean fuel, the South Coast AQMD has allowed the use of fuel oil as a standby fuel in boilers and heaters, fire suppressant pump engines and for emergency standby generators. The use of these fuels must meet the requirements of South Coast AQMD rules limiting NO_x and sulfur emissions.

AIR QUALITY-RELATED ENERGY POLICY

In September 2011, the South Coast AQMD Governing Board adopted an air quality-related energy policy to help guide a unified approach to reducing air pollution while addressing other key environmental concerns including environmental justice, climate change and energy independence. The air quality-related energy policy outlines 10 policies and 10 action steps to help meet federal health-based standards for air quality in the South Coast Air Basin while also promoting the development of zero- and near-zero emission technologies.

Policy 7 is to require any new/repowered in-Basin fossil-fueled generation power plant to incorporate BACT/LAER as required by South Coast AQMD rules, considering energy efficiency for the application. These power plants will need to comply with any requirements adopted by the California Air Resources Board, California Energy Commission, Public Utilities Commission, California Independent System Operator, or the governing board of a publicly-owned electric utility, as well as state law under the California Environmental Quality Act. In recognizing that fossil fuel electric generation will still be needed in the Basin to complement projected increased use of renewable energy sources, this policy ensures that all fossil-fueled plants will meet existing BACT/LAER requirements and South Coast AQMD's BACT/LAER determinations will also take into consideration generating efficiency in setting the emission limits. Parts E and F of the BACT Guidelines complement and support this policy.

Chapter 2 - How to Use Part B of the BACT Guidelines

This chapter explains the LAER information found in Part B - LAER/BACT Determinations for Major Polluting Facilities. Part B is a listing of LAER/BACT determinations for major polluting facilities contained in South Coast AQMD and other air pollution control agencies' permits, and data on new and emerging technologies. These LAER/BACT determinations and data are guides and will be used, along with other information, to determine LAER as outlined in Chapter 1. For a listing of equipment types, refer to the List of Equipment Categories. LAER determination for equipment not found in Part B of the BACT Guidelines is done according to the process outlined in Chapter 1.

GENERAL

Part B is divided into three sections. Section I – South Coast AQMD LAER/BACT Determinations, contains information on LAER/BACT determinations contained in permits issued by South Coast AQMD, with permit limits based on achieved in practice technology. Section II – Non-AQMD LAER/BACT Determinations, lists LAER/BACT determinations contained in other air pollution control agencies' permits or BACT Guidelines, with permit limits based on achieved in practice technology. Section III – Other Technologies, consists of information on technologies which have been achieved in practice and may be reflected in a permit limit, information on emerging technologies or emission limits which have not yet been achieved in practice but overall have not met all the criteria for achieved in practice. All three sections are subdivided based on the attached List of Equipment Categories. Within each category, the LAER/BACT determinations will be listed in order of stringency.

Each listing includes the following information, in addition to other information detailing the description and operation of the equipment:

- Equipment Information

This provides information on the manufacturer, model, description, function, size/dimensions/capacity, combustion sources, and cost of the equipment. Cost data are generally obtained from the South Coast AQMD application forms, manufacturer or owner/operator, and are not verified. It also provides additional information such as fuel type for combustion equipment and equipment information comments that can provide weight of parts cleaned per load for degreasers and the number and size of blowers for spray booths.

- Company Information

This identifies the contact person and owner/operator of the equipment, along with telephone numbers.

- Permit Information

This identifies the permitting agency and the name and telephone number of the agency's contact person. It also provides information on Permits to Construct/Operate. The South Coast AQMD is always the issuing agency for LAER determinations listed in Section I.

- Emission Information

This identifies the actual permit limits and LAER/BACT requirements set forth by the issuing agency for the equipment being evaluated, concise description of the BACT requirements for each regulated contaminant, and basis of the BACT/LAER determination.

- Control Technology

This provides information on the manufacturer, model, description, size/dimensions/capacity, permit information and required control efficiencies on the control technology used to achieve the permit limit and the LAER/BACT requirements.

- Demonstration of Compliance

This provides information such as source test or other method that was used to demonstrate compliance and any monitoring or testing requirements.

- Additional South Coast AQMD Reference Data

This identifies the BCAT (for basic equipment[10]), CCAT (for control equipment), RECLAIM and Title V facilities, and source test ID. It also lists applicable South Coast AQMD Regulation XI rules. Additionally, it provides health risk data for the permit unit.

The above information will enable permit applicants to assess the applicability of each LAER/BACT determination to their particular equipment.

The LAER requirements usually found in the LAER Determination listings are in the form of:

- an emission limit;
- a control technology;
- equipment requirements; or
- a combination of the last two

If the requirement is an emission limit, the applicant may choose any control technology to achieve the emission limit. The South Coast AQMD prefers to set an emission limit as LAER because it allows an applicant the most flexibility in reducing emissions. If control technology and/or equipment requirements are the only specified LAER, then either emissions from the equipment are difficult to measure or it was not possible to specify an emission limit that applies to all equipment within the category. Where possible, an emission limit or control efficiency condition will be specified on the permit along with the control technology or equipment requirements to ensure that the equipment is properly operated with the lowest emissions achievable.

[10] Basic equipment is the process or equipment, which emits the air contaminant for which BACT is being determined.

HOW TO DETERMINE LAER

The Part B LAER determinations are only examples of LAER determinations for equipment that have been issued permits or that have been demonstrated in practice. As described in Chapter 1, LAER is determined on a case-by-case basis. To find out what LAER is likely to be for a particular equipment, the applicant should review the Part B LAER determinations found at the South Coast AQMD website www.aqmd.gov/home/permits/bact. The CAPCOA Clearinghouse maintained by the California Air Resources Board and the USEPA RACT/BACT/LAER Clearinghouse should also be reviewed. These compendiums contain information from other districts, local agencies, and states that may not be included in the South Coast AQMD BACT Guidelines. Finally, the South Coast AQMD permitting staff may be contacted to discuss LAER prior to submitting a permit application.

As described in Chapter 1, the permit applicant should bring to the attention of the South Coast AQMD permitting engineer any special permitting considerations that may affect the LAER determination.

ATTACHMENT D

Section I – South Coast AQMD LAER/BACT Determination

Source Type: **Major/LAER**

Application No.: **615085**

Equipment Category: **Boiler < 20 MMBTU/HR**

Equipment Subcategory: **Fire-tube, Natural Gas Fired**

Date: **September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Williams and Davis	B. MODEL: WDNP2-G-840
C. DESCRIPTION: Boiler, Fire-tube Type, with a Low NOx Burner	
D. FUNCTION: Mizkan America, Inc. manufacturers a variety of vinegars (5 – 15% acetic acid). The facility has inactivated two of their older 3.985 MMBtu/hr boilers from service and has replaced them with this larger one. This boiler is currently used to produce steam to heat up their process water.	
E. SIZE/DIMENSIONS/CAPACITY: 8.4 MMBtu/hr	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 8.4 MMBTU/hr	
G. BURNER INFORMATION:	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Low NOx Burner	8.4 MMBtu/hr	one

H. PRIMARY FUEL: Natural Gas	I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 24 HRS//DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: N/A	
L. EQUIPMENT INFORMATION COMMENTS: Boiler with 10 HP Combustion Air Blower. Per Rule 1146, this boiler is considered a Group III Unit (5 MMBtu/hr – 20 MMBtu/hr) boiler.	

2. COMPANY INFORMATION

A. COMPANY: Mizkan America, Inc.	B. FAC ID: 39855
C. ADDRESS: 10037 E. 8th Street CITY: Rancho Cucamonga STATE: CA ZIP: 91730	D. NAICS CODE: 2099
E. CONTACT PERSON: Wayne Musselman	F. TITLE: Maintenance Manager
G. PHONE NO.: 909-989-4211	H. EMAIL: Wayne.Musselman@mizkan.com

3. PERMIT INFORMATION

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Christopher Gill	
D. PERMIT INFORMATION: PC ISSUANCE DATE: N/A (PO no PC) P/O NO.: G61375 PO ISSUANCE DATE: 4/21/2020	
E. START-UP DATE: 2020	
F. OPERATIONAL TIME: > 2 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit		7 PPMV	*	50 PPMV	*	
Averaging Time		15 MIN**		15 MIN**		
Correction		3 % O_2		3 % O_2		

B. OTHER BACT REQUIREMENTS:

* Using Natural Gas

** Per condition (5)(d), the sampling times shall be at least 15 consecutive minutes for maximum and minimum loads and at least one hour for normal operating load.

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: This equipment is subject to the applicable NOx requirements of Rule 1146.

5. CONTROL TECHNOLOGY

A. MANUFACTURER: William and Davis	B. MODEL: WDNP2-G-840

C. DESCRIPTION: Low NOx burner

D. SIZE/DIMENSIONS/CAPACITY: 8.4 MMBTU

E. CONTROL EQUIPMENT PERMIT INFORMATION: See Section 3

APPLICATION NO.: PC ISSUANCE DATE: Click here to enter a date.

PO NO.: PO ISSUANCE DATE: Click here to enter a date.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS: N/A

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test

B. DATE(S) OF SOURCE TEST: September 5, 2020

C. COLLECTION EFFICIENCY METHOD: N/A

D. COLLECTION EFFICIENCY PARAMETERS: N/A

E. SOURCE TEST/PERFORMANCE DATA:

Parameter	Units	Minimum	Average	Maximum	Limit	Rule/ Regulation
NO_x	ppm @ 3% O_2	3.75	5.04	5.70	7	Condition 10
	lb/hr	0.0165	0.0347	0.0507		
CO	ppm @ 3% O_2	0.566	0.187	0.0	50	
	lb/hr	0.00152	0.000783	0.0		
O_2	%	9.02	8.27	8.03		

F. TEST OPERATING PARAMETERS AND CONDITIONS: The boiler was tested at three loads: minimum, average, and maximum.

G. TEST METHODS (SPECIFY AGENCY): SCAQMD 100.1 for NOx, CO, O_2 and CO_2.

H. MONITORING AND TESTING REQUIREMENTS: Condition (5) The owner or operator of this equipment shall conduct an initial source test and subsequent source test every five years. Condition (7) The operator shall conduct periodic monitoring of NOx and CO emissions pursuant to the schedule in Rule 1146 with a portable NOx, CO and Oxygen analyzer according to the Protocol for the Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Units Subject to South Coast AQMD Rule 1146.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Unit has shown compliance from source test.

b

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 011003	B. CCAT: 81	C. APPLICATION TYPE CODE: 30
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR 20291
G. SCAQMD SOURCE SPECIFIC RULES: Rule 1146		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section I – South Coast AQMD LAER/BACT Determination

Source Type: **Major/LAER**

Application No.: **584656**

Equipment Category: **Dryer – Aggregate Facility**

Equipment Subcategory: **Rotary Dryer, Natural Gas Fired**

Date: **September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Gencor	B. MODEL: N/A
C. DESCRIPTION: Rotary Dryer, Drum/Mixer, with a Gencor Equinox Natural Gas Fired Burner	
D. FUNCTION: The facility is in the business of producing asphaltic concrete. The raw aggregate, recycled asphalt product and recycled asphalt shingles are fed into a rotary dryer from an on-site cold feed system. The material is heated to temperature under specification to remove moisture. Asphalt oil is fed directly into the dryer and mixed with raw aggregate. The asphaltic concrete is discharged into an incline slat conveyor which feeds silo loading batches via a series of drag slat conveyors. The exhaust from the dryer and conveyor is vented to a hot baghouse.	
E. SIZE/DIMENSIONS/CAPACITY: 135 MMBtu/hr	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 135 MMBTU/hr	
G. BURNER INFORMATION:	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Low NOx Burner	135 MMBtu/hr	one

H. PRIMARY FUEL: Natural Gas	I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 24 HRS//DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: N/A	
L. EQUIPMENT INFORMATION COMMENTS: Two combustion air blowers, 155 HP total.	

2. COMPANY INFORMATION

A. COMPANY: Granite Construction Co.	B. FAC ID: 178534
C. ADDRESS: 35100 Dillon Rd. CITY: Indio STATE: CA ZIP: 92203	D. NAICS CODE: 324121
E. CONTACT PERSON: Jayne Powell	F. TITLE: Environmental Manager
G. PHONE NO.: 760-775-7500	H. EMAIL: Jayne.Powell@gcinc.com

3. PERMIT INFORMATION

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Marilyn Potter	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 5/5/2016 P/O NO.: G44681 PO ISSUANCE DATE: 1/30/2017	
E. START-UP DATE: 2017	
F. OPERATIONAL TIME: 5 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit		33 PPMV				
Averaging Time		-				
Correction		3 % O_2				

B. OTHER BACT REQUIREMENTS: N/A

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: The manufacturer provided an emission guarantee for 33 ppm. The source test showed an average of 29 ppm @ 3% O_2, demonstrating compliance with Rule 1147.

5. CONTROL TECHNOLOGY

A. MANUFACTURER: -	B. MODEL: -
C. DESCRIPTION: Low NOx burner	
D. SIZE/DIMENSIONS/CAPACITY: 135 MMBTU/hr	
E. CONTROL EQUIPMENT PERMIT INFORMATION: See Section 3 APPLICATION NO.: PC ISSUANCE DATE: Click here to enter a date. PO NO.: PO ISSUANCE DATE: Click here to enter a date.	

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS: N/A

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test

B. DATE(S) OF SOURCE TEST: September 7, 2016

C. COLLECTION EFFICIENCY METHOD: N/A

D. COLLECTION EFFICIENCY PARAMETERS: N/A

E. SOURCE TEST/PERFORMANCE DATA:

Parameter	Units	Run #1	Run #2	Run #3	Limit	Rule/Regulation
NOx	ppm @ 3% O_2	27.7	29.6	29.8	33	Condition 4
	lb/MMBtu	0.034	0.036	0.037		
CO	ppm @ 3% O_2	763	815	398	2000	
	lb/MMBtu	0.572	0.611	0.299		
O_2	%	13.5	13.8	12.9		

F. TEST OPERATING PARAMETERS AND CONDITIONS: N/A

G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 100.1 for NOx, CO, O_2 and CO_2.

I. MONITORING AND TESTING REQUIREMENTS:
Permit to Construct - Condition (12): The owner or operator of this equipment shall conduct an initial source test.

I. DEMONSTRATION OF COMPLIANCE COMMENTS: Rotary Dryer has shown compliance with SCAQMD Rule 1147 through the source test.

b

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000293	B. CCAT: .	C. APPLICATION TYPE CODE: 10	
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR 16172A	
G. SCAQMD SOURCE SPECIFIC RULES: Rule 1147			
H. HEALTH RISK FOR PERMIT UNIT			
H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section I – South Coast AQMD LAER/BACT Determination

Source Type:	**Major/LAER**
Application No.:	**557373, 563695, 556097, and 555096**
Equipment Category:	**Flow Coater with Regenerative Thermal Oxidizer**
Equipment Subcategory:	**Paper and Film**
Date:	**September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Faustel		B. MODEL: N/A
C. DESCRIPTION: Arlon produces adhesive and decorative films. All four production lines are vented along with their mixing rooms to a regenerative thermal oxidizer (RTO) to control emissions of VOC. Four permanent total enclosures (PTEs), one around each coating head, are vented to the RTO.		
D. FUNCTION: Casting of paper and vinyl film and application of an adhesive on to the film		
E. SIZE/DIMENSIONS/CAPACITY: N/A		
COMBUSTION SOURCES		
F. MAXIMUM HEAT INPUT: N/A		
G. BURNER INFORMATION		
TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	N/A	N/A
H. PRIMARY FUEL: N/A	I. OTHER FUEL: N/A	
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR		
K. EQUIPMENT COST: N/A		
L. EQUIPMENT INFORMATION COMMENTS: Knife-over-roll type		

2. COMPANY INFORMATION

A. COMPANY: Arlon Graphics LLC	B. FAC ID: 174406
C. ADDRESS: 200 Boysenberry Lane CITY: Placentia STATE: CA ZIP:92870	D. NAICS CODE: 322222
E. CONTACT PERSON: Robert Nicholson	F. TITLE: Engineering Manager
G. PHONE NO.: 714-431-4221	H. EMAIL: rnicholson@arlon.com

3. PERMIT INFORMATION

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: OTHER
C. SCAQMD ENGINEER: Jeanne Pendes Villacorte	
D. PERMIT INFORMATION: P/O NO.: G51869	PC ISSUANCE DATE: 1/7/15 PO ISSUANCE DATE: 12/2/2016
E. START-UP DATE: 2016	
F. OPERATIONAL TIME: 6 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit						
Averaging Time						
Correction						

B. OTHER BACT REQUIREMENTS: N/A

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: N/A

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Adwest Technologies, Inc.	B. MODEL: 50.0 RTO-97

C. DESCRIPTION: Regenerative thermal oxidizer with a Maxon low-NOx burner

D. SIZE/DIMENSIONS/CAPACITY: 14.45 MMBtu/hr low-NOx natural gas burner

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 587507 PC ISSUANCE DATE: Click here to enter a date.

PO NO.: G51846 PO ISSUANCE DATE: 4/18/2018

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	97%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS : The operation of the RTO to control VOC emissions is in compliance with requirements of South Coast AQMD Rules 1128 and 1171. The RTO burner is only used to pre-heat the ceramic beds to establish an initial temperature of 1500F.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: April 20, 2016

C. COLLECTION EFFICIENCY METHOD: The VOC destruction efficiency was determined at the inlet and outlet of the RTO, simultaneously, by SCAQMD Methods 25.1/25.3. The enclosures were certified as PTEs for 100% capture of the VOC by EPA Method 204.

D. COLLECTION EFFICIENCY PARAMETERS: See Part C

E. SOURCE TEST/PERFORMANCE DATA: VOC destruction efficiency for the oxidizer is 98.9%. Use of PTEs yielded a collection efficiency of 100% and therefore the overall control efficiency is 98.9%.

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.
G. TEST METHODS (SPECIFY AGENCY): South Coast AQMD Methods 25.1/25.3
J. MONITORING AND TESTING REQUIREMENTS: Source test was conducted with all four coating lines operating.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: The permit requires source testing on the RTO to verify that the overall control efficiency is a minimum of 97%.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000211	B. CCAT: N/A	C. APPLICATION TYPE CODE: 60
D. RECLAIM FAC? YES ☒ NO ☐	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR15245A
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section II - Other LAER/BACT Determination

Source Type: **Major/LAER**

Application No.: **5299**

Equipment Category: **Fumigation Chamber**

Equipment Subcategory: **Methyl Bromide**

Date: **September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Custom	B. MODEL: Custom
C. DESCRIPTION: Methyl Bromide fumigation and control system consisting of carbon adsorption control device with onsite reactivation using a chemical scrubber.	
D. FUNCTION: Guadalupe Cooling is a produce cooling facility for vegetables, including broccoli, lettuce, cauliflower and celery, and berries. The produce is fumigated with methyl bromide prior to export overseas.	
E. SIZE/DIMENSIONS/CAPACITY: One 10,097 cu. ft. and two 19,189 cu. ft. in volume fumigation chambers. One methyl bromide volitizer and injection system. one USDA-APHIS-approved methyl bromide monitor and control room with methyl bromide cylinder storage.	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: N/A	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	N/A	N/A

H. PRIMARY FUEL: N/A	I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 8 Days 7 Weeks 46	
K. EQUIPMENT COST: N/A	
L. EQUIPMENT INFORMATION COMMENTS: N/A	

2. COMPANY INFORMATION

A. COMPANY: Guadalupe Cooling Company	B. FAC ID: 2825
C. ADDRESS: 2040 Guadalupe Road CITY: Nipomo STATE: CA ZIP: 93444	D. NAICS CODE: 561710
E. CONTACT PERSON: Danny Vincent	F. TITLE: Representative
G. PHONE NO.: (805) 343-2331 ext 108	H. EMAIL: sales@freshkist.com

3. PERMIT INFORMATION

A. AGENCY: San Luis Obispo County APCD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: PLR from SLOCAPCD	
D. PERMIT INFORMATION:	PC ISSUANCE DATE: 8/24/10
P/O NO.: 1713-2	PO ISSUANCE DATE: 2/18/2014
E. START-UP DATE: N/A	
F. OPERATIONAL TIME: 8 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit						
Averaging Time						
Correction						

B. OTHER BACT REQUIREMENTS: 86% overall control efficiency (capture and control) on carbon adsorption system.

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: N/A

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Custom	B. MODEL: Custom

C. DESCRIPTION: Methyl Bromide fumigation and control system consisting of carbon adsorption control device with onsite reactivation using a chemical scrubber.

D. SIZE/DIMENSIONS/CAPACITY: One carbon adsorption bed with 15.6" inner diameter exhaust stack, 40 ft. from ground level and 5,350 cubic feet per minute exhaust blower. One chemical scrubber, 15,229 gallon tank with 2.54" inner diameter exhaust stack, 50 ft. from ground level with minimum 250 cfm. desorption blower.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 5299 PC ISSUANCE DATE: 8/18/10

PO NO.: 1713-2 PO ISSUANCE DATE: 2/18/2014

F. REQUIRED CONTROL EFFICIENCIES: 86% overall control efficiency (capture and control) on carbon adsorption system.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	86%	___%	___%
NOx	--%	___%	___%
SOx	--%	___%	___%
CO	--%	___%	___%
PM	--%	___%	___%
PM_{10}	--%	___%	___%
INORGANIC	--%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS: The overall control efficiency was established and conditioned based on source testing conducted at the facility.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Tests conduction every 24 months since 2013

B. DATE(S) OF SOURCE TEST: Every 24 months since 2013

C. COLLECTION EFFICIENCY METHOD: See EPA Method below

D. COLLECTION EFFICIENCY PARAMETERS: See EPA Method below

E. SOURCE TEST/PERFORMANCE DATA: Demonstrate 86% overall control efficiency from carbon adsorption system.

F. TEST OPERATING PARAMETERS AND CONDITIONS: During venting of fumigation chambers. Sampling ports and access for source testing shall be provided in accordance with the provisions of SJVAPCD Rule 209 -Provision for Sampling and Testing Facilities.

G. TEST METHODS (SPECIFY AGENCY): EPA Method 2, 2A, or 2D for flow rate and Method 25, 25A, 25B, or 25D for measuring total gaseous organic concentrations at the inlet and outlet of the control device.

K. MONITORING AND TESTING REQUIREMENTS: (USDA-APHIS)-approved methyl bromide monitors on the inlet and outlet of both the carbon bed and chemical scrubber shall be installed, operated and maintained in accordance with the procedure listed in EPA Test Method 1 or 1A. USDA-APHIS-approved methyl bromide monitors shall be operated and maintained to demonstrate compliance with hourly, daily, and annual emission limits, and control efficiencies of the carbon bed and scrubber system. Each monitor shall be calibrated at least once every twelve (12)-months. Source testing required at least once every twenty-four (24) months.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: N/A

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE:Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section II - Other LAER/BACT Determination

Source Type:	**Major/LAER**
Application No.:	Approval Order 20AQ-E005
Equipment Category:	**Diesel Internal Combustion Engine**
Equipment Subcategory:	**Stationary, Emergency ICE ≥1,000 BHP**
Date:	**September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Caterpillar	B. MODEL: C175-16
C. DESCRIPTION: Diesel powered electric emergency generator	
D. FUNCTION: The emergency engine generators approved for operation by this size were installed at Microsoft Data Center in Quincy, Washington to provide backup/standby electrical power in case of emergency and loss of grid power.	
E. SIZE/DIMENSIONS/CAPACITY: 3.0 MWe (4,277 BHP)	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 26.51 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	N/A	N/A

H. PRIMARY FUEL: DIESEL	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: Hours HRS/DAY DAYS/WEEK WKS/YR	
K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines	
L. EQUIPMENT INFORMATION COMMENTS: Under the State of Washington permit, each engine shall not exceed 86 hours per year of operation averaged across all generators in service over a 12-month rolling average.	

2. COMPANY INFORMATION

A. COMPANY: Microsoft Corporation (MWH Data Center)	B. FAC ID:
C. ADDRESS: 1515 Port Industrial Pkwy CITY: Quincy STATE: WA ZIP: 98848	D. NAICS CODE: 511210
E. CONTACT PERSON: Jaymes Kirkham	F. TITLE: Data Center Operations Manager
G. PHONE NO.: (509) 237-3633	H. EMAIL: jayki@microsoft.com

3. PERMIT INFORMATION

A. AGENCY: State of Washington -Department of Ecology	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Jenny Filipy	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 2/27/20 P/O NO.: 20AQ-E005 PO ISSUANCE DATE: 2/27/2020 Approval Order No. 20AQ-E005: Microsoft MWH Data Center (wa.gov)	
E. START-UP DATE: 9/29/2020	
F. OPERATIONAL TIME: > 1 year	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.19 gr/kW-hr*	0.67 gr/kW-hr		3.5 gr/kW-hr	0.03 gr/kW-hr	
Averaging Time						
Correction						

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS:
According to the permit, for the five load tests, testing shall be performed at each of the five engine torque load levels described in Table 2 of Appendix B to Subpart E of 40 CFR Part 89, and data shall be reduced to a single-weighted average value using the weighting factors specified in Table 2.

*NMHC/VOC

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Caterpillar	B. MODEL: Model name and number

C. DESCRIPTION: All generators are Tier 2-ertified and each engine was equipped with urea-based selective catalytic reduction (SCR) and catalyzed diesel particulate filter (DPF) controls to meet the emission requirements of EPA Tier 4 Final engines.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: 2/27/20

PO NO.: 20AQ-E005 PO ISSUANCE DATE: 2/27/2020

F. REQUIRED CONTROL EFFICIENCIES: N/A

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS :

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: September 29, 2020

C. COLLECTION EFFICIENCY METHOD:

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA:

Pollutants: Test Results	Emission Limits
Filterable PM: 0.006 g/kWm-hr	0.03 g/kWm-hr
CO: 0.10 g/kWm-hr	3.5 g/kWm-hr
NOx: 0.47 g/kWm-hr	0.67 g/kWm-hr
NMHC: 0.004 g/kWm-hr	0.19 g/kWm-hr
NH3: 0.17* lb/hr	0.95 lb/hr

Engine brake mechanical output (kWm)

* Arithmetic average of three runs reported for ammonia emissions, not weighted average

F. TEST OPERATING PARAMETERS AND CONDITIONS:

Emission tests were performed while the source/units and air pollution control devices were operating at the conditions required by the permit. The units were tested when operating within 2% of the following target load values: 100%, 75%, 50%, 25%, and 10% load. The load was based on mechanical load. For the five load tests, testing was performed at each of the five engine torque load levels. Three test runs were conducted for each engine, except as allowed by the sampling protocol from 40 CFR 1065.

Each engine was equipped with a properly installed and maintained non-resettable meter that records total operating hours.

Each engine wase connected to a properly installed and maintained fuel flow monitoring system (either certified physical or generator manufacturer provided software) that records the amount of fuel consumed by the engine.

G. TEST METHODS (SPECIFY AGENCY):

Parameter	Load Test	Test Methods
Filterable PM	Five-load weighted average	40 CFR 1065
CO	Five-load weighted average	ASTM D-6348
NOx	Five-load weighted average	ASTM D-6348
NMHC	Five-load weighted average	EPA 25A
NH3	100%-load (±2%)	ASTM D-6348

L. MONITORING AND TESTING REQUIREMENTS: Every 60 months after initial source testing, Microsoft shall test at least one engine, including the engine with the most operating hours as long as it is a different engine from that which was tested during the previous 60 month interval testing

I. DEMONSTRATION OF COMPLIANCE COMMENTS: AIP established through source test and over one year of operation of the engines.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): W021AS-698877-RT-1155

G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.

H. HEALTH RISK FOR PERMIT UNIT

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section II - Other LAER/BACT Determination

Source Type:	**Major/LAER**
Application No.:	Approval Order 20AQ-E005
Equipment Category:	**Diesel Internal Combustion Engine**
Equipment Subcategory:	**Stationary, Emergency ICE ≥ 1,000 BHP**
Date:	**September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Caterpillar	B. MODEL: 3512C
C. DESCRIPTION: Diesel powered electric emergency generator	
D. FUNCTION: The emergency engine generators approved for operation by this order were installed at Microsoft Data Center in Quincy, Washington to provide backup/standby electrical power in case of emergency and loss of grid power.	
E. SIZE/DIMENSIONS/CAPACITY: 1.5 MWe (2,104 BHP)	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 14.20 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	N/A	N/A

H. PRIMARY FUEL: DIESEL	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: Hours HRS/DAY DAYS/WEEK WKS/YR	
K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines	
L. EQUIPMENT INFORMATION COMMENTS: Under the State of Washington permit, each engine shall not exceed 86 hours per year of operation averaged across all generators in service over a 12-month rolling average.	

2. COMPANY INFORMATION

A. COMPANY: Microsoft Corporation (MWH Data Center)	B. FAC ID:
C. ADDRESS: 1515 Port Industrial Pkwy CITY: Quincy STATE: WA ZIP: 98848	D. NAICS CODE: 511210
E. CONTACT PERSON: Jaymes Kirkham	F. TITLE: Data Center Operations Manager
G. PHONE NO.: (509) 237-3633	H. EMAIL: jayki@microsoft.com

3. PERMIT INFORMATION

A. AGENCY: State of Washington -Department of Ecology	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Jenny Filipy	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 2/27/20 P/O NO.: 20AQ-E005 PO ISSUANCE DATE: 2/27/2020 Approval Order No. 20AQ-E005: Microsoft MWH Data Center (wa.gov)	
E. START-UP DATE: 9/29/2020	
F. OPERATIONAL TIME: > 1 year	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.19 gr/kW-hr*	0.67 gr/kW-hr		3.5 gr/kW-hr	0.03 gr/kW-hr	
Averaging Time						
Correction						

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS:
According to the permit, for the five load tests, testing was performed at each of the five engine torque load levels described in Table 2 of Appendix B to Subpart E of 40 CFR Part 89, and data shall be reduced to a single-weighted average value using the weighting factors specified in Table 2.

*NMHC/VOC

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Caterpillar	B. MODEL: Model name and number

C. DESCRIPTION: All engines are Tier 2 certified, and each engine is equipped with urea-based selective catalytic reduction (SCR) and catalyzed diesel particulate filter (DPF) controls to meet the emission requirements of EPA Tier 4 engines.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: 2/27/20

PO NO.: 20AQ-E005 PO ISSUANCE DATE: 2/27/2020

F. REQUIRED CONTROL EFFICIENCIES: N/A

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS :

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: June 2, 2021

C. COLLECTION EFFICIENCY METHOD:

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA:

Pollutants: Test Results	Emission Limits
Filterable PM: 0.0007 g/kWm-hr	0.03 g/kWm-hr
CO: 0.014 g/kWm-hr	3.5 g/kWm-hr
NOx: 0.40 g/kWm-hr	0.67 g/kWm-hr
NMHC: 0.065 g/kWm-hr	0.19 g/kWm-hr
NH3: 0.16* lb/hr	0.50 lb/hr

Engine brake mechanical output (kWm)

* Arithmetic average of three runs reported for ammonia emissions, not weighted average

F. TEST OPERATING PARAMETERS AND CONDITIONS:

Emission tests were performed while the source/units and air pollution control devices were operating at the conditions required by the permit. The units were tested when operating within 2% of the following target load values: 100%, 75%, 50%, 25%, and 10% load. The load was based on mechanical load. For the five load tests, testing was performed at each of the five engine torque load levels. Three test runs were conducted for each engine, except as allowed by the sampling protocol from 40 CFR 1065.

Each engine shall be equipped with a properly installed and maintained non-resettable meter that records total operating hours.

Each engine shall be connected to a properly installed and maintained fuel flow monitoring system (either certified physical or generator manufacturer provided software) that records the amount of fuel consumed by the engine.

G. TEST METHODS (SPECIFY AGENCY):

Parameter	Load Test	Test Methods
Filterable PM	Five-load weighted average	40 CFR 1065
CO	Five-load weighted average	ASTM D-6348
NOx	Five-load weighted average	ASTM D-6348
NMHC	Five-load weighted average	EPA 25A
NH3	100%-load (±2%)	ASTM D-6348

The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

M. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.

I. DEMONSTRATION OF COMPLIANCE COMMENTS: AIP established through source test and over one year of operation of the engines.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): W021AS-698877-RT-1155
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section II - Other LAER/BACT Determination

Source Type:	**Major/LAER**
Application No.:	Approval Order 20AQ-E005
Equipment Category:	**Diesel Internal Combustion Engine**
Equipment Subcategory:	**Stationary, Emergency ICE ≥ 1,000 BHP**
Date:	**September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Caterpillar	B. MODEL: C18
C. DESCRIPTION: Diesel powered electric emergency generator	
D. FUNCTION: The emergency engine generators approved for operation by this order were installed at Microsoft Data Center in Quincy, Washington to provide backup/standby electrical power in case of emergency and loss of grid power.	
E. SIZE/DIMENSIONS/CAPACITY: 1.0 MWe (1,391 BHP)	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 9.66 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	N/A	N/A

H. PRIMARY FUEL: DIESEL	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: Hours HRS/DAY DAYS/WEEK WKS/YR	
K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines	
L. EQUIPMENT INFORMATION COMMENTS: Under the State of Washington permit, each engine shall not exceed 86 hours per year of operation averaged across all generators in service over a 12-month rolling average.	

2. COMPANY INFORMATION

A. COMPANY: Microsoft Corporation (MWH Data Center)	B. FAC ID:
C. ADDRESS: 1515 Port Industrial Pkwy CITY: Quincy STATE: WA ZIP: 98848	D. NAICS CODE: 511210
E. CONTACT PERSON: Jaymes Kirkham	F. TITLE: Data Center Operations Manager
G. PHONE NO.: (509) 237-3633	H. EMAIL: jayki@microsoft.com

3. PERMIT INFORMATION

A. AGENCY: State of Washington -Department of Ecology	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Jenny Filipy	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 2/27/20 P/O NO.: 20AQ-E005 PO ISSUANCE DATE: 2/27/2020 Approval Order No. 20AQ-E005: Microsoft MWH Data Center (wa.gov)	
E. START-UP DATE: 9/29/2020	
F. OPERATIONAL TIME: > 1 year	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.19 gr/kW-hr*	0.67 gr/kW-hr		3.5 gr/kW-hr	0.03 gr/kW-hr	
Averaging Time						
Correction						

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS:
According to the permit, for the five load tests, testing was performed at each of the five engine torque load levels described in Table 2 of Appendix B to Subpart E of 40 CFR Part 89, and data shall be reduced to a single-weighted average value using the weighting factors specified in Table 2.

*NMHC/VOC

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Caterpillar	B. MODEL: Model name and number

C. DESCRIPTION: All engines are Tier 2 certified, and each engine is equipped with urea-based selective catalytic reduction (SCR) and catalyzed diesel particulate filter (DPF) controls to meet the emission requirements of EPA Tier 4 engines.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: 2/27/20

PO NO.: 20AQ-E005 PO ISSUANCE DATE: 2/27/2020

F. REQUIRED CONTROL EFFICIENCIES: N/A

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS :

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: September 30, 2020

C. COLLECTION EFFICIENCY METHOD:

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA:

Pollutants: Test Results	Emission Limits
Filterable PM: 0.004 g/kWm-hr	0.03 g/kWm-hr
CO: 0.02 g/kWm-hr	3.5 g/kWm-hr
NOx: 0.64 g/kWm-hr	0.67 g/kWm-hr
NMHC: 0.005 g/kWm-hr	0.19 g/kWm-hr
NH3: 0.14* lb/hr	0.19 lb/hr

Engine brake mechanical output (kWm)

* Arithmetic average of three runs reported for ammonia emissions, not weighted average

F. TEST OPERATING PARAMETERS AND CONDITIONS:

Emission tests were performed while the source/units and air pollution control devices were operating at the conditions required by the permit. The units were tested when operating within 2% of the following target load values: 100%, 75%, 50%, 25%, and 10% load. The load was based on mechanical load. For the five load tests, testing was performed at each of the five engine torque load levels. Three test runs were conducted for each engine, except as allowed by the sampling protocol from 40 CFR 1065.

Each engine shall be equipped with a properly installed and maintained non-resettable meter that records total operating hours.

Each engine shall be connected to a properly installed and maintained fuel flow monitoring system (either certified physical or generator manufacturer provided software) that records the amount of fuel consumed by the engine.

G. TEST METHODS (SPECIFY AGENCY):

Parameter	Load Test	Test Methods
Filterable PM	Five-load weighted average	40 CFR 1065
CO	Five-load weighted average	ASTM D-6348
NOx	Five-load weighted average	ASTM D-6348
NMHC	Five-load weighted average	EPA 25A
NH3	100%-load (±2%)	ASTM D-6348

Identify the primary source test methods used and identify the agency (e.g., CARB Method 425).

N. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.

I. DEMONSTRATION OF COMPLIANCE COMMENTS: AIP established through source test and over one year of operation of the engines.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): W021AS-698877-RT-1155

G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.

H. HEALTH RISK FOR PERMIT UNIT

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section I – South Coast AQMD LAER/BACT Determination

Source Type: **Major/LAER**

Application No.: **625401(ICE) and 613081 (SCR)**

Equipment Category: **I.C. Engine**

Equipment Subcategory: **Stationary, Non-Emergency, Electrical Generator with SCR**

Date: **September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Miratech	B. MODEL: SP-EM35-120-18
C. DESCRIPTION: Selective Catalytic Reduction (SCR) emission control system with urea injection for prime natural gas fired electrical generation lean-burn engine	
D. FUNCTION: SCR system controls exhaust emissions from a prime operation engine used by the City of Palm Springs to generate electricity for one of their municipal facilities. Waste heat from the engine is used to heat water and provide heat to absorption chiller.	
E. SIZE/DIMENSIONS/CAPACITY: 1573 BHP, GE Jenbacher, model JMS416B86, natural gas, lean burn, turbocharged and aftercooled, 16 cylinders, four-cycle driving a 1MW electrical generator.	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: N/A	
G. BURNER INFORMATION: N/A	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	N/A	N/A

H. PRIMARY FUEL: Natural Gas	I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52	
K. EQUIPMENT COST: N/A	
L. EQUIPMENT INFORMATION COMMENTS: N/A	

2. COMPANY INFORMATION

A. COMPANY: City of Palm Springs	B. FAC ID: 42218
C. ADDRESS: 425 N. Civic Drive CITY: Palm Springs STATE: CA ZIP: 92262	D. NAICS CODE: 921190
E. CONTACT PERSON: Staci A. Schafer	F. TITLE: Director Maintenance and Facilities
G. PHONE NO.: (760) 323-8170	H. EMAIL: staci.schafer@palmspringca.gov

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: MODIFICATION
C. SCAQMD ENGINEER: Arnold Peneda	
D. PERMIT INFORMATION: P/O NO.: G63569	PC ISSUANCE DATE: 8/26/19 PO ISSUANCE DATE: 11/21/2020
E. START-UP DATE: 8/26/2019	
F. OPERATIONAL TIME: 2 years. Originally started in 11/18/15 with subsequent troubleshooting.	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

	VOC (lbs/MW-hr)	**NOx** (lbs/MW-hr)	**SOx** (lbs/MW-hr)	**CO** (lbs/MW-hr)	**PM OR PM_{10}** (lbs/MW-hr)	**INORGANIC**
BACT Limit	0.17*	0.12*		0.34*		10 ppm NH_3
Averaging Time	15 min	15 min		15 min		60 min
Correction	**	15% O_2		15% O_2		15% O_2

B. OTHER BACT REQUIREMENTS: Ammonia slip tested at least once per year and once every 3 months for the first year of operation.

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS:

* The limits are in compliance with the Rule 1110.2 electrical energy factor.

** Time Required for VOC sampling.

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Miratech	B. MODEL: SP-EM35-120-18

C. DESCRIPTION: Selective Catalytic Reduction module with a honeycomb type catalyst bed with a urea/air injector, automatic urea injection control and a 1,000 gallon capacity urea storage tank.

D. SIZE/DIMENSIONS/CAPACITY: Minimum 3 layers of catalyst, with a minimum total of 105 blocks and with a minimum volume of 26.25 cubic feet.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 613081 PC ISSUANCE DATE:8/26/19

PO NO.: G58644 PO ISSUANCE DATE: 8/26/2019

F. REQUIRED CONTROL EFFICIENCIES: Shall not exceed 10 ppm ammonia slip limit measured by volume on a dry basis at 15% oxygen over a 60 minute average.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
Sox	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS: Maximum inlet temperature of SCR bed shall not exceed 887°F and outlet temperature shall be maintained at 572°F or greater once startup is achieved, not to exceed one hour.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: 12/18/19

C. COLLECTION EFFICIENCY METHOD: N/A

D. COLLECTION EFFICIENCY PARAMETERS: N/A

E. SOURCE TEST/PERFORMANCE DATA: Maximum ammonia slip 0.10 ppm @ 15% O_2.

F. TEST OPERATING PARAMETERS AND CONDITIONS:

G. TEST METHODS (SPECIFY AGENCY): South Coast AQMD Method 207.1 (Determination of Ammonia Emissions from Stationary Sources)

O. MONITORING AND TESTING REQUIREMENTS: Ammonia slip tested at least once per year and once every 3 months for the first year of operation.

I. DEMONSTRATION OF COMPLIANCE COMMENTS: N/A

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 040002	B. CCAT: 81	C. APPLICATION TYPE CODE: 60
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): R20059
G. SCAQMD SOURCE SPECIFIC RULES: Rule 1110.2		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

PART C - POLICY AND PROCEDURES FOR NON-MAJOR POLLUTING FACILITIES

Chapter 1 - How Is MSBACT Determined for Minor Polluting Facilities?

This chapter explains the definitions of BACT for non-major polluting facilities (minor source BACT or MSBACT) found in South Coast AQMD rules and state law and how they are interpreted. It also explains the criteria used for initializing the Part D MSBACT Guidelines and the process for updating the MSBACT Guidelines.

PART D OF THE MSBACT GUIDELINES

Part D of the MSBACT Guidelines specifies the MSBACT requirements for all of the commonly permitted categories of equipment (See Chapter 2 for a full explanation of Part D).

The initial listings in Part D of the MSBACT Guidelines reflected the current BACT determinations at the time for sources at non-major polluting facilities as of April 2000. These did not represent new requirements but rather memorialized BACT determinations and emission levels at that time. This initialization was necessary to benchmark the transition from federal LAER to MSBACT for non-major polluting facilities. The control technologies and emission levels identified applied to any non-major source subject to NSR until the Guideline was updated or became out of date. The dates listed on the BACT determinations in Part D refer to the date of adoption of the determination. The dates listed do not grandfather the equipment from complying with any new requirements or limits that are implemented after the approval of a BACT determination~~17~~[1].

CRITERIA FOR NEW MSBACT AND UPDATING PART D

MSBACT requirements are determined for each source category based on the definition of MSBACT. In essence, MSBACT is the most stringent emission limit or control technology for a class or category of source that is:

- found in a state implementation plan (SIP) pursuant to Health and Safety Code section 40405(a)(1), or
- achieved in practice (AIP), or
- is technologically feasible and cost effective.

For practical purposes, nearly all South Coast AQMD MSBACT determinations will be based on AIP BACT because it is generally more stringent than MSBACT based on SIP, and because state law contains some constraints on South Coast AQMD from using the third approach. For minor polluting facilities, MSBACT will also take economic feasibility into account.

Based on Governing Board policy, MSBACT also includes a requirement for the use of clean fuels.

Terms such as “achieved in practice” and “technologically feasible” (including technology transfer) have not been defined in the rule, so one of the purposes of this

~~17~~[1] South Coast AQMD Rule 1303(a)(3)

section is to explain the criteria South Coast AQMD permitting staff uses to make a MSBACT determination.

MSBACT Based on a SIP

The most stringent emission limit found in an approved state implementation plan (SIP) may be an option for establishing MSBACT. This means that the most stringent emission limit adopted by any state as a rule, regulation or permit[182] and approved by USEPA is eligible as a MSBACT requirement. This does not include future emission limits that have not yet been implemented.

Achieved in Practice MSBACT

MSBACT may be an option for establishing the most stringent control technology or emission limit that has been achieved in practice (AIP) for a category or class of source. AIP control technology may be in operation in the United States or any other part of the world. South Coast AQMD permitting engineers will review the following sources to determine the most stringent AIP MSBACT:

- LAER/BACT determinations in Part B of the BACT Guidelines
- CAPCOA BACT Clearinghouse
- USEPA RACT/BACT/LAER Clearinghouse
- Other districts' and states' BACT Guidelines
- Permits to operate issued by South Coast AQMD or other agencies
- Any other source for which the requirements of AIP can be demonstrated

Achieved in Practice Criteria

A control technology or emission limit found in any of the references above may be considered as AIP if it meets all of the following criteria:

Commercial Availability

At least one vendor must offer this equipment for regular or full-scale operation in the United States. A performance warranty or guaranty must be available with the purchase of the control technology, as well as parts and service.

Reliability

The control technology must have been installed and operated reliably for at least twelve months on a comparable commercial operation. If the operator did not require the basic equipment to operate continuously, such as only eight hours per day and 5 days per week, then the control technology must have operated whenever the basic equipment was in operation during the twelve months.

Effectiveness

The control technology must be verified to perform effectively over the range of operation expected for that type of equipment. If the control technology will be allowed to operate at lesser effectiveness during certain modes of operation, then those modes must be identified. The verification shall be based on a South Coast AQMD-approved performance test or tests, when possible, or other performance data.

Cost Effectiveness

The control technology or emission rate must be cost effective for a substantial number

[182] Some states incorporate individual permits into their SIP as case-by-case Reasonably Available Control Technology requirements.

of sources within the class or category. Cost effectiveness criteria are described in detail in a later section. Cost criteria are not applicable to an individual permit but rather to a class or category of source.

Technology Transfer

MSBACT is based on what is AIP for a category or class of source. However, technology transfer must also be considered across source categories, in view of the other AIP criteria. There are two types of potentially transferable control technologies: 1) exhaust stream controls, and 2) process controls and modifications. For the first type, technology transfer must be considered between source categories that produce similar exhaust streams. For the second type, process similarity governs the technology.

LIMITED BACT EXEMPTION

Rule 1304 - Exemptions was amended in November 2021 to add subdivision (f) to include a limited BACT exemption for RECLAIM and former RECLAIM facilities. This limited BACT exemption is available to new or modified permit unit located at a RECLAIM or former RECLAIM facilities, for PM10 and SOx emission increases associated with the installation or modification of add-on air pollution control equipment for controlling NOx emissions to comply with NOx Best Available Retrofit Control Technology (BARCT) emission limits. The objective of the proposed narrow BACT exemption is to address the co-pollutant issue associated with the installation or modification of add-on air pollution controls and the replacement of equipment that is combined with an installation or modification of add-on air pollution control required to transition NOx RECLAIM facilities. This limited BACT exemption is available only to project at qualified facilities that meet all the requirements listed under Rule 1304 subparagraphs (f)(1)(A) through (E)[3].

Requirements of Health & Safety Code Section 40440.11

Senate Bill 456 (Kelley) was chartered into state law in 1995 and became effective in 1996. H&SC Section 40440.11 specifies the criteria and process that must be followed by the South Coast AQMD to establish new MSBACT limits for source categories listed in the MSBACT Guidelines. In general, the provisions require:

- Considering only control options or emission limits to be applied to the basic production or process equipment;
- Evaluating cost to control secondary pollutants;
- Determining the control technology is commercially available;
- Determining the control technology has been demonstrated for at least one year on a comparable commercial operation;
- Calculating total and incremental cost-effectiveness;
- Determining that the incremental cost-effectiveness is less than South Coast AQMD's established cost-effectiveness criteria;
- Putting BACT Guideline revisions on a regular meeting agenda of the South Coast AQMD Governing Board;
- Holding a Board public hearing prior to revising maximum incremental cost-effectiveness values;
- Keeping a BACT determination made for a particular application unchanged for at least one year from the application deemed complete date; and
- Considering a longer period for a major capital project (> $10,000,000)

[3] See Rule 1304 (f).

After consultation with the affected industry, the CARB, and the U.S. EPA, and considerable legal review and analysis, staff concluded that the process specified in SB 456 to update the BACT Guidelines should be interpreted to apply only if the South Coast AQMD proposes to make BACT more stringent than LAER or where LAER is inapplicable (e.g. in establishing minor source BACT). Staff intends to incorporate the spirit and intent of the SB 456 provisions into the MSBACT update process, as explained below, because non-major polluting facilities are no longer subject to federal LAER, according to Regulation XIII. Therefore, MSBACT may consider cost as specified herein.

COST EFFECTIVENESS METHODOLOGY

Cost effectiveness is measured in terms of control costs (dollars) per air emissions reduced (tons). If the cost per ton of emissions reduced is less than the maximum required cost effectiveness, then the control method is considered to be cost effective. This section also discusses the updated maximum cost effectiveness values, and those costs, which can be included in the cost effectiveness evaluation.

There are two types of cost effectiveness: average and incremental. Average cost effectiveness considers the difference in cost and emissions between a proposed MSBACT and an uncontrolled case. On the other hand, incremental cost effectiveness looks at the difference in cost and emissions between the proposed MSBACT and alternative control options.

Applicants may also conduct a cost effectiveness evaluation to support their case for the special permit considerations discussed in Chapter 2.

Discounted Cash Flow Method

The discounted cash flow method (DCF) is used in the MSBACT Guidelines. This is also the method used in South Coast AQMD Air Quality Management Plan. The DCF method calculates the present value of the control costs over the life of the equipment by adding the capital cost to the present value of all annual costs and other periodic costs over the life of the equipment. A real interest rate[~~19~~4] of four percent, and a 10-year equipment life is used. The cost effectiveness is determined by dividing the total present value of the control costs by the total emission reductions in tons over the same 10-year equipment life.

Maximum Cost Effectiveness Values

The MSBACT maximum cost effectiveness values, shown in Table 5, are based on a DCF analysis with a 4% real interest rate.

[~~19~~4] The real interest rate is the difference between market interest rates and inflation, which typically remains constant at four percent.

Table 5: Maximum Cost Effectiveness Criteria (~~3rd~~ 2nd Quarter ~~2020~~2022)

Pollutant	Average (Maximum $ per Ton)	Incremental (Maximum $ per Ton)
ROG	~~31,432~~ 40,797	~~94,297~~ 122,390
NOx	~~29,721~~ 38,575	~~89,007~~ 115,523
SOx	~~15,716~~ 20,398	~~47,149~~ 61,195
PM_{10}	~~7,002~~ 9,088	~~20,851~~ 27,063
CO	~~622~~ 808	~~1,789~~ 2,323

The cost criteria are based on those adopted by the South Coast AQMD Governing Board in the 1995 BACT Guidelines, adjusted to ~~third~~ second quarter ~~2020~~ 2022 dollars using the Marshall and Swift Equipment Cost Index. Cost effectiveness analyses should use these figures adjusted to the latest Marshall and Swift Equipment Cost Index. Contact the BACT Team for current figures.

Top-Down Cost Methodology

The South Coast AQMD uses the top-down approach for evaluating MSBACT and cost effectiveness. This means that the best control method, with the highest emission reduction, is first analyzed. If it is not cost effective, then the second-best control method is evaluated for cost effectiveness. The process continues until a control method is found to be cost-effective. This process provides a mechanism for all practical and potential control technologies to be evaluated. As part of the permitting process, the applicant is responsible for preparing the MSBACT analysis, and submitting it to the District for review and approval.

The top-down process consists of five steps:

1. Identify all control technologies

Identify all possible air pollution control options for the emissions unit. In addition to add-on control, control options may include production process methods and techniques. Innovative, transferable technologies, and LAER technologies should also be identified.

2. Eliminate technically infeasible options

The technologies identified in Step 1 should be evaluated for technical feasibility. Elimination of any of the technologies identified in Step 1 should be well-documented and based on physical, chemical and engineering principles.

3. Rank remaining control technologies

Based on overall control effectiveness, all remaining technically feasible control options should be ranked for the pollutants under review. A list should be generated for each pollutant subject to the MSBACT analysis. This list should include control efficiencies, emission rates, emission reductions, environmental impacts and energy impacts. Environmental impacts may include multimedia impacts and the impacts of the control option on toxic emissions.

4. Evaluation

Evaluate the most effective controls and document the results. For each option, the applicant is responsible for objectively discussing each of the beneficial and adverse impacts. Typically, the analysis should focus on the direct impacts. Calculations for both incremental and average cost effectiveness should be completed during this step. The MSBACT option must be cost effective for both analyses. In the event that the top option from Step 4 is ruled out after the impacts and cost effectiveness are evaluated, the decision and reasoning should be fully documented. The next most stringent alternative from Step 4, should then be evaluated.

5. Select MSBACT

The most effective control option not eliminated in Step 4 is proposed as MSBACT for the pollutant and permit unit and presented to the South Coast AQMD for review and approval.

Costs to Include in a Cost Effectiveness Analysis

Cost effectiveness evaluations consider both capital and operating costs. Capital cost includes not only the price of the equipment, but the cost for shipping, engineering and installation. Operating or annual costs include expenditures associated with utilities, labor and replacement costs. Finally, costs are reduced if any of the materials or energy created by the process result in cost savings. These cost items are shown in Table 6. Methodologies for determining these values are given in documents prepared by USEPA through their Office of Air Quality Planning and Standards (EPA Air Pollution Control Cost Manual, Sixth Edition, 2002, EPA 452/B-02-001).

The cost of land will not be considered because 1) add-on control equipment usually takes up very little space, 2) add-on control equipment does not usually require the purchase of additional land, and 3) land is non-depreciable and has value at the end of the project. In addition, the cost of controlling secondary emissions and cross-media pollutants caused by the primary MSBACT requirement should be included in any required cost effectiveness evaluation of the primary MSBACT requirement.

Table 6: Cost Factors

Total Capital Investment

Purchased Equipment Cost
- Control Device
- Ancillary (including duct work)
- Instrumentation
- Taxes
- Freight

Direct Installation Cost
- Foundations and Supports
- Handling and Erection
- Electrical
- Piping
- Insulation
- Painting

Indirect Installation Costs
- Engineering
- Construction and Field Expenses
- Start-Up
- Performance Tests
- Contingencies

Total Annual Cost

Direct Costs
- Raw Materials
- Utilities
  - Electricity
  - Fuel
  - Steam
  - Water
  - Compressed Air
- Waste Treatment/Disposal
- Labor
  - Operating
  - Supervisory
  - Maintenance
- Maintenance Materials
- Replacement Parts

Indirect Costs
- Overhead
- Property Taxes
- Insurance
- Administrative Charges

Recovery Credits
- Materials
- Energy

CLEAN FUEL GUIDELINES

In January 1988, the South Coast AQMD Governing Board adopted a Clean Fuels Policy that included a requirement to use clean fuels as part of BACT. A clean fuel is one that produces air emissions equivalent to or lower than natural gas for NO_X, SO_X, ROG, and fine respirable particulate matter (PM_{10}). Besides natural gas, other clean fuels are liquid petroleum gas (LPG), hydrogen and electricity. Utilization of zero and near- zero emission technologies are also integrated into the Clean Fuels Policy. The burning of landfill, digester, refinery and other by-product gases is not subject to the clean fuels requirement. However, the combustion of these fuels must comply with other South Coast AQMD rules, including the sulfur content of the fuel.

The requirement of a clean fuel is based on engineering feasibility. Engineering feasibility considers the availability of a clean fuel and safety concerns associated with that fuel. Some state and local safety requirements limit the types of fuel, which can be used for emergency standby purposes. Some fire departments or fire marshals do not allow the storage of LPG near occupied buildings. Fire officials have, in some cases, vetoed the use of methanol in hospitals. If special handling or safety considerations preclude the use of the clean fuel, the South Coast AQMD has allowed the use of fuel oil as a standby fuel in boilers and heaters, fire suppressant pump engines and for emergency standby generators. The use of these fuels must meet the requirements of South Coast AQMD rules limiting NO_X and sulfur emissions. In addition, the Clean Fuel requirements for MSBACT are subject to the provisions of California Health and Safety Code Section 40440.11.

AIR QUALITY-RELATED ENERGY POLICY

In September 2011, the South Coast AQMD Governing Board adopted an air quality-related energy policy to help guide a unified approach to reducing air pollution while addressing other key environmental concerns including environmental justice, climate change and energy independence. The air quality-related energy policy outlines 10 policies and 10 action steps to help meet federal health-based standards for air quality in the South Coast Air Basin while also promoting the development of zero- and near-zero emission technologies.

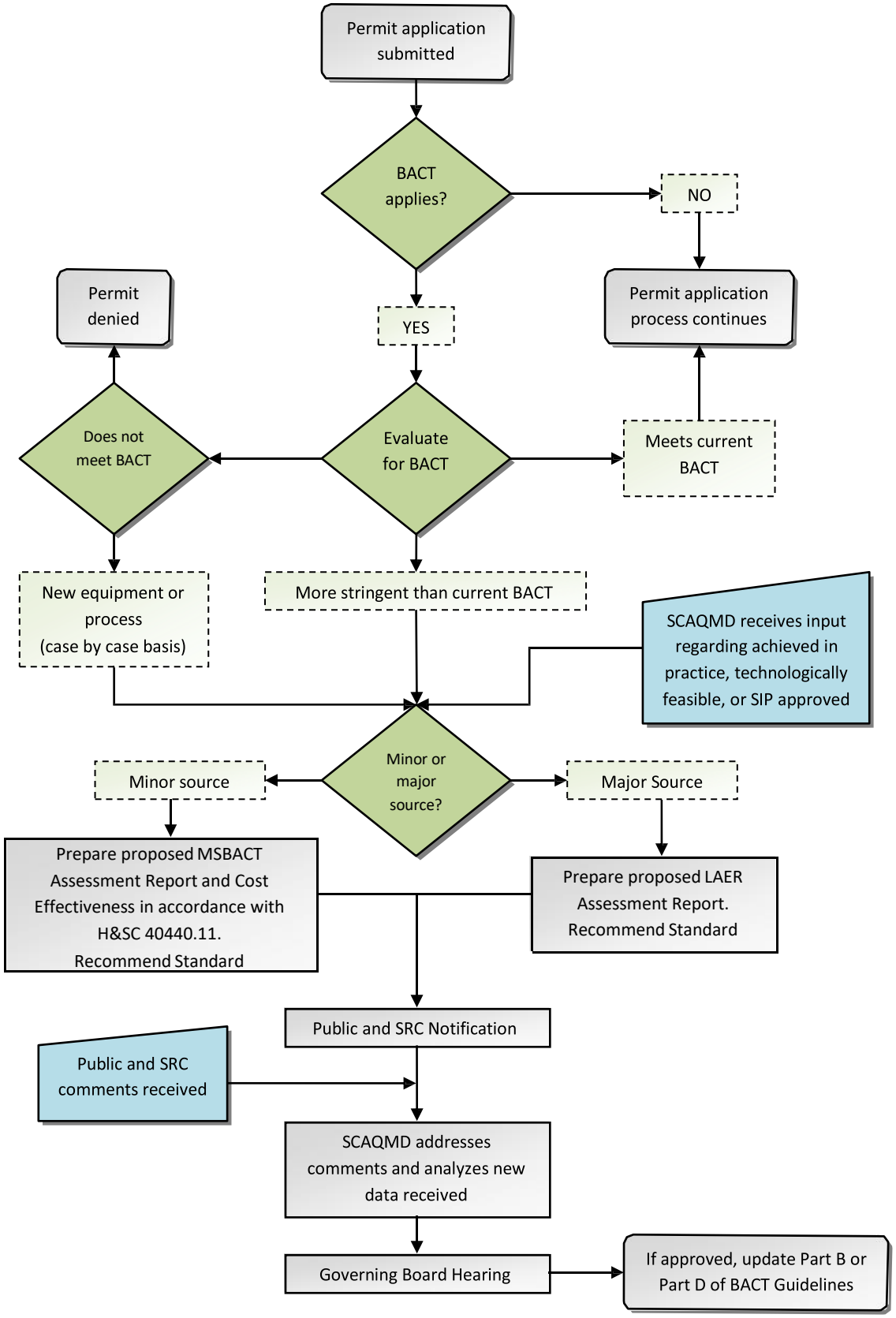
Policy 7 is to require any new/repowered in-Basin fossil-fueled generation power plant to incorporate BACT/LAER as required by District rules, considering energy efficiency for the application. These power plants will need to comply with any requirements adopted by the California Air Resources Board, California Energy Commission, Public Utilities Commission, California Independent System Operator, or the governing board of a publicly-owned electric utility, as well as state law under the California Environmental Quality Act. In recognizing that fossil fuel electric generation will still be needed in the Basin to complement projected increased use of renewable energy sources, this policy ensures that all fossil-fueled plants will meet existing BACT/LAER requirements and South Coast AQMD's BACT/LAER determinations will also take into consideration generating efficiency in setting the emission limits. Parts E and F of the BACT Guidelines complement and support this policy.

MSBACT UPDATE PROCESS

As technology advances, the South Coast AQMD's MSBACT Part D Guidelines will be updated. Updates will include revisions to the guidelines for existing equipment categories, as well as new guidelines for new categories.

The MSBACT Guidelines will be revised based on the criteria outlined in the previous sections. Once a more stringent emission limit or control technology has been reviewed by staff and is determined to meet the criteria for MSBACT, it will be reviewed through a public process. The process is shown schematically in Figure 2. The public will be notified and the BACT Scientific Review Committee will have an opportunity to comment. Following the public process and comment period, the guidelines will be presented to the Governing Board for approval at a public hearing, prior to updates of the MSBACT Guidelines, Part D.

Figure 2: The Ongoing BACT Update Process



Chapter 2 - How to Use Part D of the MSBACT Guidelines

This chapter explains the MSBACT information found in Part D - MSBACT Guidelines. The Guidelines in Part D should be used to determine MSBACT for non-major polluting facilities. For a listing of equipment, refer to the Part D Table of Contents. Determination of MSBACT for equipment not found in Part D of the MSBACT Guidelines is also explained.

GENERAL

Part D includes MSBACT Guidelines for more than 100 categories of equipment commonly processed by South Coast AQMD. Some guidelines are further subdivided by equipment size, rating, type or the material used, as appropriate.

The MSBACT requirements are in the form of:

1) an emission limit;
2) a control technology;
3) equipment requirements; or
4) a combination of the last two.

If the requirement is an emission limit, the applicant may choose any control technology to achieve the emission limit. The South Coast AQMD prefers to set an emission limit as MSBACT because it allows an applicant the most flexibility in reducing emissions.

If a control technology and/or equipment requirements are the only specified MSBACT, then either emissions from the equipment are difficult to measure or it was not possible to specify an emission limit that applies to all equipment within the category. Where possible, an emission limit or control efficiency condition will be specified in the permit along with the control technology or equipment requirements to ensure that the equipment is properly operated with the lowest emissions achievable. An applicant may still propose to use other ways to achieve the same or better emission reduction than the specified MSBACT.

MSBACT is the control technology or emission limit given in Part D for the basic equipment or process being evaluated, unless the guideline is out of date, or there are special permitting conditions, or the equipment is not identified in Part D. In those cases, the procedures described in the following sections will be used to determine MSBACT. Applicants or other interested parties are encouraged to contact the South Coast AQMD permitting staff if there are any questions about MSBACT.

SPECIAL PERMITTING CONSIDERATIONS

Although the most stringent, AIP BACT for a source category will most likely be the required MSBACT, South Coast AQMD staff may consider special technical circumstances that apply to the proposed equipment which may allow deviation from that MSBACT. The permit applicant should bring any pertinent facts to the attention of the South Coast AQMD permitting engineer for consideration.

Case-Specific Situations

South Coast AQMD staff may consider unusual equipment-specific and site-specific characteristics of the proposed project that would warrant a reconsideration of the MSBACT requirement for new equipment.

Technical infeasibility of the control technology

A particular control technology may not be required as MSBACT if the applicant demonstrates that it is not technically feasible to install and operate it to meet a specific MSBACT emission limitation in a specific permitting situation.

Operating schedule and project length

If the equipment will operate much fewer hours per year than what is typical, or for a much shorter project length, it can affect what is considered AIP.

Availability of fuel or electricity

Some MSBACT determinations may not be feasible if a project will be located in an area where natural gas or electricity is not available.

Process requirements

Some MSBACT determinations specify a particular type of process equipment. South Coast AQMD staff may consider requirements of the proposed process equipment that would make the MSBACT determination not technically feasible.

Equivalency

The permit applicant may propose alternative means to achieve the same emission reduction as required by BACT. For example, if BACT requires a certain emission limit or control efficiency to be achieved, the applicant may choose any control technology, process modification, or combination thereof that can meet the same emission limit or control efficiency.

Super Compliant Materials

South Coast AQMD will accept the use of super compliant materials in lieu of an add-on control device controlling volatile organic compound (VOC) emissions from coating operations. For example, if a permit applicant uses only surface coatings that meet the super compliant material definition in South Coast AQMD Rule 109, it may qualify as VOC MSBACT. This policy does not preclude any other MSBACT requirement for other contaminants.

Equipment Modifications

As a general rule, it is more difficult to retrofit existing equipment with MSBACT as a result of NSR modification when compared to a new source. The equipment being modified may not be compatible with some past MSBACT determinations that specify a particular process type. There may also be space restrictions that prevent installation of some add-on control technology.

Other Considerations

Although multiple process and control options may be available during the MSBACT determination process, considerations should be made for options that reduce the formation of air contaminants from the process, as well as ensuring that emissions are properly handled. In addition to evaluating the efficiency of the control stage, these additional considerations are needed to ensure that the system is capable of reducing or eliminating emissions from the facility on a consistent basis during the operational life of the equipment. Measures listed in this section for MSBACT are subject to the requirements of California Health and Safety Code Section 40440.11.

Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C. §§13101-13109) established a national policy that pollution should be prevented or reduced at the source whenever feasible. In many cases, air pollution control is a process that evaluates contaminants at the exhaust of the system. Pollution prevention is the reduction or elimination of waste at the source by the modification of the production process. Pollution prevention measures may consist of the use of alternate or reformulated materials, a modification of technology or equipment, or improvement of energy efficiency changes that result in an emissions reduction. These measures should be considered as part of the MSBACT determination process if the measures will result in the elimination or reduction of emissions, but are not required to include projects which are considered to fundamentally redefine the source. New and different emissions created by a process or material change will also need to be considered as part of the MSBACT determination process, in contrast to the overall emissions reductions from the implementation of pollution prevention measures.
U.S. EPA policy defined pollution prevention as source reduction and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources, and protection of natural resources by conservation[~~20~~[5]]. U.S. EPA further specifies that pollution prevention does not include recycling (except in-process recycling), energy recovery, treatment or disposal. For purposes of these BACT Guidelines, and to be consistent with federal definitions, source reduction and pollution prevention shall may include, but not be limited to, consideration of the feasibility of:

- equipment or technology modifications,
- process or procedure modifications,
- reformulation or redesign of products,
- substitution of raw materials, or
- improvements in housekeeping, maintenance or inventory control,

that reduce the amount of air contaminants entering any waste stream or otherwise released into the environment, including fugitive emissions.

[~~20~~5] U.S. EPA Pollution Prevention Law and Policies (www.epa.gov/p2/pollution-prevention-law-and-policies#define)

Monitoring and Testing

In order to ensure that MSBACT determinations continue to meet their initial emission and efficiency standards, periodic or continuous parameter monitoring and testing requirements may be required during the permitting process. Equipment and processes may experience some change over time, due to aging or operational methods of the equipment, which may affect emission rates or control efficiencies. In addition to other rule requirements, additional monitoring and testing requirements may need to focus on aspects directly related to the MSBACT determination, and may be made enforceable by permit conditions. Monitoring and testing requirements should be specific to characterize operating conditions (e.g. temperatures, pressures, flows, production rates) and measurement techniques when MSBACT is established to ensure clarity and consistency with the standard.

Capture Efficiency

An integral part of controlling air pollutants emitted from a process with add-on air pollution control equipment is capturing those emissions and directing them to the air pollution control device. Emissions which are designed to be collected by an exhaust system but are vented uncontrolled into the atmosphere can have a much greater impact than controlled emissions. When applicable, the evaluation of a process and its associated control equipment should address the qualification and quantification of capture efficiency. By addressing capture efficiency during MSBACT determinations, a standard can be established to evaluate the capture efficiency of other systems, as well as ensure that the capture efficiency is maintained consistently over time.

If applicable, MSBACT determinations may include the percentage capture efficiency and the methods and measurements (e.g. EPA Method 204, capture velocity measurements, design using ACGIH's Industrial Ventilation, static pressures) used to determine and verify it. For various circumstances, several South Coast AQMD rules (see Table 5, Part A, Chapter 1) already require an assessment of collection efficiency of an emission control system following EPA Method 204, EPA's "Guidelines for Determining Capture Efficiency", South Coast AQMD's "Protocol for Determination of Volatile Organic Compounds (VOC) Capture Efficiency," or other methods approved by the Executive Officer, and are appropriate to include as BACT requirements. The capture efficiency for any MSBACT Determination shall be no less stringent than any applicable rule requirement. Other considerations that may affect capture, such as cross-drafts, thermal drafts and the volume of combustion products, should also be addressed during this process.

Equipment Not Identified in the MSBACT Guidelines

Although the BACT Guidelines contains an extensive listing of practically everything the South Coast AQMD permits, occasionally applications will be received for equipment not identified in the Guidelines. As required by Rule 1303, MSBACT for equipment category not listed in the MSBACT Guidelines must be determined on a case-by-case basis using the definition of BACT in Rule 1302 and the general procedures in these MSBACT Guidelines, as shown in Chapter 1 and the previous sections of this chapter.

Applicants whose equipment is not listed in Part D of the MSBACT Guidelines should contact the South Coast AQMD and arrange a pre-application conference. MSBACT issues can be discussed in the conference for leading to a MSBACT determination. Applicants are not required to conduct the MSBACT evaluation but the application may be processed more quickly if the applicant provides a MSBACT evaluation with the application for a permit to construct.

MSBACT Determinations Should the Guidelines Become Out of Date

Should the MSBACT Guideline Part D become out of date with state BACT requirements or permits issued for similar equipment in other parts of the state, staff will evaluate permits consistent with the definition of BACT considering technical and economic criteria as required by Rule 1303 (a) and Health & Safety Code Section 40405. The technical and economic factors to be considered are those identified in Chapter 1.

MSBACT APPLICATION CUT-OFF DATES

These guidelines apply to all non-major polluting facility applications deemed complete subsequent to South Coast AQMD Governing Board adoption of the Regulation XIII amendments in 2000.

Applications for a Registration Permit for equipment issued a valid Certified Equipment Permit (CEP), which is valid for one year, will only be required to comply with MSBACT as determined at the time the CEP was issued. However, South Coast AQMD staff will reevaluate the MSBACT requirements for the CEP upon annual renewal of the CEP by the equipment manufacturer.

ATTACHMENT F

Part D – South Coast AQMD BACT Determination

Source Type: **Minor**

Application No.: **625401(ICE) and 613081 (SCR)**

Equipment Category: **I.C. Engine**

Equipment Subcategory: **Stationary, Non-Emergency, Electrical Generator with SCR**

Date: **September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Miratech	B. MODEL: SP-EM35-120-18
C. DESCRIPTION: Selective Catalytic Reduction (SCR) emission control system with urea injection for prime natural gas fired electrical generation lean-burn engine	
D. FUNCTION: SCR system controls exhaust emissions from a prime operation engine used by the City of Palm Springs to generate electricity for one of their municipal facilities. Waste heat from the engine is used to heat water and provide heat to absorption chiller.	
E. SIZE/DIMENSIONS/CAPACITY: 1573 BHP, GE Jenbacher, model JMS416B86, natural gas, lean burn, turbocharged and aftercooled, 16 cylinders, four-cycle driving a 1MW electrical generator.	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: N/A	
G. BURNER INFORMATION: N/A	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	N/A	N/A

H. PRIMARY FUEL: Natural Gas	I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52	
K. EQUIPMENT COST: N/A	
L. EQUIPMENT INFORMATION COMMENTS: N/A	

2. COMPANY INFORMATION

A. COMPANY: City of Palm Springs	B. FAC ID: 42218
C. ADDRESS: 425 N. Civic Drive CITY: Palm Springs STATE: CA ZIP: 92262	D. NAICS CODE: 921190
E. CONTACT PERSON: Staci A. Schafer	F. TITLE: Director Maintenance and Facilities
G. PHONE NO.: (760) 323-8170	H. EMAIL: staci.schafer@palmspringca.gov

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: MODIFICATION
C. SCAQMD ENGINEER: Arnold Peneda	
D. PERMIT INFORMATION: P/O NO.: G63569	PC ISSUANCE DATE: 8/26/19 PO ISSUANCE DATE: 11/21/2020
E. START-UP DATE: 8/26/2019	
F. OPERATIONAL TIME: 2+ years. Originally started in 11/18/15 with subsequent troubleshooting.	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:

	VOC (lbs/MW-hr)	**NOx** (lbs/MW-hr)	**SOx** (lbs/MW-hr)	**CO** (lbs/MW-hr)	**PM OR PM_{10}** (lbs/MW-hr)	**INORGANIC**
BACT Limit	0.17*	0.12*		0.34*		10 ppm NH_3
Averaging Time	15 min	15 min		15 min		60 min
Correction	**	15% O_2		15% O_2		15% O_2

B. OTHER BACT REQUIREMENTS: Ammonia slip tested at least once per year and once every 3 months for the first year of operation.

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS:

* The limits are in compliance with the Rule 1110.2 electrical energy factor.

** Time Required for VOC sampling.

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Miratech	B. MODEL: SP-EM35-120-18
C. DESCRIPTION: Selective Catalytic Reduction module with a honeycomb type catalyst bed with a urea/air injector, automatic urea injection control and a 1,000 gallon capacity urea storage tank.	
D. SIZE/DIMENSIONS/CAPACITY: Minimum 3 layers of catalyst, with a minimum total of 105 blocks and with a minimum volume of 26.25 cubic feet.	
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. 613081 PC ISSUANCE DATE:8/26/19 PO NO.: G58644 PO ISSUANCE DATE: 8/26/2019	
F. REQUIRED CONTROL EFFICIENCIES: Shall not exceed 10 ppm ammonia slip limit measured by volume on a dry basis at 15% oxygen over a 60 minute average.	

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
Sox	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS: Maximum inlet temperature of SCR bed shall not exceed 887°F and outlet temperature shall be maintained at 572°F or greater once startup is achieved, not to exceed one hour.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test
B. DATE(S) OF SOURCE TEST: 12/18/19
C. COLLECTION EFFICIENCY METHOD: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A
E. SOURCE TEST/PERFORMANCE DATA: Maximum ammonia slip 0.10 ppm @ 15% O_2.

F. TEST OPERATING PARAMETERS AND CONDITIONS:
G. TEST METHODS (SPECIFY AGENCY): South Coast AQMD Method 207.1 (Determination of Ammonia Emissions from Stationary Sources)
H. MONITORING AND TESTING REQUIREMENTS: Ammonia slip tested at least once per year and once every 3 months for the first year of operation.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: N/A

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 040002	B. CCAT: 81	C. APPLICATION TYPE CODE: 60
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): R20059
G. SCAQMD SOURCE SPECIFIC RULES: Rule 1110.2		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

ATTACHMENT F

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Best Available Control Technology Guidelines

Part D: BACT Guidelines for Non-Major Polluting Facilities

October 20, 2000 (Revised June 6, 2003; December 5, 2003; July 9, 2004; December 3, 2004; July 14, 2006; October 3, 2008; December 2, 2016; February 2, 2018; February 1, 2019; February 5, 2021; September 2, 2022)

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Table of Contents

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Abrasive Blasting – Enclosed

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse; or Cartridge Dust Collector (07-11-97)	

* Means those facilities that are minor facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Absorption Chiller

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		≤ 20 ppmv dry corrected to 3% O_2 (10-20-2000)	Natural Gas (10-20-2000)	≤50 ppmv for firetube type, ≤ 100 ppmv for watertube type, dry corrected to 3% O_2 (10-20-2000)	Natural Gas (10-20-2000)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Air Stripper – Ground Water Treatment

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Carbon Adsorber, Thermal Oxidizer, or Catalytic Oxidizer (10-20-2000)					

* Means those facilities that are minor facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev 1

Equipment or Process: Aluminum Melting Furnace

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Crucible or Pot		≤60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (07-11-97)		Natural Gas with Ingots or Non-contaminated Scrap Charge, or Baghouse (10-20-2000)	
Reverberatory, Non-Sweating < 5 MM BTU/HR		≤60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Same as above. (10-20-2000)	
Reverberatory, Non-Sweating ≥ 5 MM BTU/HR		Natural Gas with Low NOx Burner ≤ 60 ppmvd @ 3% O_2 (10-20-2000)	Natural Gas (1990)		Same as above. (10-20-2000)	
Reverberatory or Rotary, Sweating < 5 MM BTU/HR	Afterburner (≥ 0.3 sec. Retention Time at ≥ 1400° F) or Secondary Combustion Chamber (1990)	≤60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas with Baghouse and: - Afterburner (≥ 0.3 sec. Retention Time at ≥ 1400° F); or - Secondary Combustion Chamber (1990)	
Reverberatory or Rotary, Sweating ≥ 5 MM BTU/HR	Same as Above (1990)	Natural Gas with Low NOx Burner ≤ 60 ppmvd @ 3% O_2 (10-20-2000)	Natural Gas (1990)		Same as above. (1990)	

Note: Some of this equipment may also subject to 40 CFR 63, Subpart RRR – National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Ammonium Bisulfate and Thiosulfate Production

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Packed Column Scrubber with Heat Exchanger and Mist Eliminator (1990)	Packed Column Scrubber for NH3 (1990)

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Asbestos Machining Equipment

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Air Cleaning Equipment (40 CFR Part 61 Subpart M) (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Asphalt Batch Plant

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		Natural Gas with Low NOx Burner ≤ 33 ppmvd @ 3% O_2 (10-20-2000)			Baghouse (1990)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Asphalt Roofing Line

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		Natural Gas (1990)	Natural Gas (1990)		Natural Gas with High Velocity Filter and Mist Eliminator (1990)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Asphaltic Day Tanker

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Fiberglass or Steel Wool Filter (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Auto Body Shredder

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse with Water Sprays in Hammermill (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Ball Mill

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Beryllium Machining Equipment

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					High Efficiency Particulate Air Filter and Compliance with 40CFR Part 61, Subpart D (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0; 10-03-2008 Rev. 1; 12-02-2016 Rev. 2

2-1-2019 Rev. 3

Equipment or Process: Boiler

	Criteria Pollutants					
Subcategory/Rating/ Size	**VOC**	**NOx[1]**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Natural Gas Fired, > 2 and < 20 MMBtu/HR		Compliance with Rules 1146 or 1146.1[2] (12-02-2016)	Natural Gas (10-20-2000)	≤50 ppmvd for firetube type, ≤ 100 ppmvd for watertube type, corrected to 3% O_2 (04-10-98)	Natural Gas (04-10-98)	
Propane Fired, > 2 and < 20 MMBtu/HR		≤ 12 ppmvd corrected to 3% O_2[2] (10-20-2000)		≤50 ppmvd for firetube type, ≤ 100 ppmvd for watertube type, corrected to 3% O_2 (04-10-98)		
Natural Gas or Propane Fired, ≥ 20 and < 75 MMBtu/HR		Compliance with Rule 1146 (2-1-2019)	Natural Gas (10-20-2000)	Same as above. (04-10-98)	Natural Gas (04-10-98)	With Add-On Controls: ≤ 5 ppmvd NH_3, corrected to 3% O_2 ≤ 1 ppmvd ozone, corrected to 3% O_2 (10-20-2000)
Natural Gas or Propane Fired, ≥ 75 MM Btu/HR		Compliance with Rule 1146 (12-02-2016)	Natural Gas (10-20-2000)	Same as above. (04-10-98)	Natural Gas (04-10-98)	With Add-On Controls: ≤ 5 ppmvd NH_3, corrected to 3% O_2 ≤ 1 ppmvd ozone, corrected to 3% O_2 (10-20-2000)

* Means those facilities that are minor facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

	Criteria Pollutants					
Subcategory/Rating/ Size	**VOC**	**NOx[1]**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Oil Fired[3]		Compliance with Rule 1146 or 1146.1 (10-20-2000)	Fuel Sulfur Content ≤ 0.0015% by weight (10-03-2008)	≤ 50 ppmvd for firetube type ≤ 100 ppmvd for watertube type, corrected to 3% O_2 (04-10-98)		
Atmospheric Unit, ≥ 2 and ≤ 10 MMBtu/HR		Compliance with Rules 1146 and 1146.1 (12-02-2016)		Compliance with Rules 1146 and 1146.1 (12-02-2016)		
Landfill Gas Fired, < 75 MMBTU/Hr		Compliance with Rules 1146 and 1146.1 (12-02-2016)		≤ 100 ppmvd at 3% O_2 dry. (04-10-98)	≤ 0.1 gr/scf at 12% CO_2 (Rule 409) (04-10-98)	
Digester Gas Fired, < 75 MMBTU/Hr		Compliance with Rules 1146 and 1146.1 (12-02-2016)		≤ 100 ppmvd at 3% O_2 dry. (04-10-98)	≤ 0.1 gr/scf at 12% CO_2 (Rule 409) (04-10-98)	

1) Electric utility boilers, refinery boilers rated >40 MMBtu/hr and sulfur plant reaction boilers rated ≥5 MMBtu/hr are excluded; and there are exceptions for low-use boilers and boilers that met a 12-ppm limit prior to 9/5/08. Applicants are advised to review these rules for further details.

2) A higher NOx limit may be allowed for facilities required to have a standby fuel, where use of a clean standby fuel is not possible and an ultra low-NOx burner is not available.

3) See Clean Fuels Policy in Part C of the BACT Guidelines. Oil firing is only allowed as a standby fuel, and where use of a clean standby fuel is not possible.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Brakeshoe Debonder

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Afterburner or Secondary Combustion Chamber with ≥ 0.3 Second Retention Time at ≥1400°F Achieved within 15 Minutes of Primary Burner Ignition (07-11-97)	Natural Gas (07-11-97)	Natural Gas (07-11-97)		Natural Gas (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev 1

Equipment or Process: Brass Melting Furnace

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Crucible, ≤ 300 Lbs/Hr Process Rate		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas, Charge Clean Metal Only and Maintain Slag Cover Over Entire Melt Surface (1990)	
Crucible, > 300 Lbs/Hr Process Rate		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas, with Baghouse (1990)	
Reverberatory or Rotary, Non-Sweating		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas with Baghouse (1990)	
Reverberatory or Rotary, Sweating	Afterburner (≥ 0.3 Second Retention Time at ≥ 1400 °F) (1990)	60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)	Afterburner (≥ 0.3 Second Retention Time at ≥ 1400 °F) (1990)	Natural Gas with Baghouse (1990)	
Tilting Induction, ≤ 300 Lbs/Hr Process Rate					Charge Clean Metal Only and Slag Cover Maintained Over Entire Melt Surface (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

Equipment or Process: Brass Melting Furnace

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Tilting Induction, > 300 Lbs/Hr Process Rate					Baghouse (7-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Bulk Solid Material Handling – Other

	Criteria Pollutants					
Subcategory[3)]/Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Animal Feed Mfg. – Dry Material Handling					Baghouse (07-11-97)	
Clay, Ceramics and Refractories Handling (Except Mixing)					Baghouse (1988)	
Coal, Coke and Sulfur Handling					Compliance with Rule 1158 (10-20-2000)	
Feed and Grain Handling					Baghouse (1988)	
Natural Fertilizer Handling [1)]					Baghouse or Equivalent Material Moisture (07-11-97)	
Paper and Fiber Handling					High Efficiency Cyclone with Baghouse (10-20-2000)	
Pneumatic Conveying, Except Paper and Fiber					Baghouse (1988)	
Railcar Dumper					Enclosed Dump Station and Water Spray for Wet Material (1988)	
Other Dry Materials Handling [2)]					Enclosed Conveyors and Baghouse (7-11-97)	
Other Wet Materials Handling [2)]					Water Spray or Adequate Material Moisture (1988)	

1. Includes conveying, size reduction, classification and packaging.
2. Includes conveying, size reduction and classification.
3. Also see Catalyst Manufacturing, Coffee Roasting, Non-Metallic Mineral Processing, Nut Roasting, Rendering, Pharmaceutical Operations, and Rock-Aggregate Processing for other bulk solid material handling.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Bulk Solid Material Ship Loading

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Non-White Commodities					Enclosed Conveyor and - Water Spray; or - Adequate Material Moisture (1988)	
White Commodities					Enclosed Conveyor and Baghouse Venting Ship Holds and Transfer Points (07-11-97)	

Notes:
1. Non-White commodities include coal, copper concentrate, sulfur, iron slag, iron ore, iron pellets, green petroleum coke and other wet commodities
2. White commodities include soda ash, salt cake, potash and other dry commodities.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Bulk Solid Material Ship Unloading

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Bulk Cement		Shore Utility Power (1988)	Shore Utility Power (1988)		Enclosed, Self-Unloading Ship (1988)	
Other Bulk Solid Materials					Enclosed Hold and Baghouse; or Material Moisture Equivalent to an Enclosed Hold and Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Bulk Solid Material Storage

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Coal, Petroleum Coke, Sulfur					Enclosed Storage in Compliance with Rule 1158 (10-20-2000)	
Other Non-White Commodities					Water Spray and Chemical Additives or Charged Fog Spray (1988)	
White Commodities					Enclosed Storage and Baghouse (1988)	
Storage Tanks and Silos					Baghouse or Filtered Vent for Dry Material; Water Spray or Adequate Moisture for Wet Material (07-11-97)	
Other Open Storage					Water with Chemical Additives (1988)	

Notes:
1. Other non-white commodities include copper concentrate, iron slag, iron ore, and iron pellets.
2. White commodities include cement, gypsum, lime, soda ash, borax and flour.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev 1

Equipment or Process: Burnoff or Burnout Furnace (Excluding Wax Furnace)

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Afterburner or Secondary Combustion Chamber with ≥ 0.3 Second Retention Time at ≥1400°F Achieved within 15 Minutes of Primary Burner Ignition (07-11-97)	Compliance with Rule 1147 (2-1-2019)	Natural Gas (07-11-97)		Natural Gas (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev 1

Equipment or Process: Calciner

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Petroleum Coke	Afterburner (≥ 0.3 Second Retention Time at ≥ 1400 °F) (1988)	Compliance with Rule 1147 (2-1-2019)	Natural Gas with Flue Gas Desulfurization (> 90% Removal Efficiency) (1988)	Afterburner (≥ 0.3 Second Retention Time at ≥ 1400 °F) (1988)	0.005 gr/dscf Corrected to 3% O_2 (1988)	
Other		Compliance with Rule 1147 (2-1-2019)	Natural Gas (1988)		Natural Gas with Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Carpet Beating and Shearing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Catalyst Manufacturing and Regeneration

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Calcining		Three-Stage NOx Reduction Scrubber (1990)	Natural Gas (1990)		Baghouse (10-20-2000)	
Reactor		NOx Scrubber (07-11-97)				
Rotary or Spray Dryer					Baghouse (07-11-97)	
Regeneration, Hydrocarbon Removal	Flare, Firebox, or Afterburner (≥ 0.3 Second Retention Time at ≥ 1400 °F) (07-11-97)					
Catalyst Solids Handling					Baghouse (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Charbroiler, Chain-driven (conveyorized)

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Catalytic Oxidizer (12-12-97)				Catalytic Oxidizer (12-12-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Chip Dryer

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1400°F) (10-20-2000)	Natural Gas with Low NOx Burner (10-20-2000)	Natural Gas (1989)		Natural Gas with: - Baghouse and Limestone Filter Coating; or - Baghouse and Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1400°F) (1989)	

Note: This equipment may also subject to 40 CFR 63, Subpart RRR – National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
10-20-2000 Rev. 0

Equipment or Process: Circuit Board Etcher

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Batch Immersion Type, Subtractive Process					Packed Water Scrubber and Etchant Solution Temperature Control (10-20-2000)	
Conveyorized Spray Type, Subtractive Process					Packed Water Scrubber and Etchant Solution Temperature Control (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Cleaning Compound Blender

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse or Wet Centrifugal Collector or Cyclone (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev. 1
2-5-2021 Rev. 2

Equipment or Process: Coffee Roasting

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Roaster < 110,000 BTU/Hr			Natural Gas (1988)		Natural Gas (1988)	
Roaster ≥ 110,000 BTU/Hr	Afterburner [1] (0.3 Sec Retention Time at 1200 °F) (1990)		Natural Gas (1990)		Natural Gas with Cyclone and Afterburner (≥ 0.3 Second Retention Time at ≥ 1200 °F) (1990)	
Handling Equipment, < 1,590 Lbs/Hr All[2]						
Handling Equipment, ≥ 1,590 Lbs/Hr All					Cyclone (1990)	

1) Gaseous process emissions from roasting operations which are ducted to a thermal oxidizer or catalytic oxidizer as control technology will be subject to the NOx requirements of thermal oxidizer or catalytic oxidizer BACT listing in Part D. (2-5-2021)
2) At the date of the last revision for this category, there was no Achieved In Practice BACT Determination for this subcategory. Technologically Feasible options listed in historic South Coast AQMD BACT Guidelines for this subcategory require cost effective analyses before they can be listed in these current Guidelines.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

12-5-2003 Rev. 0
2-1-2019 Rev. 1

Equipment or Process: Composting

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic (Ammonia)**
Co-composting[a)]	Compliance with Rule 1133.2[b)] (12-5-2003)					Compliance with Rule 1133.2[b)] (12-5-2003)
Greenwaste composting	Compliance with Rule 1133.3 (2-1-2019)					Compliance with Rule 1133.3 (2-1-2019)

a) Co-composting is composting where biosolids and/or manure are mixed with bulking agents to produce compost.

b) Not required for design capacity < 1,000 tons per year.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Concrete Batch Plant

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Central Mixed, < 5 Cubic Yards/Batch					Water Spray (1988)	
Central Mixed, ≥ 5 Cubic Yards/Batch					Baghouse for Cement Handling and Adequate Moisture in Aggregate (1988)	
Transit-Mixed					Baghouse Venting the Cement Weigh Hopper and the Mixer Truck Loading Station; and Adequate Aggregate Moisture (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Concrete Blocks and Forms Manufacturing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Cotton Gin

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Rotary Drum Filter and Cyclone (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev. 1

Equipment or Process: Crematory

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Secondary Combustion Chamber, ≥ 1500 °F (1990)	60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas with Secondary Combustion Chamber, ≥ 1500 °F (1990)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Degreaser – Other

	Criteria Pollutants					
Rating/Size	**VOC/ODC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Batch-Loaded or Conveyorized Cold Cleaners	Use of solvents containing 50 grams of VOC or less per liter of material (12-12-97)					
Film Cleaning Machine	Carbon Adsorber (10-20-2000)					
Solvent Spraying[1)], 1,1,1 Trichloroethane	Carbon Adsorber (1990) and Compliance with 40 CFR 63, Subpart T – National Emission Standards for Halogenated Solvent Cleaning (10-20-2000)					
Solvent Spraying[1)], Other VOCs	Compliance with Rule 1171 (10-20-2000)					

Note: Use of certain halogenated solvents is also subject to 40 CFR 63, Subpart T – National Emission Standards for Halogenated Solvent Cleaning

1) This subcategory includes solvent spray booths and remote reservoir cleaners.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Degreaser –Vapor Cleaning, Volatile Organic Compounds

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Batch	Tier 1: Use of an automatically operated airtight or airless cleaning system that emits no more than [4.3 x $V^{0.6}$] lb/month of VOCs, where V is the cleaning chamber volume in cubic feet. Use of alternative equipment is allowed provided such equipment is subject to the same emissions limitation (lb/month of VOCs) as calculated above. Tier 2: Use of equipment that does not exceed [22 x A] lb/month of VOCs, where A is the solvent surface area in square feet, provided it is technically infeasible to use Tier 1 equipment because of part deformation, inherent part pressure, part type or geometry, soil type or amount, cleanliness sensitivity, or other reasons. (4-10-98)					
Conveyorized	Use of a conveyorized vapor degreaser that does not exceed [17 x A] lb/month of VOCs, where, A is the solvent surface area in square feet (04-10-98)					

Notes:

1. Use of certain halogenated solvents is also subject to 40 CFR 63, Subpart T – National Emission Standards for Halogenated Solvent Cleaning
2. Use of VOCs not subject to the above-described NESHAP is also subject to Rule 1122.
3. Any permit applicant may demonstrate that the Tier 1 BACT may not be technologically feasible for the applicant's permit unit. For batch-loaded vapor degreasing equipment, South Coast AQMD will consider the following three factors taken together as a whole, as well as any other technical factors presented by the applicant: a) Part Type and Geometry – In that different parts and part geometries lend themselves to different cleaning methods that may be acceptable to achieve proper cleanliness, South Coast AQMD will consider information presented by the applicant regarding the type and geometry of the part(s) proposed to be cleaned in determining what cleaning technologies are available for the part(s) in questions; b) Soil Type and Amount – In that different types and quantities of soils being cleaned from parts lend themselves to different cleaning methods, South Coast AQMD will consider information presented by the applicant regarding the soil type and soil quantity of the part(s) proposed to be cleaned in determining what cleaning technologies are available for the part(s) in question; c) Cleanliness Sensitivity – In that (i) different parts have different levels of sensitivity to cleanliness (e.g., medical and high technology device parts may need to achieve an extremely high level of cleanliness, whereas standard plumbing supplies may tolerate a lower level of cleanliness), and (ii) the integrity of certain parts may be compromised by exposure to the reduced pressure environment of airless cleaning systems; South Coast AQMD will consider information presented by the applicant regarding the cleanliness sensitivity of the part(s) proposed to be cleaned in determining what cleaning technologies are available for the part(s) in question.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Detergent Manufacturing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Solids Handling					Cyclone and Baghouse (07-11-97)	
Spray Dryer		Natural Gas with Low-NOx Burner (1988)	Natural Gas (1988)		Natural Gas with: - Cyclone and Baghouse; or - Cyclone, Scrubber and Electrostatic Precipitator (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Drum Reclamation Furnace

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Afterburner (≥ 0.3 Sec. Retention time at ≥ 1400 °F) (1990)	Natural Gas (1990)	Natural Gas (1990)		Natural Gas with Afterburner (> 0.3 Sec. Retention Time at ≥ 1400 °F) and Baghouse (1990)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
7-9-2004 Rev. 1

Equipment or Process: Dry Cleaning

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC/ODC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Perchloroethylene	Delisted as a VOC. See Rule 1421 – Control of Perchloroethylene Dry Cleaning Operations[1] (06-13-97)					
Petroleum Solvent[2]	Closed Loop, Dry-to-Dry Machine with a Refrigerated Condenser (10-20-2000) or Evaporatively Cooled Condenser (7-9-2004)					

[1] Rule 1421 implements the federal National Emission Standard for Hazardous Air Pollutant for Perchloroethylene Dry Cleaning Facilities (40 Code of Federal Regulations [CFR] 63.320, *et seq*) and the state Airborne Toxic Control Measure (ATCM) for Emissions of Perchloroethylene from Dry Cleaning Operations (17 California of Regulation [CCR] 93109, *et seq*).

[2]This Equipment may also be subject to AQMD Rule 1102 – Dry Cleaners Using Solvent Other Than Perchloroethylene.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev 1

Equipment or Process: Dryer – Kiln

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All[1]		Compliance with Rule 1147 (2-1-2019)	Natural Gas (1988)		Natural Gas (1988)	

[1]Does not include digester gas or landfill gas fired units.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-2-2018 Rev. 1
2-1-2019 Rev. 2

Equipment or Process: Dryer or Oven

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Carpet Oven		30 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas (1990)	
Rotary, Spray and Flash Dryers[1)]		Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas with Baghouse (1990)	
Tray, Agitated Pan, and Rotary Vacuum Dryers		Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas (1990)	
Tenter Frame Fabric Dryer		30 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (10-20-2000)		Natural Gas (10-20-2000)	
Other Dryers and Ovens – Direct and Indirect Fired[2, 3]		30 ppmvd corrected to 3% O_2 (04-10-98)	Natural Gas (10-20-2000)		Natural Gas (10-20-2000)	

1. Dryers for foodstuff, pharmaceuticals, aggregate & chemicals.
2. Does not include food or bakery ovens. See listing for "Food Oven."
3. Does not include digester gas or landfill gas units.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Electric Furnace – Pyrolyzing, Carbonizing and Graphitizing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1400 °F) (1988)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Electrical Wire Reclamation – Insulation Burn-Off Furnace

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Afterburner (≥ 0.3 Second Retention Time at ≥ 1400 °F); Or Secondary Combustion Chamber (≥ 0.3 Second Retention Time at ≥ 1400 °F) (1988)	Natural Gas (1988)	Natural Gas (1988)		Natural Gas with Baghouse and: - Afterburner ((≥ 0.3 Second Retention Time at ≥ 1400 °F) or - Secondary Combustion Chamber (≥ 0.3 Second Retention Time at ≥ 1400 °F) (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Ethylene Oxide Sterilization

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Aeration	Recirculation Vacuum Pump-Seal Fluid with Fluid Reservoir Vented to: Chemical Scrubber; or Afterburner (≥ 0.3 second retention time at ≥ 1400°F); or Catalytic Afterburner (at ≥ 280°F) (07-11-97)					
Quarantine Storage	Unvented Enclosure with Internal Circulation Through Activated Carbon Impregnated with Sulfuric Acid (1989)					

Note: Ethylene Oxide Sterilization may also be Subject to 40 CFR 63, Subpart O – Emission Standards for Ethylene Oxide Sterilization Facilities.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Expanded Polystyrene Manufacturing Using Blowing Agent

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	For VOC Emissions: Incineration (≥ 0.3 Sec. Retention Time at ≥ 1400 °F) (1990)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Fatty Acid – Fat Hydrolyzing and Fractionation

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Condenser or Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1300 °F) (10-20-2000)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Fatty Alcohol

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Afterburner (≥ 0.3 second retention time at ≥ 1400°F) (07-11-97)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-5-2021 Rev. 2

Equipment or Process: Fermentation, Beer and Wine

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All Closed Systems	Carbon Adsorber (10-20-2000)					
All Open Systems	Scrubber with Approved Liquid Waste Disposal (10-20-2000)					
Wine Fermentation Tanks: Closed-Top ≤ 30,000 gallons capacity of each tank in system (2-5-2021)	Water Scrubber or Chiller Condenser with 67.0% combined capture and control efficiency averaged over length of fermentation season (mass balance basis)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev. 1
2-5-2021 Rev. 2

Equipment or Process: Fish Reduction

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Cooker	Scrubber with Chlorinated Solution (≤ 20 ppmv Cl^- Outlet Conc., ≥ 0.6 Sec. Retention Time and ≤ 200 °F Outlet Temp.) (1988)					
Digestor, Evaporator and Acidulation Tank	Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1200 °F) (1990)				Natural Gas with Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1200 °F) (1990)	
Dryer	Scrubber with Chlorinated Solution (≤ 20 ppmv Cl^- Outlet Conc., ≥ 0.6 Sec. Retention Time and ≤ 200 °F Outlet Temp.) (1990)				Natural Gas and Scrubber with Chlorinated Solution (≤ 20 ppmv Cl^- Outlet Conc., ≥ 0.6 Sec. Retention Time and ≤ 200 °F Outlet Temp.) (1990)	
Meal Handling[1]						
Rendering – Presses, Centrifuges, Separators, Tanks, Etc.	Water Condenser and Vent to Dryer Firebox (1988)					

1) At the date of the last revision for this category, there was no Achieved In Practice BACT Determination for this subcategory. Technologically Feasible options listed in historic South Coast AQMD BACT Guidelines for this subcategory require cost effective analyses before they can be listed in these current Guidelines.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-5-2021 Rev. 1

Equipment or Process: Flare

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Digester Gas or Landfill Gas from Non-Hazardous Waste Landfill	Ground Level, Shrouded, ≥ 0.6 Sec. Retention Time at ≥ 1400 °F, Auto Combustion Air Control, Automatic Shutoff Gas Valve and Automatic Re-Start System (1988) Compliance with Rule 1118.1 (Landfill gas only) (2-5-2021)	0.06 lbs/MM Btu (1988) Compliance with Rule 1118.1 (2-5-2021)		Ground Level, Shrouded, ≥ 0.6 Sec. Retention Time at ≥ 1400 °F, and Auto Combustion Air Control (1988) Compliance with Rule 1118.1 (Landfill gas only) (2-5-2021)	Knockout Vessel (1988)	
Landfill Gas from Hazardous Waste Landfill	Ground Level, Shrouded, ≥ 0.6 Sec. Retention Time at ≥ 1500 °F, Auto Combustion Air Control, Automatic Shutoff Gas Valve and Automatic Re-Start System (1988) Compliance with Rule 1118.1	0.06 lbs/MM Btu (2020) Compliance with Rule 1118.1 (2-5-2021)		Ground Level, Shrouded, ≥ 0.6 Sec. Retention Time at ≥ 1500 °F, and Auto Combustion Air Control (1988) Compliance with Rule 1118.1 (2-5-2021)	Knockout Vessel (1988)	
Produced Gas (2-5-2021)	Compliance with Rule 1118.1	Compliance with Rule 1118.1		Compliance with Rule 1118.1		
Organic Liquid Storage (2-5-2021)		Compliance with Rule 1118.1		Compliance with Rule 1118.1		
Organic Liquid Loading (2-5-2021)		Compliance with Rule 1118.1		Compliance with Rule 1118.1		
Other Flare Gas (2-5-2021)		Compliance with Rule 1118.1				

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Flow Coater, Dip Tank and Roller Coater

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
< 36 lbs/day VOC	Compliance with Regulation XI (10-20-2000)					
≥ 36 lbs/day VOC	Coating with Lower VOC Content than Required by Applicable Rules, and Emissions from Coating Area, Flash Off Area, Drying Area, and Oven Vented to Control Device Achieving ≥ 90% Overall Efficiency (1988) Or Super Compliant Materials with ≤ 5% VOC by Weight (10-20-2000)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

2-2-2018 Rev. 0

Equipment or Process: Food Oven

		Criteria Pollutants					
Subcategory[1]	**Rating/ Size**	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Ribbon Burner	> 500°F		60 ppmvd @ 3% O_2 (2-2-2018)	Natural Gas (2-2-2018)	Compliance with applicable Rules 407 or 1153.1 (2-2-2018)	Natural Gas (2-2-2018)	
	≤ 500°F		30 ppmvd @ 3% O_2 (2-2-2018)	Same as above	Same as above	Same as above	
Other Direct Fired Burner			30 ppmvd @ 3% O_2 (2-2-2018)				
Infrared Burner			30 ppmvd @ 3% O_2 (2-2-2018)				
Add-on Control for Bakery Oven processing yeast leavened products with emissions ≥ 30 lb VOC/day		Catalytic oxidizer with 95% overall control efficiency (mass basis); catalyst inlet temperature ≥ 600°F; ceramic prefilter (2-2-2018)	Compliance with Rule 1147 at the time of applicability (2-2-2018)				

[1]Indirect Fired units may be subject to Rules 1146 and 1146.1 and BACT for Process Heater.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Foundry Sand Mold – Cold Cure Process

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All			Packed Column Scrubber with pH of Solution Maintained at a Minimum of 8.0 (1988)			

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev 1

Equipment or Process: Fryer – Deep Fat

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Integrated Afterburner/Oil Heater < 2 MM Btu/hr	≥ 0.3 Sec. Retention Time at ≥ 1400 °F (2-1-2019)	Natural Gas (1990)	Natural Gas (1990)		≥ 0.3 Sec. Retention Time at ≥ 1400 °F	
Integrated Afterburner/Oil Heater ≥ 2 MM Btu/hr	≥ 0.3 Sec. Retention Time at ≥ 1400 °F (2-1-2019)	Natural Gas (1990)	Natural Gas (1990)		≥ 0.3 Sec. Retention Time at ≥ 1400 °F, and Electrostatic Precipitator or High Efficiency Mist Eliminator ~~(10-20-2000)~~ (2-1-2019)	
Non-Integrated Direct and In-Direct Oil Heater (Steam, Thermal Fluid Heater and burner exhaust gases)		60 ppm Compliance with Rule 1147 (2-1-2019)				

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
12-5-2003 Rev. 1

Equipment or Process: Fugitive Emission Sources at Natural Gas Plants and Oil and Gas Production Fields

	Criteria Pollutants					
Subcategory/Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Compressors, Centrifugal Type	Seal System with a Higher Pressure Barrier Fluid (04-10-98); and Compliance with Rule 1173 (12-5-2003)					
Compressors, Rotary Type	Enclosed Seal System Connected to Closed Vent System (04-10-98); and Compliance with Rule 1173					
Pressure Relief Valves	Connected to Closed Vent System or Equipped with Rupture Disc if Applicable (4-10-98); and Compliance with Rule 1173 (12-5-2003)					
Pumps – In Heavy Liquid Service	Single Mechanical (4-10-1998); and Compliance with Rule 1173 (12-5-2003)					
Pumps – In Light Liquid Service	Sealless Type if Available and Compatible; or Double or Tandem Seals, and Vented to Closed Vent System (4-10-98); and Compliance with Rule 1173 (12-5-2003)					
Sampling Connections	Closed-Purge, Closed-Loop, or Closed-Vent System (4-10-98); and Compliance with Rule 1173 (12-5-2003)					
Valves, Fittings, Diaphragms, Hatches, Sight-Glasses, Open-Ended Pipes and Meters in VOC Service	Compliance with Rule 1173 (12-5-2003)					
Compressors, Centrifugal Type	Seal System with a Higher Pressure Barrier Fluid; < 500 ppmv by USEPA Method 21 with Quarterly I&M Program[1)] (04-10-98)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0; 12-5-2003 Rev. 1

Equipment or Process: Fugitive Emission Sources at Organic Liquid Bulk Loading Facilities

	Criteria Pollutants					
Subcategory/Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Compressors, Rotary Type	Enclosed Seal System Connected to Closed Vent System; < 500 ppmv by USEPA Method 21 with Quarterly I&M Program[1)] (04-10-98)					
Connectors[2)] in Gas, Vapor or Light Liquid VOC Service	< 500 ppmv by USEPA Method 21 with Quarterly I&M Program[1)] (04-10-98)					
Open Ended Valves and Pipes	Compliance with Rule 1173 where Applicable (10-20-2000)					
Pressure Relief Valves	Connected to Closed Vent System or Equipped with Rupture Disc if Applicable (4-10-98); and Compliance with AQMD Rule 1173 (10-20-2000)					
Process Valves – Gate, Globe and Ball	Compliance with AQMD Rule 1173, where Applicable (10-20-2000)					
Pumps – In Heavy Liquid Service	Single Mechanical; < 1000 ppmv by USEPA Method 21 with Quarterly I&M (4-10-1998)					
Pumps – In Light Liquid Service	1. Sealless Type if Available and Compatible, or 2. Double or Tandem Seals and Vented to Closed Vent System; < 1000 ppmv by USEPA Method 21 with Approved South Coast AQMD I&M; <1000 ppmv by USEPA Method 21 with Approved South Coast AQMD I&M (4-10-98)					
Sampling Connections	Closed-Purge, Closed-Loop, or Closed-Vent System (4-10-98)					

1) Quarterly I&M shall be consistent with Rule 1173 and other applicable requirements except that leaks between 500 and 1000 ppmv must be repaired within 14 days after detection.
2) Connectors include flanges, screwed or other joined fittings

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
12-5-2003 Rev. 1

Equipment or Process: Fugitive Emission Sources, Other Facilities

	Criteria Pollutants					
Subcategory/Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Compressors, Fittings, Open Ended Pipes, Pressure Relief Devices, , Valves, Pumps, Sampling Connections, Diaphragms, Hatches, Sight-Glasses and Meters in VOC Service	Compliance with Rule 1173, where Applicable by Rule (12-5-2003)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Galvanizing Furnace

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Batch Operations		Natural Gas with Low NOx Burner (10-20-2000)	Natural Gas (1988)		Natural Gas with Baghouse with Lime Coating (1988)	
Continuous Sheet Metal Operations		Natural Gas with Low NOx Burner (10-20-2000)	Natural Gas (1988)		Natural Gas with Packed Column Scrubber Serving the Caustic, Acid Pickling Tanks and/or Metal Preparation Tanks (1988, 2000)	
Continuous Wire Operations		Natural Gas with Low NOx Burner (10-20-2000)	Natural Gas (1988)		Natural Gas with Noncombustible Covering on Molten Metal Surface, Baghouse, and Packed Column Scrubber Serving the Metal Preparation Tanks (1988, 2000)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Garnetting Equipment

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse or Rotary Drum Filter (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
12-3-2004 Rev. 1

Equipment or Process: Gas Turbine

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Natural Gas Fired, < 3 MWe		9 ppmvd @ 15% O_2 (10-20-2000)		10 ppmvd @ 15% O_2 (10-20-2000)		With Add-On Controls: 9 ppmvd ammonia @ 15% O_2 (10-20-2000)
Natural Gas Fired, ≥ 3 MWe and < 50 MWe		2.5 ppmvd @ 15% O_2 x efficiency (%)[1)] / 34% (6-12-98)		10 ppmvd @ 15% O_2 (6-12-98)		With Add-On Controls: 5.0 ppmvd ammonia @ 15% O_2 (10-20-2000)
Natural Gas Fired, ≥ 50 MWe	2.0 ppmvd (as methane) @ 15% O_2, 1-hour avg. OR 0.0027 lbs/MMBtu (higher heating value) (10-20-2000)	2.5 ppmvd @ 15% O_2, 1-hour rolling avg. OR 2.0 ppmvd @ 15 %O_2, 3-hour rolling avg. x efficiency (%)[1)] / 34% (10-20-2000)		6.0 ppmvd @ 15% O_2, 3-hour rolling avg. (10-20-2000)		With Add-On Controls: 5.0 ppmvd ammonia @ 15% O_2 (10-20-2000)
Emergency		See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)	See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)		See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

Landfill or Digester Gas Fired		25 ppmv, dry, corrected to 15 $\%O_2$ (1990)	Compliance with Rule 431.1 (10-20-2000)	130 ppmv, dry, corrected to 15 $\%O_2$ (10-20-2000)	Fuel Gas Treatment for Particulate Removal (1990)	

Notes: 1) The turbine efficiency correction for NOx is limited to 1.0 as a minimum. The turbine efficiency is the demonstrated percent efficiency at full load (corrected to the higher heating value of the fuel) without consideration of any downstream heat recovery (12-3-2004).

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Glass Melting Furnace

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Decorator Glass		Natural Gas with Low NOx Burner (10-20-2000); Cullet in Raw Material Charged > 80% (1988)			Baghouse (10-20-2000)	
Flat Glass		Natural Gas with Heating Modifications: - Excess Oxygen in Ports < 5% - Cullet in Raw Material Charged > 15% - Hot Spot Temperature < 2,700 °F (1988)	Process Modification: Sulfur Content of Batch Charged < 0.25% by Weight of Total Batch (1988)		Baghouse (10-20-2000)	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

2-5-2021 Rev. 0

Equipment or Process: Glass Screen Printing

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Flat Glass	Compliance with Rule 1145 or use of Rule 1145 compliant UV/EB or water-based coatings					

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Incinerator – Hazardous Waste

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Automatic Combustion Air Control, ≥ 2 Sec. Retention Time and ≥ 1800 °F (1988)	Natural Gas Supplemental Fuel with Selective Non-catalytic Reduction (1988)	Natural Gas Supplemental Fuel and Spray Dryer with Lime Injection (1988)	Automatic Combustion Air Control, ≥ 2 Sec. Retention Time and ≥ 1800 °F (1988)	0.002 gr/dscf at 12% CO_2 (1988)	

Note: The equipment may also be subject to 40 CFR 264, Subpart O--Incinerators

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Incinerator – Infectious Waste

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
≤ 300 lbs/hr	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1800 °F) (1988)	Natural Gas as Auxiliary Fuel (1988)	Natural Gas as Auxiliary Fuel with Wet Scrubber (1988)	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1800 °F) (1988)		
> 300 lbs/hr	Same as Above	Same as Above	Same as Above	Same as Above	0.04 gr/dscf Corrected to 12% CO_2, with Enclosed Automatic Feed and Ash Removal System (1988)	

Note: The equipment may also be subject to 40 CFR 60, Subpart Ec--Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction Is Commenced After June 20, 1996

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
7-9-2004 Rev. 1

Equipment or Process: Incinerator – Non-Infectious, Non-Hazardous Waste

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
≤ 300 lbs/hr	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1600 °F} (1988)	Natural Gas as Auxiliary Fuel (1988)	Natural Gas as Auxiliary Fuel with Wet Scrubber (1988)	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1600 °F) (1988)	Natural Gas as Auxiliary Fuel with Enclosed Automatic Feed and Fly ash Removal System (1988)	
> 300 lbs/hr and < 750 lbs/hr	Same as Above	Same as Above	Same as Above	Same as Above	0.04 gr/dscf Corrected to 12% CO_2, with Enclosed Automatic Feed and Ash Removal System (1988)	
≥ 750 lbs/hr	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1800 °F) (1988)	Same as Above	Same as Above	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1800 °F) (1988)	Same as Above	

Note: The equipment may also be subject to 40 CFR 60, Subpart CCCC--Standards of Performance for New Stationary Sources: Commercial and Industrial Solid Waste Incineration Units.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
6-6-2003 Rev. 1
7-14-2006 Rev. 2
12-02-2016 Rev. 3
2-2-2018 Rev. 4

Equipment or Process: I.C. Engine, Portable [1]

		Criteria Pollutants					
Subcategory	**Rating/Size**	**VOC**	**NOx**	**NOx + NMHC[2]**	**SOx**	**CO**	**PM**
Compression-Ignition[3]	50 ≤ HP < 75			Tier 4 Final: 4.7 grams/kW-hr (3.5 grams/bhp-hr) (12-02-2016)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule 431.2). (6-6-2003)	Tier 4 Final: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (12-02-2016)	Tier 4 Final: 0.03 grams/kW-hr (0.02 grams/bhp-hr) and CARB ATCM for portable diesel engines[4] (12-02-2016)
	75≤ HP < 175		Tier 4 Final: 0.40 grams/kW-hr (0.30 grams/bhp-hr) (2-2-2018)	Tier 4 Final: NMHC only: 0.19 grams/kW-hr (0.14 grams/bhp-hr) (2-2-2018)		Tier 4 Final: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (2-2-2018)	Tier 4 Final: 0.02 grams/kW-hr (0.01 grams/bhp-hr) and CARB ATCM for portable diesel engines[4] (2-2-2018)
	175 ≤ HP < 750		Tier 4 Final: 0.40 grams/kW-hr (0.30 grams/bhp-hr) (12-02-2016)	Tier 4 Final: NMHC only: 0.19 grams/kW-hr (0.14 grams/bhp-hr) (12-02-2016)		Tier 4 Final: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (12-02-2016)	Tier 4 Final: 0.02 grams/kW-hr (0.01 grams/bhp-hr) and CARB ATCM for portable diesel engines[4] (12-02-2016)

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

		Criteria Pollutants					
Subcategory	**Rating/Size**	**VOC**	**NOx**	**NOx + NMHC[2]**	**SOx**	**CO**	**PM**

(Continued on next page)

Compression-Ignition[3]	≥750 HP [5]		*Tier 4 Interim:* ***For Generator Sets > 1200 HP:*** *0.67 grams/kW-hr (0.50 grams/bhp-hr)* ***For All Engines Except "Generator Sets > 1200 HP":*** *3.5 grams/kW-hr (2.6 grams/bhp-hr) (12-02-2016)*	*Tier 4 Interim: NMHC only: 0.4 grams/kW-hr (0.30 grams/bhp-hr) (12-02-2016)*	*Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule 431.2). (6-6-2003)*	*Tier 4 Interim: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (12-02-2016)*	*Tier 4 Interim: 0.10 grams/kW-hr (0.07 grams/bhp-hr)and CARB ATCM for portable diesel engines[4] (12-02-2016)*
Spark Ignition	All	1.5 grams/bhp-hr, or 240 ppmvd as methane @ 15% O2 (4-10-1998)	1.5 grams/bhp-hr, or 80 ppmvd @ 15% O2 (4-10-1998)			2.0 grams/bhp-hr, or 176 ppmvd @ 15% O2 (4-10-1998)	

Notes:

1) BACT for "I.C. Engine, Portable" is determined by deemed complete date of permit application not date of manufacture or installation.
2) NMHC + NOx means the sum of non-methane hydrocarbons and oxides of nitrogen emissions, unless specified as "NMHC only", which only includes NMHC emissions.
3) The engine must be certified by U.S. EPA or CARB to meet the Tier 4 emission requirements of 40 CFR Part 89 – Control of Emissions from New and In-use Nonroad Compression-Ignition Engines shown in the table– or otherwise demonstrate that it meets the Tier 4 emission limits. If, because of the averaging, banking, and trading program, there is no new engine from any manufacturer that meets the above standards, then the engine must meet the family emission limits established by the manufacturer and approved by U.S. EPA. Based on the model year, the CARB Airborne Toxic Control Measure (ATCM) for Portable Diesel Engines (see www.arb.ca.gov/diesel/peatcm/peatcm.htm) requires in-use portable

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

diesel engines to be certified to Tier 1, 2, 3 or 4 by their respective deadlines, all of which have passed. All exceptions allowed in the ATCM are also allowed in this guideline.

4) The CARB ATCM also requires in-use portable diesel engines to meet fleet-average PM standards beginning 1/1/2013. The PM limits in the table apply only to filterable PM.
5) CARB has extended the Tier 4 Final requirements deadline "until further notice" for Portable, Compression-Ignition Engines for HP ≥ 750.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
6-6-2003 Rev. 1
12-3-2004 Rev. 2
7-14-2006 Rev. 3
10-3-2008 Rev. 4
12-2-2016 Rev. 5
2-1-2019 Rev. 6
9-2-2022 Rev. 7

Equipment or Process: I.C. Engine, Stationary, Emergency [1]

		Criteria Pollutants					
Subcategory	**Rating/Size**	**NMHC or VOC**	**NOx**	**NOx + NMHC[2]**	**SOx**	**CO**	**PM**
Compression Ignition, Fire Pump [3, 4]	50 ≤ HP < 100			~~Compliance with Rule 1470 (12-02-2016)~~ Tier 3: 4.7 grams/kW-hr (3.5 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule 431.2). (6-6-2003)	~~Compliance with Rule 1470 (12-02-2016)~~ Tier 3: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	~~Compliance with Rule 1470 (12-3-2004)~~ Tier 3: 0.40 grams/kW-hr (0.30 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-3-2004)[7]
	100 ≤ HP < 175			~~Compliance with Rule 1470 (12-02-2016)~~ Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr) (10-03-2008)		~~Compliance with Rule 1470 (12-02-2016)~~ Tier 3: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (10-03-2008)	~~Compliance with Rule 1470 (12-3-2004)~~ Tier 3: 0.30 grams/kW-hr (0.22 grams/bhp-hr) (10-03-2008)

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

		Criteria Pollutants					
Subcategory	**Rating/Size**	**NMHC or VOC**	**NOx**	**NOx + NMHC[2]**	**SOx**	**CO**	**PM**
				Compliance with Rule 1470 (12-02-2016)		Compliance with Rule 1470 (12-02-2016)	Compliance with Rule 1470 (12-3-2004)[7]
Compression Ignition, Fire Pump [3, 4] (continued)	175 ≤ HP < 750			~~Compliance with Rule 1470 (12-02-2016)~~ Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr): (10-03-2008) Compliance with Rule 1470 (12-02-2016)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule 431.2). (6-6-2003)	~~Compliance with Rule 1470 (12-02-2016)~~ Tier 3: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	~~Compliance with Rule 1470 (12-3-2004)~~ Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-3-2004)[7]
	≥750 HP			~~Compliance with Rule 1470 (12-02-2016)~~ Tier 2: 6.4 grams/kW-hr (4.8 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)		~~Compliance with Rule 1470 (12-02-2016)~~ Tier 2: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	~~Compliance with Rule 1470 (12-02-2016)~~ Tier 2: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)[7]
Compression-Ignition, Other[3, 4]	50 ≤ HP < 100			~~Compliance with Rule 1470 (12-02-2016)~~		~~Compliance with Rule 1470 (12-02-2016)~~	~~Compliance with Rule 1470 (12-3-2004)~~

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

		Criteria Pollutants					
Subcategory	**Rating/Size**	**NMHC or VOC**	**NOx**	**NOx + NMHC[2]**	**SOx**	**CO**	**PM**
				Tier 3: 4.7 grams/kW-hr (3.5 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)		Tier 3: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-3-2004)[7]
Compression-Ignition, Other[3, 4] (continued)	100 ≤ HP < 175			~~Compliance with Rule 1470~~ ~~(12-02-2016)~~ Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule 431.2). (6-6-2003)	~~Compliance with Rule 1470~~ ~~(12-02-2016)~~ Tier 3: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	~~Compliance with Rule 1470~~ ~~(12-3-2004)~~ Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (2-01-2019) Compliance with Rule 1470 (12-3-2004)[7]
	175≤ HP < 300			~~Compliance with Rule 1470~~ ~~(12-02-2016)~~ Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)		Compliance with Rule 1470 (12-02-2016) Tier 3: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	~~Compliance with Rule 1470~~ ~~(12-3-2004)~~ Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-3-2004)[7]

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

		Criteria Pollutants					
Subcategory	**Rating/Size**	**NMHC or VOC**	**NOx**	**NOx + NMHC[2]**	**SOx**	**CO**	**PM**
	300≤ HP < 750			~~Compliance with Rule 1470 (12-02-2016)~~ Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr) (7-14-2006) Compliance with Rule 1470 (12-02-2016)		~~Compliance with Rule 1470 (12-02-2016)~~ Tier 3: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (7-14-2006) Compliance with Rule 1470 (12-02-2016)	~~Compliance with Rule 1470 (12-3-2004)~~ Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (7-14-2006) Compliance with Rule 1470 (12-3-2004)[7]
Compression-Ignition, Other[3, 4] (continued)	≥750 HP			~~Compliance with Rule 1470 (12-02-2016)~~ Tier 2: 6.4 grams/kW-hr (4.8 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule 431.2). (6-6-2003)	~~Compliance with Rule 1470 (12-02-2016)~~ Tier 2: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-02-2016)	~~Compliance with Rule 1470 (12-3-2004)~~ Tier 2: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008) Compliance with Rule 1470 (12-3-2004)[7]
Spark Ignition[5]	< 130 HP	VOC: 1.5 grams/bhp-hr (10-20-2000)	1.5 grams/bhp-hr (10-20-2000)		See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)	2.0 grams/bhp-hr (10-20-2000)	See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

		Criteria Pollutants					
Subcategory	**Rating/Size**	**NMHC or VOC**	**NOx**	**NOx + NMHC[2]**	**SOx**	**CO**	**PM**
	≥ 130 HP	VOC: 1.0 grams/bhp-hr[6] (12-02-2016)	1.5 grams/bhp-hr (10-20-2000)		See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)	2.0 grams/bhp-hr (10-20-2000)	See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)

1) An emergency engine is an engine which operates as a temporary replacement for primary mechanical or electrical power sources during periods of fuel or energy shortage or while a primary power source is under repair. This includes fire pumps, emergency electrical generation and other emergency uses.

2) NMHC + NOx means the sum of non-methane hydrocarbons and oxides of nitrogen emissions.

3) South Coast AQMD restricts operation of emergency compression-ignition engines to 50 hours per year, or less if required by Rule 1470, for maintenance and testing and a maximum of 200 hours per year total operation. For engines used to drive standby generators, operation beyond 50 hours per year for maintenance and testing is allowed only in the event of a loss of grid power or up to 30 minutes prior to a rotating outage provided that the electrical grid operator or electric utility has ordered rotating outages in the control area where the engine is located or has indicated that it expects to issue such an order at a certain time, and the engine is located in a control area that is subject to the rotating outage.

4) The engine must be certified by U.S. EPA or CARB to meet the Tier 1, 2 or 3 emission requirements of 40 CFR Part 89 – Control of Emissions from New and In-use Nonroad Compression-Ignition Engines shown in the table– or otherwise demonstrate that it meets the Tier 1, 2 or 3 emission limits. If, because of the averaging, banking, and trading program, there is no new engine from any manufacturer that meets the above standards, then the engine must meet the family emission limits established by the manufacturer and approved by U.S. EPA. The PM limits apply only to filterable PM.

5) South Coast AQMD restricts operation of emergency spark-ignition engines to 50 hours per year for maintenance and testing and a maximum of 200 hours per year total operation. Emergency spark-ignition engines may be used in a Demand Response Program, however the engine will require additional evaluation and may be subject to more stringent regulatory requirements. Since some requirements are based upon the California Airborne Toxic Control Measure for Stationary Compression Ignition Engines, applicants are referred to Title 17, Section 93115.3 of the California Code of Regulations for possible exemptions.

6) VOC limit is based on the requirement listed in Table 1 of 40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

7) BACT PM emission standard requirement for new Stationary Emergency Standby Diesel-Fueled CI Engines located at a sensitive receptor or 50 meters or less from a sensitive receptor. (9-2-2022)

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

12-02-2016 Rev. 0
2-2-2018 Rev. 1

Equipment or Process: I.C. Engine, Stationary, Non-Emergency, Non-Electrical Generators

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
> 50 bhp	Compliance with Rule 1110.2 (12-02-2016)	Compliance with Rule 1110.2 (12-02-2016)	See Clean Fuels Policy in Part C of the BACT Guidelines (12-02-2016)	Compliance with Rule 1110.2 (12-02-2016)	See Clean Fuels Policy in Part C of the BACT Guidelines (12-02-2016) Compliance with Rule 1470 (12-02-2016)	
Landfill or Digester Gas Fired[1]	Compliance with Rule 1110.2 (2-2-2018)	Compliance with Rule 1110.2 (2-2-2018)	Compliance with Rule 431.1 (12-02-2016)	Compliance with Rule 1110.2 (2-2-2018)		

1) For the adoption of this new listing, the requirements for this subcategory were transferred directly from the existing requirements under "I.C. Engine, Stationary, Non-Emergency." The requirements are not new, but the date listed was updated to reflect the date of adoption of the new listing.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

2-2-2018 Rev. 0
9-2-2022 Rev. 1

Equipment or Process: I.C. Engine, Stationary, Non-Emergency, Electrical Generators ~~1~~

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
> 50 bhp	Compliance with Rule 1110.2 (2-2-2018)	Compliance with Rule 1110.2 (2-2-2018)	See Clean Fuels Policy in Part C of the BACT Guidelines (2-2-2018)	Compliance with Rule 1110.2 (2-2-2018)	See Clean Fuels Policy in Part C of the BACT Guidelines (2-2-2018) Compliance with Rule 1470 (2-2-2018)	With Add-On Controls: 10 ppmvd ammonia @ 15% O_2 (9-2-2022)
Landfill or Digester Gas Fired	Compliance with Rule 1110.2 (2-2-2018)	Compliance with Rule 1110.2 (2-2-2018)	Compliance with Rule 431.1 (2-2-2018)	Compliance with Rule 1110.2 (2-2-2018)		

~~1) This BACT listing was adapted from the previous "I.C. Engine, Stationary, Non-Emergency," Part D BACT listing.~~

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Jet Engine Test Facility

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Experimental High Altitude Testing					Venturi Scrubber with Water Spray in Exhaust (1988)	
Experimental Sea Level (Low Altitude) Testing[1]						
Performance Testing[1]						

1) At the date of the last revision for this category, there was no Achieved In Practice BACT Determination for this subcategory. Technologically Feasible options listed in historic South Coast AQMD BACT Guidelines for this subcategory require cost effective analyses before they can be listed in these current Guidelines.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Landfill Gas Gathering System

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Compliance with Rule 1150.1 - Control of Gaseous Emissions from Municipal Solid Waste Landfills (10-20-2000)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Latex Manufacturing - Reaction

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Catalytic Incinerator and Caustic Scrubber (1988)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev. 1

Equipment or Process: Lead Melting Furnace

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Pot or Crucible, Non-Refining Operations		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas and Melt only Sows, Pigs, Ingots or Clean Scrap (1990)	
Pot or Crucible, Refining Operations		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas with Scrubber; or Natural Gas with Sulfur Free Refining Agents (1990)		Natural Gas with Baghouse (1990)	
Reverberatory, Secondary Melting Operations		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas with Scrubber (1990)		Natural Gas with Baghouse (1990)	

Note: Some secondary lead smelting operations must also comply with the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart X.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Lead Oxide Manufacturing – Reaction Pot Barton Process

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		Natural Gas (1988)	Natural Gas (1988)		Natural Gas with Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
12-02-2016 Rev.1

Equipment or Process: Liquid Transfer and Handling

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Marine, Loading	For VOC Emissions: Vapor Collection System Vented to Incinerator (1990)					
Tank Truck and Rail Car Bulk Loading, Class A (Rule 462)	Compliance with Rule 462 (0.08 Lbs/1000 Gals) (10-20-2000)					For Ammonia: Bottom Loading with Vapor Collection System Vented to Packed Column Scrubber (10-20-2000)
Tank Truck and Rail Car Bulk Loading, Classes B and C (Rule 462)	Bottom Loading with Vapor Collection System Vented to: - Incinerator; or - Compression/absorption with Tail Gas Vented to Incinerator; or - Refrigeration System; or - Carbon Adsorption system and Compliance with Rule 462 (10-20-2000)					Same as Above
Gasoline Transfer and Dispensing	Compliance with Rule 461 (12-02-2016)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Metal Heating Furnace

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		Natural Gas with Low NOx Burner ≤ 50 ppmvd at 3% O_2, dry. (10-20-2000)	Natural Gas (1990)			Natural Gas (1990)

Note: This category includes metal aging, annealing, forging, heat treating, and homogenizing.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Metallizing Spray Gun

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Water Wash Spray Booth or Scrubber (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Mixer, Blender or Mill

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Dry					Baghouse (07-11-97)	
Wet	Carbon Adsorber; or Refrigerated Condenser; or Afterburner (VOC Emissions Only); or Vapor Recovery (07-11-97)				Baghouse if Dry Ingredients are Added (07-11-97)	Packed Column Scrubber (07-11-97)

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Nitric Acid Manufacturing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		Catalytic Reduction Furnace (07-11-97)				

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Non-Metallic Mineral Processing – Except Rock or Aggregate

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse for Enclosed Operations Water Fog Spray for Open Operations (1988)	

Notes:
1. Non-metallic Minerals are minerals such as rock salt, sodium compounds, pumice, gilsonite, talc and pyrophyllite, boron, barite, fluorspar, feldspar, diatomite, perlite, vermiculite, mica, carbon black, silicon and kyanite.
2. This category includes conveying, size reduction and classification.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Nut Roasting

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Roaster		Natural Gas (1988)			Afterburner (≥ 0.3 second Retention Time at ≥ 1400°F) (10-20-2000)	
Handling Equipment					Baghouse (10-20-2000)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
12-02-2016 Rev. 1

Equipment or Process: Oil and Gas Production

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Combined Tankage	All Tanks Vented to: - Vacuum Gas Gathering System; or - Positive Pressure Gas Gathering System; or - Incinerator or Firebox (1988) Compliance with Rules 1148 and 1148.1 (12-02-2016)					
Wellhead	All Wellheads Vented to: - Vacuum Gas Gathering System; or - Positive Pressure Gas Gathering System; or - Incinerator or Firebox (10-20-2000) Compliance with Rules 1148 and 1148.1 (12-02-2016)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-5-2021 Rev. 1
9-2-2022 Rev. 2

Equipment or Process: Open Process Tanks: Chemical Milling (Etching) and Plating

		Criteria Pollutants					
Subcategory/ Rating/Size		**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Chemical Milling (9-2-2022)	Aluminum and Magnesium [1]						
	Nickel Alloys, Stainless Steel and Titanium		Packed Chemical Scrubber (10-20-2000)			High Efficiency Mist Eliminator (10-20-2000)	
Plating	Decorative Chrome					Compliance with Rule 1469 (2-5-2021)	
	Hard Chrome					Compliance with Rule 1469 (2-5-2021)	

1) At the date of the last revision for this category, there was no Achieved In Practice BACT Determination for this subcategory. Technologically Feasible options listed in historic South Coast AQMD BACT Guidelines for this subcategory require cost effective analyses before they can be listed in these current Guidelines.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

Equipment or Process: Open Spraying – Spray Gun**

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Compliance with Regulation XI (10-20-2000)				Compliance with Regulation XI (10-20-2000)*[1]	

**[1] The open spraying must be conducted in a spray booth where feasible.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Perlite Manufacturing System

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		Natural Gas with Low NOx Burner (10-20-2000)	Natural Gas (10-20-2000)		Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
7-9-2004 Rev. 1

Equipment or Process: Pharmaceutical Manufacturing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Operations Involving Solvents	Afterburner (≥0.3 second Retention Time at ≥1400°F), Refrigerated Condenser, or Carbon Adsorber (07-11-97)					
Solids Handling					Baghouse (07-11-97)	
Solids Storage Tanks					Baghouse or Vent Filter (07-11-97)	

Note: This equipment may also be subject to Rule 1103 and 40 CFR 63 Subpart GGG – National Emission Standards Pharmaceuticals Production. (7-9-2004)

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Phosphoric Acid - Thermal Process

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Fiber Mist Filter, Electrostatic Precipitator, or Packed Scrubber with Mist Eliminator (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Phthalic Anhydride

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Afterburner (≥0.3 Second Retention Time at ≥1400°F) or Water Cooled Condenser (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Plasma Arc Metal Cutting Torch

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
> 30 KVA Electrical Input					Water Table and Nozzle Water Shroud; or Electrostatic Precipitator (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-5-2021 Rev. 1

Equipment or Process: Polyester Resin Operations

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Fabrication – Hand and Spray Layup	Compliance with Rule 1162 (10-20-2000)				Airless Spray Equipment and Spray Booth with Mesh Type Filter (1988)	
Molding and Casting	Compliance with Rule 1162 and Use of Aqueous Emulsion Cleaner or Acetone for Clean-Up to Maximum Extent Possible (1988/10-20-2000)					
Panel Manufacturing	Curing Oven, Impregnation Tables and Mixing Tanks Vented to an Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1400 °F). Storage and Holding Tanks Vented to a Carbon Adsorber (1988)	Natural Gas Fired Curing Oven, Electrically Heated Cellophane Oven and Laminating Table (1988)	Natural Gas (10-20-2000)		Natural Gas Fired Curing Ovens, Cellophane Ovens Vented to an Electrostatic Precipitator and Panel Cutting Saw Vented to Baghouse (1988)	
Pultrusion	Styrene Suppressed Resin (1988), and Compliance with Rule 1162 (10-20-2000)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Polystyrene Extruder

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Electrostatic Precipitator or Fiber Mist Filter (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Polystyrene Manufacturing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Water Cooled Condenser (07-11-97)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-5-2021 Rev. 1

Equipment or Process: Powder Coating Booth

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
≤ 37 Lbs/Day Throughput					Pocket or Bag-Type Filters (10-20-2000)	
> 37 Lbs/Day Throughput					1. Baghouse (≥99% efficiency); or 2. Cartridge Filters (≥99% efficiency); or 3. HEPA Filters (≥99.97% efficiency) (1988/10-20-2000) (2-5-2021)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Precious Metal Reclamation

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Incineration		Natural Gas (1988)	Natural Gas (1988)		Natural Gas with Baghouse and: - Afterburner (≥ 0.3 sec. Retention Time at ≥ 1400° F); or -Secondary Combustion Chamber (≥ 0.3 sec. Retention Time at ≥ 1400° F) (1988)	
Chemical Recovery and Chemical Reactions		3-Stage NOx Reduction Scrubber (07-11-97)				

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
12-5-2003 Rev. 1
7-14-2006 Rev. 2
2-2-2018 Rev. 3
2-1-2019 Rev. 4
9-2-2022 Rev. 5

Equipment or Process: Printing (Graphic Arts)

	Criteria Pollutants					
Subcategory	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Flexographic	Inks with ≤ 1.5 Lbs VOC/Gal, Less Water and Less Exempt Compounds (1990); or use of UV/EB or water-based inks/coatings ≤ 180 g VOC/L. Compliance with Rules 1130 and 1171 (2-2-2018)					
Alternatively	For add-on control required by Rule 1130(c)(5) or other South Coast AQMD requirement: EPA M. 204 Permanent Total Enclosure (100% collection) vented to thermal oxidizer with 95% overall control efficiency; Combustion Chamber: Temp ≥ 1500°F[1], Retention Time > 0.3 seconds (2-2-2018)	Compliance with BACT requirements for Thermal Oxidizer ~~BACT requirements~~		Compliance with BACT requirements for Thermal Oxidizer ~~BACT requirements~~		
Letterpress	Compliance with Rules 1130 and 1171 (12-5-2003)					
Lithographic or Offset, Heatset	Low VOC Fountain Solution (≤ 8% by Vol. VOC); Low VOC (≤ 100 g/l) Blanket and Roller Washes; Oil-Based or UV-Curable Inks; and Compliance with Rules 1130 and 1171 (2-2-18) Oven Vented to a thermal oxidizer (≥ 0.3 Sec. Retention Time at ≥ 1400 ^{0}F; 95% Overall Efficiency)	Compliance with BACT requirements		Compliance with BACT requirements	Venting to a thermal oxidizer (≥ 0.3 sec. Retention Time at ≥ 1400 ^{0}F) (10-20-2000) (2-1-2019)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

	Criteria Pollutants					
Subcategory	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
	(10-20-2000)	for Thermal Oxidizer ~~BACT requirements~~ Compliance with BACT requirements for Other Dryers and Ovens (9-2-2022)		for Thermal Oxidizer ~~BACT requirements~~		
Lithographic or Offset, Non-Heatset	Low VOC Fountain Solution (≤ 8% by Vol. VOC); Low VOC (≤ 100 g/l) Blanket and Roller Washes; Oil-Based or UV-Curable Inks; and Compliance with Rules 1130 and 1171. (2-1-2019)					
Rotogravure or Gravure—Publication and Packaging	Compliance with Rules 1130 and 1171 (10-20-2000)					
Screen Printing and Drying	Compliance with Rules 1130.1 and 1171; or use of Rule 1130.1 and 1171 compliant UV/EB or water-based inks/coatings. (2-2-2018).					

1) or temperature demonstrating equivalent overall control efficiency in a South Coast AQMD-approved source test.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
10-03-2008 Rev. 1
12-02-2016 Rev. 2
2-1-2019 Rev. 3

Equipment or Process: Process Heater – Non-Refinery

	Criteria Pollutants					
Subcategory/Rating/ Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Natural Gas or Propane Fired, >2 and < 20 MM Btu/hr		Compliance with Rules 1146 or 1146.1 (12-02-2016)	Natural Gas (10-20-2000)	≤50 ppmv for firetube type, ≤ 100 ppmv for watertube type, dry corrected to 3% O_2 (10-20-2000)	Natural Gas (10-20-2000)	
Natural Gas or Propane Fired, ≥ 20 MM Btu/hr		Compliance with Rules 1146 (2-1-2019)	Natural Gas (10-20-2000)	Same as above. (10-20-2000)	Natural Gas (10-20-2000)	With SCR: ≤ 5 ppmvd NH3, corrected to 3% O2 With LTO: ≤ 1 ppmvd ozone, corrected to 3% O2 (10-20-2000)

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
12-5-2003 Rev. 1

Equipment or Process: Reactor with Atmospheric Vent [a)]

	Criteria Pollutants					
Rating/Size	**VOC/ODC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	- Carbon Adsorber; or - Afterburner (VOC Only); or - Refrigerated Condenser; or - Scrubber with Approved Liquid Waste Disposal (VOC only) (1990)					

a) Also see "Resin Manufacturing" and "Surfactant Manufacturing". (12-5-2003)

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Rendering

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Processing Equipment[1)]					Vent to Afterburner or Boiler Fire Box (≥ 0.3 sec. Retention Time at ≥ 1200 °F) (1988)	
Meal Grinding and Handling System					Enclosed Grinding and Screening Operation with Mechanical Conveyors Transporting Meal (1988)	
Tanks and Miscellaneous Equipment					Maintain Internal Temperature Below 140 °F (1988)	

1) Processing equipment includes crax pressing, filtering, centrifuging, evaporators, cookers, dryers, and grease and blood processing.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

12-5-2003 Rev. 0

Equipment or Process: Resin Manufacturing

	Criteria Pollutants					
Subcategory	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Continuous Polystyrene Process	Compliance with Rule 1141: ≤0.12 Pounds VOC per 1000 Pounds Completed Resin Product from Vacuum Devolatilizer and Styrene Recovery Systems (12-5-2003)					
Liquid-Phase, High-Density Polyethylene Slurry Process	Compliance with Rule 1141: ≥98% Reduction from Reactors, Recycle Treaters, Thinning Tanks, Blending Tanks and Product Finishing Section (12-5-2003)					
Liquid-Phase Polypropylene Process	Compliance with Rule 1141: ≥98% Reduction from Organic Resin Reactors, Slurry Vacuum Filter System, Diluent Recovery Section and Product Finishing Section (12-5-2003)					
Other Resin Manufacturing	Compliance with Rule 1141: ≤0.5 Pounds VOC per 1000 Pounds Completed Resin Product, or ≥95% Reduction from Resin Reactors, Thinning Tanks and Blending Tanks (12-5-2003)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Rock – Aggregate Processing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse Venting Jaw Crushers, Cone Crushers, and Material Transfer Points Adjacent to and after these Items; and Water Sprays at Other Material Transfer Points (1990)	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Rocket Engine Test Cell

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		Chemical Packed Scrubber (1988)			Chemical Packed Scrubber and Water Spray in Exhaust with Steam Ejectors (1988)	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Rubber Compounding – Banbury Type Mixer

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Sand Handling System with Shakeout and/or Muller in System

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Sewage Treatment Plants

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Carbon Adsorber or Scrubbing System, Covers for Primary Raw Sewage Processing, and Digester Gas Incineration or Recovery (1988)		Ferrous Chloride Injection and Caustic Scrubber for Hydrogen Sulfide Removal (1988)			

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Smokehouse

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Afterburner (≥ 0.3 sec. Retention Time at ≥ 1200° F) (1990)	Steam Heated Smokehouse and Electrically Heated Smoke Generator (1990)		Afterburner (≥ 0.3 sec. Retention Time at ≥ 1200° F) (1990)	Afterburner (≥ 0.3 sec. Retention Time at ≥ 1200° F) (1990)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

2-1-2019 Rev. 0

Equipment or Process: Soil Vapor Extraction – Thermal/Catalytic Oxidation (Natural Gas – burner only)

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	.	Compliance with Rule 1147.				

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Solder Leveling –Hot Oil or Hot Air

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Electrostatic Precipitator (1988)	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Solvent Reclamation

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Refrigerated or Water Cooled Condenser (07-11-97)					

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev 1
2-5-2021 Rev. 2

Equipment or Process: Spray Booth

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Fully-enclosed, Down-Draft Type, < 667 Lbs/Month of VOC Emissions (2-5-2021)	Compliance with Applicable Regulation XI Rules (10-20-2000)	If booth has a Make-up Air Unit or a Heater; Compliance with Rule 1147 (2-5-2021)			Dry Filters or Waterwash (1990)	
Other Types, < 1170 Lbs/Month of VOC Emissions	Compliance with Applicable Regulation XI Rules (10-20-2000)	If booth has a Make-up Air Unit or a Heater; Compliance with Rule 1147 (2-5-2021)			Same as Above (1990)	
Fully-enclosed, Down-Draft Type, ≥ 22 Lbs/Day of VOC Emissions (2-5-2021)	- Compliance with Applicable Regulation XI Rules, and VOC Control System with ≥ 90% Collection Efficiency and ≥ 95% Destruction Efficiency, or - Use of Super Compliant Materials (<50 grams of VOC per liter of material): or - Use of Low-VOC Materials Resulting in an Equivalent Emission Reduction (10-20-2000)	If booth has a Make-up Air Unit or a Heater; Compliance with Rule 1147 (2-5-2021)			Same as Above (1990)	
Other Types,	- Compliance with Applicable	If booth has a			Same as Above	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

≥ 1170 Lbs/Month of VOC Emissions	Regulation XI Rules, and VOC Control System with ≥ 90% Collection Efficiency and ≥ 95% Destruction Efficiency, or - Use of Super Compliant Materials (<50 grams of VOC per liter of material): or - Use of Low-VOC Materials Resulting in an Equivalent Emission Reduction (10-20-2000)	Make-up Air Unit or a Heater; Compliance with Rule 1147 (2-5-2021)			(1990)	
Enclosed with automated spray nozzles for wood cabinets, < 1170 Lbs/Month of VOC Emissions (2-5-2021)	Compliance with Rule 1136 or use of Rule 1136 compliant UV/EB or water-based coatings.	If booth has a Make-up Air Unit or a Heater; Compliance with Rule 1147				

Note: The sum of all VOC emissions from all spray booths within the same subcategory applied for in the previous two years at the same facility are considered toward the emission threshold.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Steel Melting Furnace

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Electric Arc					Baghouse (1988)	
Induction, ≤ 300 Lb. Capacity					Charge Only Ingots or Clean Returns, or Baghouse (10-20-2000)	
Induction, > 300 Lb. Capacity					Baghouse (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Storage Tanks - Liquid

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Asphalt					Cool Gases to < 120 °F and Vent to a Fiberglass or Steel Wool Filter. (07-11-97)	
External Floating Roof, VP ≤ 11 psia	Category A Tank Seals and Compliance with Rule 463 (10-20-2000)					
Fixed Roof	Vapor Recovery System with an Overall System Efficiency of ≥ 95% (7-11-97)					
Fuming Sulfuric Acid					Scrubber Followed by Fiber Mist Filter; or Water Spray Followed by Fiber Mist Filter (1988)	
Grease or Tallow					Maintain Temperature ≤ 140 °F (1988)	
Internal Floating Roof	Category A Tank Seals and Compliance with Rule 463 (10-20-2000)					
Sulfuric Acid			Caustic Scrubber and Mist Eliminator (1988)			
Underground, > 250 Gallons	≥ 95% Removal Efficiency for VOC (1990)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

12-5-2003 Rev. 0

Equipment or Process: Surfactant Manufacturing

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Compliance with Rule 1141.2[a)]: ≤ 0.5 Pounds per 1000 Pounds of Surfactant Product, or ≥ 95% (Wt.) Reduction From All Surfactant Manufacturing Equipment Vented to Atmosphere (12-5-2003)					

a) Does not apply to soap manufacturing operations or facilities that only blend and package surfactants.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Tank – Grease or Tallow Processing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Water Cooled or Atmospheric Condenser and Afterburner (≥ 0.3 sec. Retention Time at ≥ 1200 °F) (1990)	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

2-1-2019 Rev. 0
2-5-2021 Rev. 1

Equipment or Process: Thermal Oxidizer (Afterburner, Regenerative Thermal Oxidizer, and Thermal Recuperative Oxidizer) and Catalytic Oxidizer – Natural Gas Fired**

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Regenerative Thermal Oxidizer (2-5-2021)		30 ppmvd @ 3% O_2 (Burner emissions only		400 ppmvd @ 3% O_2 (Burner emissions only)		
Other Types		30 ppmvd @ 3% O_2 (Burner emissions only)				

** Does not include tank degassing, soil vapor extraction, and vapor incinerators where vapors are directed into the burner or into a combustion chamber.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Tire Buffer

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Cyclone and Water Spray at Rasp (07-11-97)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Vegetable Oil Purification

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Scrubber and Barometric Condenser (1988)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Vinegar Manufacturing

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All	Scrubber with South Coast AQMD- and Sanitation District-Approved Liquid Disposal (1988)					

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
12-5-2003 Rev. 1

Equipment or Process: Wastewater System

	Criteria Pollutants					
Subcategory	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Oil/Water Separator	Cover and Vent to Vapor Disposal System (1988); and Compliance with Rule 1176 (12-5-2003)					
Other Equipment	Compliance with Rule 1176 if Applicable by Rule[a)] (12-5-2003)					

a) Not required for sanitary sewer system.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Wax Burnoff Furnace

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All		Natural Gas with Low NOx Burner (1988)]	Natural Gas (1988)		Natural Gas with Afterburner or Secondary Combustion Chamber (≥ 0.3 sec. Retention Time at ≥ 1200° F) (1988)	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Wood Processing Equipment

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
All					Baghouse (1988)	

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

12-5-2003 Rev. 0

Equipment or Process: Woodworking

	Criteria Pollutants					
Subcategory	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Pneumatic Conveyance System					Compliance with Rule 1137[a]: Baghouse with No Visible Emissions Except During Startup and Shutdown (12-5-2003)	

a) Not required if system vents solely to stand-alone control device or into a closed room.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
2-1-2019 Rev 1

Equipment or Process: Zinc Melting Furnace

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Crucible or Pot		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas with Ingot and/or Clean Scrap Charge Only, or Baghouse (1988/2000)	
Reverberatory, Non-Sweating Operations		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Same as Above (10-20-2000)	
Reverberatory, Sweating Operations		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Natural Gas with Baghouse and: Afterburner (≥ 0.3 sec. Retention Time at ≥ 1400° F); or Secondary Combustion (≥ 0.3 sec. Retention Time at ≥ 1400° F); (1990)	
Rotary, Sweating Operations		60 ppm Compliance with Rule 1147 (2-1-2019)	Natural Gas (1990)		Same as Above (1990)	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

ATTACHMENT G

I.C. Engine – Stationary, Non-Emergency, Electrical with SCR, Natural Gas

ICE-SCR Ammonia slip 20 ppm to 10 ppm Cost Effectiveness Analysis

Control Technology		SCR with additional catalyst layer		
Operation Schedule:	24 hr/day	365 days/yr		
SCR Life	10 years			
Interest rate:	4 %			
Capital Cost				
Equipment (SCR with additonal catalyst layer)		$	30,000	
Direct & Indirect Installation				
Total Capital		$	30,000	
Operating Cost			0.0	
Direct & Indirect		$	-	Per SCR manufacturer, negligible additonal O&M costs.
Total Average Annual		$	-	
PVF			8.11	
Present Value of Capital Costs		$	30,000	
Present Value of Annual Costs (10 years @ 4%)		$	-	
Total 10-Year Capital Cost		$	30,000	
NH_3 (PM contribution) Emissions reduction (lbs/day)			13.0	
NH_3 (PM contribution) Emissions reduction (tons/year)			2.4	
NH_3 (PM contribution) Emissions reduction (tons/10-year life)			23.7	
Cost per ton of PM reduced			**1267.6**	
MSBACT maximum cost effectiveness PM10 ($/ton)		**$**	**20,687**	**INCREMENTAL 4th Qtr 2019**
		COST EFFECTIVE		
		$	***6,947***	**AVERAGE 4th Qtr 2019**

Notes:

- NH_3 will form $(NH_4)_2SO_4$ in the presence of SO_3 and H_2SO_3. Therefore, based on chemical reaction 1 ton of NH_3 can be equivalent to 1/2 ton of directly emitted $PM_{2.5}$ as $(NH_4)_2SO_4$.
- For the SCR exhaust stream consider PM_{10} and $PM_{2.5}$ as the same.
- Maximum allowed cost effectiveness was based on PM_{10} Average/Incremental value in Table 5, Part C of the BACT Guidelines
- Cost for additional catalyst layer to achieve 10 ppm NH3 slip was provided by catalyst manufacturer with no change on the mintenance costs.

I.C. Engine – Stationary, Non-Emergency, Electrical with SCR, Natural Gas

BASIS

NH_3 will form $(NH_4)_2SO_4$ in the presence of SO_3 and H_2SO_3. Therefore, based on chemical reaction 1 ton of NH_3 can be equivalent to 1/2 ton of directly emitted $PM_{2.5}$ as $(NH_4)_2SO_4$.

For most combustion sources, consider PM_{10} and $PM_{2.5}$ as the same.

SCR with urea solution as reductant source installed on 1,573 BHP natural gas engine driving an electrical generator.

Data and Parameters			**Notes**
Baseline NH3 Emission Limit	**20**	**ppmv @ 15% O_2**	Past historical permitted limit on SCR
Proposed BACT NH3 Emission Limit	**10**	**ppmv @ 15% O_2**	Current achieved in practice and proposed limit
Reference O_2 Level	15	%	Standard
O_2 Standard Concentration	20.9	%	Standard
Source Test exhaust volume flow rate	2,835	dscfm @ 9.99% O_2	12/18/19 Source Test
Engine Hp	1573	Hp	From Permit
Operating Hours	8,760	Hrs/yr	From Permit
Operating Hours	24	hours/day	From Permit
F-Factor (Fd)	8710	dscf/MMBtu	40 CFR 60 App A, Method 19
HHV Natural Gas	1050	Btu/scf	Standard
Molar Volume	385	scf/lb-mol	Standard
Molecular Weight (MW) NH_3	17.031	lbs/lb-mol	Standard
Molecular Weight (MW) $(NH_4)_2SO_4$	132.14	lbs/lb-mol	Standard
Conversion	2000	lbs/ton	Standard
SCFM	5,242.35	dscfm corrected to 15% O_2	corrected to 15% O_2 from source test

$$2NH_3 + SO_3 + H_2O \rightarrow (NH_4)_2SO_4$$

$$H_2SO_3 + 2NH_3 \rightarrow (NH_4)_2SO_4$$

$$\text{Emissions lbs/hr } (NH_4)_2SO_4 = \frac{\text{ppm } NH_3 \times MW_{((NH_4)_2SO_4)} \times \text{Stack Gas dscfm} \times 60}{385 \text{ scf/lb-mole} \times 10^6 \times 2}$$

Pollutant	SCR Ammonia Limit (ppm)	lbs/hr	lbs/day	tons/year
Particulate Matter as $(NH_4)_2SO_4$	20	1.08	25.91	4.73
Particulate Matter as $(NH_4)_2SO_4$	10	0.54	12.95	2.36
PM reduction			12.95	2.36

Notes:

City of Palm Springs, Source Test R20059, 12/18/19, 1573 BHP, SCR and OxiCat, 2835 dscfm @ 9.99% O_2

ATTACHMENT H

Comments and Responses to Proposed Amendments to BACT Guidelines

Public meetings were held on June 24, 2021, November 3, 2021, and February 23, 2022 with the BACT Scientific Review Committee to present and discuss the proposed amendments to the BACT Guidelines. The following written comments, questions, and staff responses are from letters received after the first meeting as well as during the 30-day comment period starting February 23, 2022.

A. Comment Letter A – Mr. Steve Jepsen, Southern California Alliance of Publicly Owned Treatment Works (SCAP)
B. Comment Letter B – Mr. Karl Lany, Montrose Environmental Solutions / BACT SRC member
C. Comment Letter C – Mr. Timothy A. French, Truck & Engine Manufacturers Association (EMA)
D. Comment Letter D – Dr. Wayne Miller, CE-CERT / BACT SRC member

Comment Letter A (SCAP)

March 24, 2022

Sent via email to: Al Baez abaez@aqmd.gov
BACT Program Supervisor
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: LAER/BACT Determination Proposed New Listing 11 I.C. Engine-Compression Ignition ≥1,000 BHP, Stationary Emergency

Dear Mr. Baez:

The Southern California Alliance of Publicly Owned Treatment Works (SCAP) appreciates the opportunity to comment on the proposed LAER/BACT determination for compression ignition stationary emergency generators over 1,000 BHP.

SCAP represents over 80 public water/wastewater agencies in Southern California. SCAP members provide essential water supply and wastewater treatment for approximately 20 million people in Los Angeles, Orange, San Diego, Santa Barbara, Riverside, San Bernardino, and Ventura counties. SCAP's wastewater members provide environmentally sound, cost-effective management of more than two billion gallons of wastewater each day and, in the process, convert wastewater into resources for beneficial uses such as recycled water and renewable energy.

Comment A1

SCAP members rely on compression ignition emergency generators to maintain essential public wastewater conveyance and treatment during power outages. These generators must start and provide power within seconds of a power outage. Our responsibility to the public and water quality related permits have zero allowance for power outages. We must always protect public health and the environment from sewer overflows and comply with water quality permit conditions regardless of the status of grid power.

As discussed during the February 23, 2022 BACT SRC meeting, our members are troubled that EPA certified final Tier 4 generators include an inducement feature to derate and shutdown, if any one of a variety of sensors detects an anomaly with operating parameters. Once a generator is shutdown, it cannot be restarted until a factory service representative physically resets the inducement feature. This process could take hours or days depending on the service representative's availability. This is an untenable scenario for wastewater conveyance and treatment essential for protecting public health and the environment.

Comment A2

We understand that SCAQMD would allow compliant final Tier 4 generators to be used if source testing requirements are included in the stationary source permit. While we appreciate this option,

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SCAP
SOUTHERN CALIFORNIA ALLIANCE OF PUBLICLY OWNED TREATMENT WORKS

REUSE
BRINGING WATER FULL CIRCLE
WASTE
TREATMENT

the required source testing would likely exceed maintenance and testing limitations as contained in SCAQMD Rule 1470. We believe such source testing requirements would be duplicative of testing performed by manufacturers for the same certified generators and would needlessly increase emissions. The proposed LAER/BACT determination should provide for a viable compliance pathway moving forward without being required to install emergency generators with inducement features that will severely undermine our ability to provide a reliable essential public service.

While we understand that LAER/BACT determinations are not required to address permitting nuances, we believe this is a unique situation that must be resolved prior to the adoption of this LAER/BACT determination. We respectfully request that compliant source testing options be identified, such that compliant final Tier 4 generators can be used by essential public services, before the proposed LAER/BACT determination is adopted by SCAQMD.

If there are any questions regarding these comments, please contact me directly at (760) 415-4332 or sjepsen@scap1.org

Sincerely,

Steve Jepsen

Executive Director - SCAP

cc: Jason Aspell (SCAQMD)
Bhaskar Chandan (SCAQMD)
SCAP Air Quality Committee

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South Coast
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June 14, 2022

Mr. Steve Jepsen
Executive Director
Southern California Alliance of
Publicly Owned Treatment Works (SCAP)
605 Third Street
Encinitas, CA 92024

Re: Proposed New/Updates to Part B, Major Polluting Facilities – Section II of the BACT Guidelines for I.C. Engine-Compression Ignition ≥ 1,000 BHP, Stationary Emergency

Dear Mr. Jepsen:

Thank you for your letter dated March 24, 2022, regarding the Proposed New/Updates to Part B, Major Polluting Facilities for Emergency Diesel IC Engines ≥ 1000 HP. We appreciate your participation at the February 23, 2022 Scientific Review Committee (SRC) meeting.

South Coast AQMD has reviewed your comment letter and providing responses below to address your concerns on the proposal to establish a Lowest Achievable Emission Rate (LAER) determination of Tier 4 Final standards for IC Engine-Compression Ignition≥ 1000 BHP: Stationary Emergency, Non-Agricultural, non-direct drive fire Pump.

Comment #1: Concern about reliability of Tier 4 Final certified generators to maintain essential public wastewater conveyance and treatment during power outages: Inducement feature on certified Tier 4 Final engines can result in generators de-rating/shutdown in response to an anomaly with operating parameters. If the engine shutdown occurs due to inducement, a factory service representative has to visit the site to physically reset the inducement feature which can take hours or days and is a major concern for SCAP members.

Response A1

Response #1: We understand your concerns regarding providing reliable essential public service. It is for this reason that we had spent considerable time at the February 23, 2022 SRC meeting to discuss this issue in extensive details, and had also provided comments from an engine vendor to address concerns regarding the inducement feature on certified engines. The inducement feature imposes limitations on engine operation when it runs out of DEF, has poor quality DEF, or when tampering occurs to the SCR system. The inducement feature generally allows a predetermined

time period (typically 4 hours) for the operator to fix problems with the SCR system before derating, and ultimately shutting down the engine if the problems with SCR system are not fixed. Therefore, the operator will receive advance warning to avoid engine derating or shutdown.

As you have noted in your comment letter, and as was discussed at the SRC meeting, the South Coast AQMD will allow the use of compliant Tier 4 Final engines as acceptable pathways to comply with proposed BACT/LAER Tier 4 Final emission standards. The compliant Tier 4 Final engines do not have the inducement feature that is inherent on the certified Tier 4 Final engines, thus allowing the facility to operate these engines without shutting down due to anomaly with SCR system. Using compliant Tier 4 Final engines would provide assurance to your members that reliable essential public service can be maintained.

Comment #2: Likelihood of exceeding the maximum allowed hours of maintenance and testing: Conducting 5-mode test cycle (also referred to as the ISO D2 test) on a Tier 4 Final compliant engine would likely exceed the permitted maintenance and testing hours and Rule 1470 limitations. It would be duplicative of testing performed by manufacturers and also results in emissions increase.

Response A2

Response #2: Although we agree with your comment regarding the testing requirements, please note that unlike the rigorous ISO D2 testing requirement for the certified Tier 4 final engines, the compliant engines are not required to be tested for compliance with the emissions standards either by the manufacturer or the end user. Thus, testing the compliant Tier 4 Final engine is needed to assure compliance with the emissions limits, and periodic long-term testing is needed to assure proper operation of the engines and control equipment, as well as ensuring continued compliance with the emissions limits. Staff understands that the ISO D2 testing requirement would be burdensome on the facilities and could result in an increase in emissions due to the operation of the engine solely for testing purposes. We are open to working with the facilities to minimizing the impact of the testing requirements for compliant Tier 4 Final engines. Staff is drafting an engine testing guidance policy memorandum to address industry's concern, while at the same time assuring compliance with the emissions standards. We are in the process of meeting with the engine manufacturers, source testing companies, and affected facilities to draft the guidance memorandum.

However, it is important to note that the proposed LAER listing for Tier 4 Final standards for I.C. Engine-Compression Ignition $\geq$ 1000 BHP does not contain testing requirements. The topic of source test requirements has been discussed in past SRC meetings to not be an integral part of the BACT/LAER determinations, however the testing is an important item to discuss as it provides the basis of compliance with the BACT/LAER standard. Additionally, it is important to utilize similar testing procedures as the LAER standard to ensure consistency of the compliance demonstration. The testing requirements for the compliant Tier 4 Final engines would be determined during the permitting based on the source testing guidance memorandum described above. Therefore, we plan on proceeding with this and other LAER/BACT listing proposed at the February 23, 2022 SRC meeting. As the next step in this process, we will present the proposed BACT/LAER listings to the Stationary Source Committee on June 17, 2022. During this meeting, staff plans to present their progress with developing the source testing guidance memorandum.

Staff appreciates SCAP's time and consideration in submitting comments to our proposed LAER determination for Tier 4 Final emergency ICEs ≥1000 BHP. Should you have further questions or comments please contact Bahareh Farahani at 909-396-2353 or me at 909-396-3902 or bchandan@aqmd.gov.

Sincerely,

Bhaskar Chandan, P.E., QEP
Senior Air Quality Engineering Manager
Refinery Permitting and BACT Team

Cc: Jason Aspell, Deputy Executive Officer, Engineering & Permitting (jaspell@aqmd.gov)
Jillian Wong, Assistant Deputy Executive Officer, Engineering & Permitting (jwong1@aqmd.gov)
Bill Welch, Source Testing Manager, Science & Technology Advancement (bwelch@aqmd.gov)

Comment Letter B (Montrose Environmental Solutions)

MONTROSE ENVIRONMENTAL

March 24, 2022

Mr. Bhaskar Chandan
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 92865

Via e-mail: bchandan@aqmd.gov

Subject: Proposed LAER Determination for Emergency Engines Rated Above 1,000 bhp

Dear Mr. Chandan:

Montrose Environmental Solutions (Montrose) appreciates the opportunity to present comments regarding SCAQMD's proposed Lowest Achievable Emission Rate (LAER) determination for large emergency engines. Montrose provides permitting and compliance management services to clients in a variety of industries, including clients with operations regulated by the SCAQMD. I am submitting these comments as a member of the SCAQMD BACT Scientific Review Committee.

My comments are directed toward the relative effectiveness of selective catalytic reduction technology (SCR) in emergency engine applications as well as implications for compliance demonstrations, should SCAQMD enforce its proposed LAER determination through emission testing programs.

Comment B1

Effectiveness of SCR Technology in Emergency Engine Applications

Like several engine manufacturers, Montrose continues to question the effectiveness of SCR in emergency engine applications. LAER guidelines should reflect the effectiveness of technology in normal engine operations. While SCR is undoubtedly effective high-utilization applications, it is generally dependent upon two conditions that are not often met in emergency engine applications. First, catalyst temperature must meet minimum thresholds that are not often achieved within the first 20-30 minutes of engine operation or during extended low-load operations. Second, relative environmental benefits are achieved only when annual engine utilization is significant. Neither of these conditions are typically met in emergency engine applications that we see in Southern California.

Montrose recently evaluated records for approximately 200 emergency engines in commercial operations for the year 2020. The data shows that even in the PSPS environment that exists today, on average emergency engines continue to be tested for less than 15 hours per year. In most commercial operations, National Fire Protection Association (NFPA) guidelines can be met by conducting tests for less than 30 minutes and at low loads. Many operators test their engines at levels at or below NFPA guidelines and under conditions that do not allow SCR to be effective. As such, SCR effectiveness is only achieved when the engine is operated to serve building load during an extended emergency or during times when load is artificially induced. Based upon the analysis of commercial applications, however, approximately 24% of engines have no emergency operations at all in a given year. This finding appears consistent with statements made by other stakeholders. Furthermore, approximately 38% of engines operate less than 10 hours in a given year for emergencies. Only 10% of engines

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operate for a combined total of 50 or more hours per year (testing plus emergency operations), even during years when PSPS events occurred. Montrose conducted a similar analysis of engines operated in the SCAQMD in 2016 and the results of that earlier analysis are consistent with the analysis that was conducted for 2020 operations.

Admittedly, an overview of commercial facilities may not fully represent those facilities that are most likely to operate larger engines such as hospitals, data centers and government facilities that may also be inclined to carry out more robust testing operations. In the SCAQMD, however, those larger facilities appear less likely to be subject to grid power interruptions than many of small operations that may be located in more remote areas.

During the most recent SCR meeting, SCAQMD appeared to agree that the primary benefit of SCR would indeed be achieved during power failures, rather than testing and maintenance operations. One SRC member suggested that because of the many ways in which SCAQMD BACT/LAER guidelines are used, SCAQMD should clearly state its expectation that the benefits of SCR would generally be limited to loaded emergency operations. Montrose agrees with the commentor and recommends that SCAQMD include such qualifying language in its proposed LAER guideline.

Comment B2

Testing for LAER Compliance

SCAQMD is considering circumstances that would result in the need for facility operators to demonstrate LAER compliance upon commissioning and periodically thereafter. SCAQMD is also considering the ways in which such tests would be conducted. Specifically, SCAQMD is weighing the benefits of testing under the five-load D2 duty cycle (i.e., ISO 8178) that engine manufacturers use to certify engines to Tier 4 emission standards, relative to the simplicity of testing at a single load.

SCAQMD's proposed LAER determination would apply Tier 4 engine standards to all criteria pollutants, rather than only those pollutants that trigger major source status. As such a project that triggers LAER for NOx, would also trigger LAER for particulate matter (PM). To meet LAER for PM, the engine would typically be equipped with a PM filter. SCAQMD has required the use of PM filters for several years in certain applications including major source facilities, but has also recognized the passive nature and reliable performance of diesel particulate filter technology and has not required emission tests to demonstrate filter effectiveness.

Testing for low-concentration PM emissions presents challenges and costs that do not exist for NOx or other gaseous pollutants. Based upon traditional in-field test methods (EPA5) conducting triplicate tests at a single operating load can take a full day. Conducting a five-load test can therefore take up to five days to complete. One must remember that many of the engines subject to the proposed LAER guideline consume over 170 gallons of fuel per hour at full load. Because of the high level of fuel consumption, a five-load test using traditional methods is neither cost effective, nor environmentally sound. The environmental impact of a single test program can easily exceed the impact of normal annual operations.

A five-load test to demonstrate LAER compliance may also be unwarranted from a technical perspective. A five-load test may demonstrate equivalency to, or compliance with, Tier 4 emission standards, but that absolute demonstration is not the point. If SCAQMD recognizes that SRC effectiveness is not expected to be met at low operating loads (testing and maintenance operations), then the value of a five-load emission test is lost. Several engine manufacturers have also advised California regulators that for the purpose of demonstrating LAER compliance for emergency engines, a single-load test is suitable.

To ensure that test programs are both cost effective and environmentally sound, Montrose recommends that SCAQMD consider the following alternatives as it develops its LAER guideline:

- Continue to recognize the demonstrated reliability of PM filter technology and continue to waive in-field PM testing requirements.
- For any pollutants that would otherwise be tested, allow a single-load test. This approach would be similar to BAAQMD's test program for emergency engines.
- Should SCAQMD determine that the need for a five-load PM test exists, allow for the use of a dilution system similar to what is used in the engine certification program. Doing so will reduce the test duration, save fuel and minimize the environmental impacts of testing.

In addition to minimizing the duration of test programs, SCAQMD can take other steps to reduce operator costs and environmental impacts. Montrose suggests that SCAQMD consider the following strategies that are also being considered or implemented by other agencies. These strategies rely upon compliance assurance programs that are already in place as well as the limited engine/SCR configurations in the market.

- Waive commissioning and periodic testing of EPA-certified Tier 4 engines and CARB-verified aftermarket solutions.
- Allow surrogate demonstrations for identical engine/SCR configurations.
- If periodic testing is required, allow five-year test intervals and allow for rotations of identical engine/SCR configurations.

I welcome the opportunity to discuss the concerns presented in this letter with SCAQMD and am happy to once again bring Montrose emission testing professionals into the conversation. You can contact me at (714) 376-6531 or by email klany@montrose-env.com.

Sincerely,
Montrose Environmental Solutions

Karl Lany
Principal, Western District Manager
Environmental Permitting and Compliance Services

cc: Dipankar Sarkar
Bahareh Farahani

Response to Comment Letter B

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

June 7, 2022

Mr. Karl Lany
Montrose Environmental Solutions
1631 East Saint Andrew Place
Santa Ana, California 92705

Re: Proposed New/Updates to Part B, Major Polluting Facilities – Section II of the BACT Guidelines for I.C. Engine-Compression Ignition ≥ 1000 BHP, Stationary Emergency

Dear Mr. Lany:

Thank you for your letter dated March 24, 2022, regarding the Proposed New/Updates to Part B, Major Polluting Facilities for Emergency Diesel I.C. Engines ≥ 1000 HP. We appreciate your participation at the February 23, 2022 Scientific Review Committee (SRC) meeting.

Staff has reviewed your comment letter and providing responses below to address your concerns on the proposal to establish a Lowest Achievable Emission Rate (LAER) determination of Tier 4 Final standards for I.C. Engine-Compression Ignition≥ 1000 BHP: Stationary Emergency, Non-Agricultural, non-direct drive fire Pump.

Comment #1: Concern about effectiveness of SCR technology in emergency engine applications: Catalyst operating temperature are not often achieved within the first 20-30 minutes of engine operation or during extended low-load operations. Clarify in the BACT/LAER guidelines that the benefit of SCR would be limited to loaded emergency operations.

Response B1

Response #1: One of the Tier 4 engine suppliers has informed us that their engines can be equipped with an integrated load bank technology. The integrated load bank, which is activated at generator startup, can bring the engine to SCR operating temperature in under 10 mins, thereby significantly reducing the typical time of 20-30 minutes for engaging the SCR. The integrated load bank can also be activated manually in order to use for exercising the generator per National Fire Protection Association (NFPA) guidelines. The integrated load bank is not included as a requirement of the proposed LAER listing but can be used as a strategy for fuel savings and potential further emission reductions. Additionally, during start up the NOx

emissions are comparable to the current Tier 2 engine LAER listing and any operation past the startup period of the Tier 4 engine SCR will result in substantially lower NOx emissions.

It is important to note that although the SCR may take up to 10 minutes to reach the operating temperature, the DPF would still be fully operational during the entire startup period resulting in reducing the PM emissions by as much as 87%. We understand that during low-load operation the SCR would not be as effective as during medium and high-load operations. But based on a survey conducted by BAAQMD, more than 80% of these engines operate at loads > 10% when the SCR is effective.

There are over 260 permitted diesel emergency I.C. engines rated 1000 BHP or greater located at about 60 facilities in South Coast. Our survey of 57 engines located at 5 facilities including essential public services and facilities with high number of engines, shows that emergency use of these engines increased in 2021 as compared to 2020. Emergencies, like PSPS (Public Safety Power Shutoffs) events, can last anywhere from hours to a few days. Therefore, emergency use of these engines may be expected to increase in the coming years due to PSPS events. Additionally, South Coast AQMD has recently amended Rule 1470 to allow for testing and maintenance considerations for conditions leading to PSPS events indicating their increasing impact on the region and the potential for increased NOx emissions from PSPS events.

If all diesel emergency engines rated 1000 BHP or greater permitted in the South Coast AQMD were Tier 4 Final engines, it would result in a reduction of 38.8 tons/year of NOx and 1.6 tons/year of PM emissions. A Tier 4 Final engine emits 87% less NOx and 89% less PM as compared to a Tier 2 engine. Thus, the overall emissions reductions that can be attained by this proposed LAER are not trivial. For clarity, the proposed LAER listing will only apply to new engines in the same class and category that will be installed at major sources, or any similar engines that will be modified with an increase in emissions.

Comment #2: Recognize the demonstrated reliability of PM filter technology and waive in-field PM testing requirements. Allow a single-load test for any pollutants that would otherwise be tested. Allow for the use of a dilution system to reduce the test duration, save fuel and minimize the environmental impacts.

Response B2

Response #2: Staff understands that the ISO D2 testing requirement would be burdensome on the facilities and could result in an increase in emissions due to the operation of the engine solely for testing purposes. In addition, fuel usage from testing requirements also needs to be considered. We are open to working with the facilities to minimizing the impact of the testing requirements for compliant Tier 4 Final engines. Staff is drafting an engine testing guidance policy memorandum to address industry's concern, while at the same time assuring compliance with the emissions standards. We are in the process of meeting with the engine manufacturers, source testing companies, and affected facilities to draft the guidance memorandum.

However, it is important to note that the proposed LAER listing for Tier 4 Final standards for I.C. Engine-Compression Ignition ≥ 1000 BHP does not contain testing requirements. The topic of source test requirements has been discussed in past SRC meetings to not be an integral part of the BACT/LAER determinations, however the testing is an important item to discuss as it provides the basis of compliance with the BACT/LAER standard. Additionally, it is important to utilize similar testing procedures as the LAER standard to ensure consistency of the compliance demonstration. The testing requirements for the compliant Tier 4 Final engines would be determined during the permitting based on the source testing guidance memorandum described above. Therefore, we plan on proceeding with this and other LAER/BACT listing proposed at the February 23, 2022 SRC meeting. As the next step in this process, we will present the proposed BACT/LAER listings to the Stationary Source Committee on June 17, 2022. During this meeting, staff plans to present their progress with developing the source testing guidance memorandum.

Staff appreciates your significant time and consideration in submitting comments to our proposed LAER determination for Tier 4 Final emergency I.C. Engines ≥1000 BHP. The SRC's efforts are vital to ensure BACT/LAER listings receive a robust analysis. Should you have further questions or comments please contact Bahareh Farahani at 909-396-2353 or me at 909-396-3902 or bchandan@aqmd.gov.

Sincerely,

Bhaskar Chandan, P.E., QEP
Senior Air Quality Engineering Manager
Refinery Permitting and BACT Team

Cc: Jason Aspell, Deputy Executive Officer, Engineering & Permitting (jaspell@aqmd.gov)
Jillian Wong, Assistant Deputy Executive Officer, Engineering & Permitting (jwong1@aqmd.gov)
Bill Welch, Source Testing Manager, Science & Technology Advancement (bwelch@aqmd.gov)

Comment Letter C (EMA)

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June 18, 2021

VIA E-MAIL (abaez@aqmd.gov)

Al Baez
BACT Program Supervisor
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

Re: Proposed New/Updates to Part B, Major Polluting Facilities for Emergency Diesel IC Engines > 1,000 HP

Dear Mr. Baez:

I am writing on behalf of the Truck and Engine Manufacturers Association ("EMA") regarding the South Coast Air Quality Management District's (SCAQMD) Scientific Review Committee (SRC) meeting agenda item, on June 24, 2021, for "I.C. Engines - Stationary, Emergency, > 1,000 BHP."

By way of background, EMA is the trade association that represents the world's leading manufacturers of internal combustion engines used in all applications other than passenger cars and aircraft. Included among the wide array of engine products manufactured by EMA members are all power ranges of stationary engines, including Emergency Diesel Engines. EMA regularly represents its members in developing and commenting on federal, state and local regulations relating to engine-emissions standards, and, as a result, EMA has a direct and significant interest in this matter.

An Emergency Diesel Engine frequently is just a small component of a larger construction project and, consequently, the end-users of Emergency Diesel Engines may not be aware of the full ramifications of a proposed revised BACT determination until after the fact when a construction project is underway. Engine manufacturers are better-suited and positioned to appreciate how revised BACT requirements can impact the broad range of applications for Emergency Diesel Engines, the primary purpose of which is to support and maintain life and safety when emergencies arise. EMA members manufacture and sell both Tier 4 and emergency-use only engines. Accordingly, EMA's goal in submitting these comments is not at all to repudiate Tier 4 standards, but rather solely to try to ensure that end-users retain the ability to specify and select the appropriate emergency engines equipped with the appropriate emissions controls.

While we have yet to learn what the SCAQMD's intent is for this agenda item, we are concerned that its basis may be the Bay Area AQMD's (BAAQMD) recent adoption of a Tier 4 Final emissions requirement for Emergency Diesel Engines 1,000 HP and greater. The stated

Comment C1

premise for the BAAQMD's revised BACT is that Tier 4 technologies have been deployed for Emergency Diesel Engines at various sites in the U.S., and thus, Tier 4 standards have been "achieved in practice." But that is not actually the case. The fact that SCR and DPF systems have been installed on certain specific Emergency Diesel Engines in the field does not mean that those engines actually and consistently **achieve** Tier 4 emission limits while in operation. To the contrary, the limited operating times, loads and exhaust temperatures that are inherent to how Emergency Diesel Engines typically operate – e.g., during very brief start-up and maintenance tests – necessarily means that the exhaust streams from those engines likely will not reach the high NO_x-conversion rates and light-off temperatures required to actually achieve emissions performance reflective of actual Tier 4 emission limits. Consequently, it has **not** been established that Tier 4 standards – as opposed to the installation of Tier 4 aftertreatment systems – have been "achieved in practice."

Comment C2

SCAQMD BACT Guidelines establish the relevant criteria for determining BACT, and include three alternatives: (a) BACT reflects the most effective emission reduction devices and "which has been achieved in practice for such category or class of source;" (b) BACT "is contained in any state implementation plan (SIP)…," but "shall not apply if…such limitation or control technique is not presently achievable;" or (c) BACT constitutes an alternative emission-control device or technique that is determined "to be technologically feasible" and "cost-effective." In this case, the first of the alternative definitions of BACT was not met by the BAAQMD because, as noted, the BAAQMD has not established that Emergency Diesel Engines consistently **meet** the Tier 4 standards during their expected patterns of operation. Accordingly, the SCAQMD should not be relying on the first BACT alternative in its Guidelines. The third alternative definition of BACT is equally problematic, since there is no basis for assuming that a BACT requirement for Tier 4 aftertreatment-equipped Emergency Diesel Engines — engines which operate, on average, less than 40 hours per year — could ever meet the BACT cost-effectiveness thresholds. As for the second alternative, mandates for Tier 4 technologies for emergency backup engines are not contained in the current SIPs.

Moreover, the BACT determinations made by the BAAQMD are not appropriate benchmarks, since, again, the operating loads and temperatures at the referenced installations generally are not sufficient to achieve the targeted NO_x conversion rates and catalyst regenerations required to reduce emissions to Tier 4 levels during the typical duty cycle of Diesel Emergency Engines. The net result is that even if the emergency engines at those referenced locations were equipped with SCR and DPF systems, those engines likely did not actually achieve Tier 4 emission levels "in practice." Indeed, we are not aware of any consistent site testing of emergency engines that establishes that the Tier 4 emission limits are met during all maintenance testing and other short-term operation of emergency engines which, as noted, represents the majority use of these engines.

In addition, the BAAQMD's reliance on the D2 (5-Step) mode testing with a 15-minute warm-up period, which was used as one installation's source test to establish "achieved in practice," is not representative of a Diesel Emergency Engine's typical operation because it ignores the engine's NO_x levels during the typical lightly-loaded 15 to 30 minute exercise/maintenance periods for emergency engines. Thus, the D2 testing did not (and cannot) demonstrate "achieved in practice" for Diesel Emergency Engines.

This is a significant issue, since EPA Region IX has stated that "the successful operation of a new control technology [i.e., in a manner that successfully meets the targeted BACT emission standards] **for six months** constitutes achieved in practice." (See CAPCOA BACT Clearinghouse Manual, Section B.) (Emphasis added.) No such "achieved in practice" determination can be made for Emergency Diesel Engines.

Significant as well, the principal cited example from the BAQMD is not a typical Emergency Diesel Engine installation, but rather represents a unique siting problem that triggered "fenceline" air toxics concerns – not criteria pollutant issues – and that was resolved, presumably in agreement with the impacted community, through the installation of Tier 4 aftertreatment systems. Accordingly, that installation does not establish that it is appropriate to require that **all** Emergency Diesel Engines utilize Tier 4 aftertreatment technologies, without regard to cost-effectiveness or whether the applicable Tier 4 emission limits are actually achieved in practice by emergency engines that operate for such limited amounts of time.

Comment C3

In recognition of the foregoing issues, EPA's New Source Performance Standards (NSPS) expressly provide that the Agency's Tier 2 standards apply to emergency IC engines above 750 hp, and that the Tier 3 standards apply to emergency IC engines rated at 75-750 hp. Similarly, CARB's stationary engine ATCM, as well as various other District stationary engine rules, specifically exempt Emergency Diesel Engines from having to meet EPA's Tier 4 standards, provided that the emergency engines are used exclusively to preserve or protect property, human life, or public health during an emergency power outage, and further provided that the emergency engines are limited to operate no more than 50 hours per year in non-emergency situations, such as during required periodic engine testing. Thus, the SCAQMD's BACT determination should continue to conform with the relevant NSPS, and State and local regulations pertaining to Emergency Diesel Engines.

We understand that the SRC agenda item is focused on emissions at major sources, and we are aware that the Lowest Achievable Emissions Rate (LAER) for Emergency Diesel Engines at major sources requires a diesel particulate filter (DPF) to control PM. That requirement can be met by installing a CARB-verified after-market DPF. However, no LAER NO_x level lower than EPA's NSPS, or CARB's stationary engine ATCM has been established for Emergency Diesel Engines because no technology has been, or can be, demonstrated as achieved in practice for the normal operation of emergency engines.

There are multiple other compelling reasons for not requiring that major source Emergency Diesel Engines meet EPA's final Tier 4 emission standard for NO_x. As noted, those standards require the use of expensive diesel particulate filters (DPF) to control PM, and selective catalytic reduction (SCR) systems to reduce NO_x emissions. That is a significant concern in the context of certified emergency engines, however, since there is the potential that the SCR systems can cause those engines to derate or even shutdown in the event of a system malfunction or a lack of DEF fluid, which could raise a number of concerns, particularly during an actual emergency. Additionally, the inherently limited use of emergency engines, which usually only operate for just minutes at a time during routine readiness testing, means (again) that those engines typically will not achieve the exhaust and catalyst temperatures required for the effective operation of SCR systems. In that regard, a significant load on an SCR-equipped engine is necessary to get the NO_x catalyst up to a high enough temperature to begin controlling NO_x in an effective and efficient

manner. But emergency engines generally are only run during periodic maintenance tests, and even then only for 15 – 30 minutes at very light loads, which means that the SCR temperatures will be too low for effective NO_x control. A white paper prepared by Caterpillar explains these technical points in additional detail, and is attached hereto.

Comment C4 ➡

Since Emergency Diesel Engines do not and cannot actually and consistently achieve Tier 4 emission limits in practice, the third alternative definition of BACT comes into play, which raises the question of whether Tier 4 aftertreatment systems are technologically feasible and cost-effective for Emergency Diesel Engines. They are not. There is a very significant cost-premium for Tier 4 engine configurations, which can cost anywhere from 35% - 60% more compared to the non-Tier-4 emergency engines required under EPA's NSPS and CARB's stationary engine ATCM. That purchase-price cost-premium does not include the extra costs for increased engine-room size, added maintenance, DEF tank systems and fluid, plumbing, electrical alarms, and other aftertreatment-related expenses, all of which can add 25% - 40% more to the cost of the engine system. The total costs of the engine and installation premiums need to be included in any BACT cost-effectiveness analysis. Consequently, given emergency engines' inherently limited potential to emit (i.e., typically only during maintenance and start-up readiness tests), the significant cost differential for a Tier-4-compliant system precludes a determination that the Tier 4 standards should be BACT for all Emergency Diesel Engines.

For all the foregoing reasons, EMA respectfully requests that the District continue to clarify that Emergency Diesel Engines rated at or above 1,000 hp should meet EPA's Tier 2 standards, not EPA's Tier 4 standards. Only verified after-market DPFs should be required, as is currently the case, to satisfy LAER for PM at major sources.

Very truly yours,

Timothy A. French

cc: Matt Miyasato, Deputy Executive Officer, Science & Technology Advancement (mmiyasato@aqmd.gov)
Aaron Katzenstein, Asst. Deputy Executive Officer, Science & Technology Advancement (akatzenstein@aqmd.gov)
Joseph Impullitti, Technology Demonstration Manager (jimpullitti@aqmd.gov)
EMA Stationary Engine Committee

Attachment B

Caterpillar Justification Submitted for Consideration of Tier 4 Engine Use as Emergency Standby Applications

BACT Template Version 071315

Caterpillar Inc.

Emissions, Regulations & Conformance
PO Box 600, MOS 11
Mossville, IL 61552

Subject: Stationary Emergency Use Only Engine BACT Standards Should Align with US EPA Standards for Compression Ignition and Spark Ignition Engines

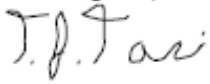
To Whom It May Concern:

Please find attached a white paper outlining recommendations for effective regulation of emissions from stationary engines in emergency power applications. This paper addresses the necessary exemption of Tier 4 Final product in standby emergency applications from Federal, California (CA) and other applicable local regulations. It recommends application of Tier 2 and Tier 3 standards in alignment with US EPA and CARB requirements. The paper is intended to explain why replication of prime power regulations is neither effective nor appropriate for emergency power applications and provide specific guidance for regulating those applications to achieve better air quality outcomes.

There is an immediate need for implementation of these recommendations as local air quality boards seek to achieve real improvements in air quality within their jurisdictions and may not fully understand the real-world implications of their policy decisions.

I am available for questions.

Kind Regards,



T.J. Tarabulski
Emissions Regulatory Affairs
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309 578-6587

Recommendations for Effective Regulation of Emissions for Stationary Engines in Emergency Power Applications

T.J. Tarabulski, Caterpillar Inc.
July 2020

INTRODUCTION

This paper is intended to inform the actions of regulatory bodies so that regulations are aligned with the intended air quality improvement objectives. This paper provides specific recommendations on how to regulate engines used in emergency power applications to achieve better air quality outcomes than what is realized by simple replication of prime power regulations.

Stationary engines used for emergency power should be regulated differently than stationary engines used for prime power. Emergency engines operate very few hours per year and have distinct operating profiles that result in a much different environmental impact than prime power engines.

RECOMMENDATION AND BASIS

1. Best Available Control Technology (BACT) Standards for emergency diesel engines should remain at Tier 2 (emergency) above 560 bkW and at Tier 3 (emergency) at or below 560 bkW as Tier 4 (non-emergency) emissions levels will not be achieved in practice in significant portions of emergency engine operations; this request for ***emergency engine*** applications should not be misinterpreted to imply that Tier 4 engines are not effective in ***non-emergency engine*** applications that operate high hours per year where startup and shutdown are a small fraction of operating time.
2. Emergency gas engine levels should be set at 1.5 g/bhp-hr NOx and 2.0 g/bhp-hr CO for all horsepower ranges; VOC should be set at 1.5 g/bhp-hr for less than 130 hp, and 1.0 g/bhp-hr for greater than or equal to 130 hp. Such levels are achievable with a certified gas engine that is exempt from source test requirements under EPA's NSPS regulations.
3. It is important to note the above approaches would also minimize greenhouse gas (GHG) emissions from emergency applications.
4. Air permitting authorities, as an alternative to cost ineffective solutions, should limit emergency hours of operation (200 hours typical) with force majeure permit provisions for emergency engines in extraordinary grid-power outages to more accurately represent emergency engine impacts on an airshed.

BACKGROUND

U.S. EPA determined[1] that the use of aftertreatment devices such as Selective Catalytic Reduction (SCR) and Diesel Particulate Filters (DPF) were not justified based on cost effectiveness ($/ton reduced) for emergency diesel engines in both the NSPS regulations for new engines (40 CFR Part 60 Subpart IIII) and in the regulation of hazardous air pollutants from new and existing engines (NESHAP, 40 CFR 63 Subpart ZZZZ). These regulations require the engines to meet 2007 emissions standards (Tier 3 for 75 HP to 750 HP, and Tier 2 for engines > 750 HP).

In 2011, California Air Resources Board (CARB) Airborne Toxic Control Measure (ATCM) agreed with EPA's reasoning and aligned with EPA regulations to also allow this stationary emergency engine exemption, excepting CARB adopted a 0.15 g/bhp-hr PM for engines < 175 hp.

More stringent particulate matter (PM) emissions levels are required in California, such as the area under jurisdiction of South Coast Air Quality Management District (SCAQMD), to meet area-specific requirements ("sensitive receptor") or for major sources including Federal Title V facilities. None of these regional requirements mandates the use of Tier 4 certified engines.

SCAQMD limits emergency engines to 200 hours total /year which minimizes the modeled and realistic potential emissions in the airshed as an alternative to adding costly controls to engines that run on average < 50 hrs./year. Limiting testing and maintenance to non-ozone forming hours of the day will also mitigate emissions impact notwithstanding facility constraints that may apply.

Appendix A shows the steady state NOx concentration (ppm) for testing and maintenance conditions and full engine power output operation of a diesel engine. The EPA Tier 4 standard is reported in grams/bkW-hr based on a weighted average of 5 operating points and some of the

[1] US EPA June 2006 - Regulatory Impact Analysis of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (PDF) page 61

operating conditions may be above the absolute value of the Tier 4 standard. The test cycle does not include the no load (note: zero bkW drives g/bkW-hr to infinity) high idle operating condition typical of testing and maintenance. Therefore, emissions are not at Tier 4 g/kW-hr levels for the no load testing and maintenance condition, but operation is the lowest mass flow rate possible for engine operation and the mass flow is small when compared to full load exhaust mass flow rates. At zero engine load operation, the required engine temperature for the SCR system to operate will not be achieved. Engines with lower ratings than the example shown would typically have lower engine operating temperatures, especially at less than full load, and thus the time needed to reach the operating temperature of the SCR will be longer. Emergency engines typically run between 0% and 60% load when tested and less than 60% load during emergencies. In other words, even a Tier 4 engine will not achieve Tier 4 in practice in an emergency application.

Several considerations exist when investigating the use of Tier 4 certified technology in stationary emergency diesel engine applications:

1. Certified Tier 4 engines must have safeguards (inducements) to prevent the operation of the engine with certain emissions related faults. For example, certified Tier 4 engines will derate and eventually shut off without diesel exhaust fluid (DEF). The engine can also shut down with high exhaust backpressure. These unexpected shutdowns subordinate the mission of an emergency engine to provide power during an emergency. The EPA does allow the SCR induced engine shutdown to be overridden during an emergency, but only up to 120 hours of operation after which the engine will shut down without a factory override reset. This 120-hour shutdown could occur during an extended emergency and thus could risk human life, public health and safety or critical services. The DPF cannot be bypassed by the operator so DPF backpressure risk cannot be eliminated.
2. SCR systems require high operating temperatures. Achieving optimum operating temperature profiles typically requires at least 20 to 30 minutes at typical emergency engine loads. Emergency standby engines typically have short operation sessions resulting in exhaust temperatures that are too cool for NOx reduction to occur. This limitation of SCR makes them ineffective during typical testing and maintenance operations. The result is Tier 4 emissions levels are not achieved in practice for these short duration events.
3. NOx reductions using SCR are also dependent upon demand load. A lightly loaded engine that is typically operated for short periods of time would not achieve the full NOx reduction potential of the SCR system (see attached). Most operating hours for emergency standby engines occur when performing maintenance and testing checks at low engine loads. Artificially increasing these testing and maintenance loads to elevate temperatures increases GHG emissions at a minimum.
4. SCR requires the use of DEF, a urea-based solution, for the catalytic reaction. This required fluid requires separate storage from the diesel tank. DEF has a limited shelf life and will also degrade over long periods of time. With low hour usage on emergency engines, unused fluids that degrade over time could require additional system maintenance. Additionally, these urea systems could increase the maintenance test frequency.
5. DPFs on emergency engines will also pose their own issues. DPFs typically require engines to operate at higher loads for longer periods or add heat to properly regenerate (burn carbon). This increases fuel consumption resulting in larger required tanks to satisfy minimum run time. This will also increase GHG emissions (CO_2). Some customers may request a bypass to assure the systems never interfere with normal operation. If misused, such bypasses may further reduce control effectiveness and may be considered a defeat device and or tampering if used as part of an EPA certified system.
6. Additional operating and maintenance time under loaded conditions will be required in order to assure proper functioning of the DPFs or to activate SCR dosing. With the already low limits on emergency engine operation (generally less than 200 hours per year total and often less than 50 hours per year including maintenance and repair) added time for maintenance will further limit the possible run time for actual emergencies.
7. Tier 4 engines with aftertreatment systems require more building space and floor loading considerations for engine, urea tank and control systems. Additional structural supports, plumbing, electrical and exhaust ducts may also be required. Load banks or supplemental exhaust heat may also be needed to ensure proper engine loading to prevent DPF plugging. This will increase fuel consumption and GHG emissions (CO_2).

8. Costs for Tier 4 diesel engine generators, installation of necessary additional design requirements, and increased maintenance requirements will run as much as 60% to over 100% more than the standard emergency Tier 2 above 560 bkW and Tier 3 at or below 560 bkW. These costs, for engines that typically operate far below stringent State or Federal hour limits, will far exceed cost-effectiveness ($/ton) basis for engine emission regulation to Tier 4 levels.

ADDITIONAL CONSIDERATIONS FOR SPARK IGNITION ENGINES

This analysis is also applicable to Spark-ignited engines, consistent with EPA NSPS standards. EPA NSPS is clear on source test requirements for a noncertified engine on initial installation and every 3 years thereafter. Certified engines do not require source testing per NSPS. There is no other state or local air district applicable regulation—it is a federally mandated minimum requirement. Manufacturers are only certifying to the emergency and prime gas engine NSPS standards of 2.0 g/bhp-hr NOx and 1.0 g/bhp-hr NOx respectively. Thus, by setting emergency gas engine BACT at 0.5 g/bhp-hr the air district has automatically imposed an expensive source test ($5K - $10K per engine) on initial installation and every 3 years thereafter on the end user.

EPA regulations place the "performance test" requirement on the end user, not on the manufacturer due to this being a site specific NSPS requirement. In most cases, the very low NOx engine will also require the installation of an oxidation catalyst to reduce the CO and VOC to the BACT levels set by authorities. Such regulations should allow manufacturers to voluntarily **certify** emergency gas engines so that end users are not forced into an expensive, on-going source testing requirement and additional oxidation catalysts for engines that are intended to operate infrequently and for limited hours. Removal of certified OEM engine emissions components/aftertreatment on certified engines to meet a different BACT standard than the US EPA NSPS requirements would be counterproductive for certified products and reintroduce the source test requirement.

CONCLUSION

For all of the foregoing reasons, BACT for emergency diesel engines should be aligned with EPA and CARB regulations which require Tier 2 above 560 bkW and Tier 3 below 560 bkW, as Tier 4 emissions levels will not be achieved in practice, are not cost effective and may compromise safety for stationary emergency diesel applications. Therefore, Tier 4 engine systems would be misapplied for emergency installations, notwithstanding Tier 4 systems are installed in facilities despite the recognition that Tier 4 levels are not achieved in practice in significant portions of **emergency** engine operations.

Emergency gas engine BACT should be maintained in alignment or revised to allow certified gas engines requirements to align with EPA NSPS' exemption to eliminate costly initial and on-going source testing. Emergency gas engine BACT must allow for certified engines to be used without modification.

In short, to achieve optimum air quality outcomes beyond what is realized by simple application of prime power regulations to emergency engines, stationary engines used for emergency power should be regulated differently than stationary engines used for prime power and aligned with existing EPA and CARB emergency engine regulations.

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

November 1, 2021

Mr. Timothy A. French
Truck & Engine Manufacturers Association
333 West Wacker Drive, Suite 810
Chicago, IL 60606

Re: Proposed New/Updates to Part B, Major Polluting Facilities of the BACT Guidelines for Emergency Diesel IC Engines ≥ 1000 BHP

Dear Mr. French:

Thank you for your letter dated June 18, 2021 regarding the Proposed New/Updates to Part B, Major Polluting Facilities for Emergency Diesel IC Engines > 1000 HP. South Coast AQMD staff have reviewed your comment letter and are providing responses to address your concerns on the proposal to establish a Lowest Achievable Emission Rate (LAER) Determination for IC Engine-Compression Ignition≥ 1000 BHP: Stationary Emergency, Non-Agricultural, non-direct drive fire Pump.

Response C1

South Coast AQMD's basis for proposed Tier 4 Final LAER for Emergency ICEs ≥ 1000 BHP

Staff acknowledges Bay Area Air Quality Management District (BAAQMD) and Sacramento Metropolitan Air Quality Management District (SMAQMD) recent adoption of Tier 4 Final BACT for Emergency ICEs ≥1000 BHP. Staff is proposing to adopt a similar Tier 4 Final requirement for LAER that will apply to major sources in the South Coast AQMD which per US EPA guidelines do not allow for routine consideration of the cost of control. In accordance with the criteria in the BACT Guidelines, Part A: Policy and Procedures for Major Polluting Facilities, Chapter1 – How is LAER Determined for Major Polluting Facilities, achieved in practice (AIP) LAER will be the basis for the proposal to establish Tier 4 Final LAER for Internal Combustion Engine-Compression Ignition: Stationary Emergency, non-Agricultural, non-direct drive fire pump. The 104 permitted, conditioned, operational, tested and commercially available emergency engines at the Microsoft MWH Data Center in Quincy, Washington are being evaluated for LAER AIP. In addition to these 104 emergency engines staff has been identifying other ≥1000 BHP emergency engines equipped with Tier 4 Final certified or equivalent technology that have been permitted, installed, operational and tested in the South Coast AQMD and Bay Area AQMD.

Response C2

South Coast AQMD AIP LAER

An emission limit or control technology may be considered AIP LAER for a category or class of source if it exists in any of the following regulatory documents or programs:

- South Coast AQMD BACT Guidelines
- CAPCOA BACT Clearinghouse
- USEPA RACT/BACT/LAER Clearinghouse
- Other districts' and states' BACT Guidelines
- BACT/LAER requirements in New Source Review permits issued by South Coast AQMD or other agencies

In addition to the above means of determining AIP LAER, a control technology or emission limit may also be considered as AIP if it meets all of the following criteria:

- **Commercial Availability**: At least one vendor must offer this equipment for regular or full-scale operation in the United States.
- **Reliability**: All control technologies must have been installed and operated reliably for at least six months.
- **Effectiveness**: The control technology must be verified to perform effectively over the range of operation expected for that type of equipment.

Staff is in the process of identifying installed and operational emergency standby engines ≥1000 BHP equipped with Tier 4 certified or equivalent technology that meet the LAER AIP criteria and plans to present this information at an upcoming BACT Scientific Review Committee meeting scheduled for November 3, 2021.

Response C3

EPA NSPS and CARB ATCM Tier 2 requirement and Caterpillar's white paper on exemption of Tier 4 Final in standby emergency applications from Federal, California and other applicable local regulations

Current EPA and CARB standards for emergency standby engines were promulgated several years ago. Most all South Coast AQMD LAER determinations are based on AIP LAER because it is generally more stringent than LAER based on SIP. The BACT process is used in establishing LAER which recognizes newer and cleaner technology that updates current LAER. Our preliminary research has indicated that Tier 4 Final Emergency ICEs ≥1000 BHP have been installed and in operation at a variety of different industries (e.g., data centers, wastewater treatment plants, pumping stations, manufacturing, etc.). We are aware of two major manufacturers that have EPA certified engines of this type. So far, the information we have been discovering is providing a strong case for AIP LAER. For the reliability criteria of AIP, we are considering emergency engines which have successfully been in operation for at least six months from the date a permit to operate was issued. In regard to the low load start up conditions, the Tier 4 standards are based on the weighted average of a five-mode operational test. It is understood that an engine will periodically meet the Tier 4 NOx standard during operation as it relies on catalytic reactions that require proper temperature under specific load conditions as part

of the compliance certification test. The higher NOx emissions prior to full catalyst activation is a known occurrence in catalytic control of combustion emissions including on-road vehicles. Overall higher NOx emission reductions are expected to be achieved when engines reach proper temperatures during longer maintenance and operational runs.

In analyzing proposed LAER, it is more appropriate to compare the emissions from the current Tier 2 engine LAER to the startup emissions and normal operating emissions for the proposed Tier 4F LAER to evaluate emission reductions. South Coast AQMD acknowledges that many types of equipment and processes have higher emissions during start up than during their normal operations, however, as was done in Appendix A of Caterpillar's white paper, the analysis of a proposed LAER should not simply compare the startup and normal operating emissions of the same Tier4 F engine. The LAER analysis must include the current LAER Tier 2 emission profile.

Response C4

Tier 4 aftertreatment technologically feasible and cost-effective

In establishing LAER, the South Coast AQMD follows US EPA guidelines which do not allow for routine consideration of the cost of control. State law (H&SC 40405) defines BACT as the lowest achievable emission rate, which is the more stringent of either (i) the most stringent emission limitation contained in the SIP, or (ii) the most stringent emission limitation that is achieved in practice. There is no explicit reference or prohibition to cost considerations, and the applicability extends to all permitted sources. South Coast AQMD rules implement both state BACT and federal LAER requirements simultaneously, and furthermore specify that South Coast AQMD BACT must meet federal LAER requirements for major polluting Facilities.

Staff appreciates Truck & Engine Manufacturers Association's time and consideration in submitting comments to our preliminary LAER determination Tier 4 Final for emergency ICEs ≥1000 BHP. As I indicated above, staff has scheduled a BACT SRC meeting for November 3, 2021 that will be focused on this Tier 4 LAER proposal to present more information. Should you have further questions or comments please contact me at 909-396-2516 or abaez@aqmd.gov.

Sincerely,

Alfonso Baez
Program Supervisor
Best Available Control Technology

Comment Letter D (CE-CERT)

From: Wayne Miller
Sent: Thursday, June 24, 2021 8:33 PM
To: Bahareh Farahani <bfarahani@aqmd.gov>; Al Baez <abaez@aqmd.gov>
Cc: Jason Aspell <JAspell@aqmd.gov>
Subject: RE: BACT SRC meeting - Thursday, June 24, 2021 2pm - 4pm

Al and Bahareh ....well run meeting ... with some good meaty discussion. And TY for adding a timer to public speakers so all had equal opportunity

Comments ..

Comment D1

Slide 4 ....

1. CO emissions are not 0.0; they are below a value stated as the lower detection limit (LDL) for the current analytical method
2. Need to specify source of method is it AQMD Method 100.1?

Slide 8

D2

1. AQMD Method 207.1?? → same Agency ID missing throughout
2. Details on the averaging period and number of measurements needed for NH3; perhaps part of the method?
3. CEMS for NH3 will be quite useful.

Comment D3

Slide 11

1. Method should be consistent in units, either MW or BHP
2. Is the rated value with auxiliary power devices (like fan) or not?
3. What does low load mean? Lowest D2 load is 10% but idle is ~ 5% load so what is low load?
4. ***Info at today meeting is interesting but is for a Microsoft specific site that was tied down in litigation for years and not generally applicable to units in AQMD...much more discussion is needed My concern is there are over 4,000 BUGS permitted in AQMD and there may be a rush to apply Tier 4 to all of them .. I welcome Jason's suggestion that a meeting consistent with the Brown Act be held on BUGs in general as there are many stakeholders with BUGS.***
5. I was less concerned about the comments on source testing as CAT does give a letter of instruction to their owners on preconditioning their units prior to source testing. I have source tested BUGS for CEC and ARB and that was not a concern.
6. Agree, that source testing is expensive and a nuisance to owners.
7. UCR did massive BUGS study before; see CEC reports below. Data includes cold starts and operations at low loads.

D4

Slide 13

1. Language and text is fine; cation is not. NH3 slip/release in exhaust is precursor to PM as ammonium sulfate. It is not created mainly in the catalyst.

Best regards,
Wayne Miller
Adjunct Professor Chem & Envir Engr
Associate Director CE-CERT

Response to Comment Letter D (CE-CERT)

In response to Dr. Miller's comment letter, the slides revised accordingly to address the received comments:

Response D1

Slide #4

1. The term "non-detectable" is no longer used for emission reporting purposes. Instead, non-detectable results are reported with respect to the limit of detection of the analytical instrument or method. Since the results were less than 20% of the instrument range, therefore we added the detection limit of 10 ppm to the slide.
2. Added South Coast AQMD Method 100.1 to clarify the test method used for source testing.

Response D2

Slide # 8

1. Added South Coast AQMD Method 207.1 to clarify the test method used for source testing.
2. The ammonia concentration limit at the exit of SCR has a permit condition and is based on a 60-minute averaging time. It has been included in the LAER/BACT form, Section (4)(A).
3. Currently, we do not have any certification method for ammonia CEMS and only compliance is through SCAQMD method 207.1

Response D3

Slide # 11

1. Added the engine rating in brake horsepower for clarification:

   MW (BHP): 3.0 (4,277) 1.5 (2,104) 1.0 (1,391)
2. The rated value is based on the engine name plate rating.
3. Low load means 10% of the engine load and was based in mechanical load. Emissions are evaluated on a 5-mode, weighted test cycle average Per ISO 8178 D2 cycle.
4. The proposed BACT/LAER determinations apply to diesel emergency I.C. engines at or greater than 1000 BHP. In south coast AQMD, there are around 350 total major polluting facilities. Among them 62 have one or more emergency stationary I.C. engines installed. There are almost 260 diesel emergency I.C. engines at or greater than 1000 BHP located at these facilities.

   Consistent with the Brown Act, a public BACT SRC meeting focused on I.C. engines was held on November 3, 2021 to address the stakeholders' comments and questions.

5, 6, and 7. Staff are in the process of meeting with the engine manufacturers, source testing companies, and affected facilities to get more information on testing to draft an engine guidance policy memorandum to address industry' concern.

Response D4

Slide # 13

1. If too much ammonia is injected, the unreacted ammonia results in ammonia slip downstream of the catalyst. To reduce this effect, an ammonia slip catalyst (ASC) can be used but has not been installed on this engine.

ATTACHMENT I

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 AMENDMENTS TO THE BEST AVAILABLE CONTROL TECHNOLOGY (BACT) GUIDELINES**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

If the proposed project is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino Counties. The Notice of Exemption will also be electronically filed with the State Clearinghouse of the Governor's Office of Planning and Research for posting on their CEQAnet Web Portal which may be accessed via the following weblink: https://ceqanet.opr.ca.gov/search/recent. In addition, the Notice of Exemption will be electronically posted on the South Coast AQMD's webpage which can be accessed via the following weblink: http://www.aqmd.gov/nav/about/public-notices/ceqa-notices/notices-of-exemption/noe---year-2022.

NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

To:	County Clerks for the Counties of Los Angeles, Orange, Riverside and San Bernardino; and Governor's Office of Planning and Research – State Clearinghouse	**From:**	South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

Project Title: Proposed Amendments to the Best Available Control Technology (BACT) Guidelines

Project Location: The proposed project is located within the South Coast Air Quality Management District's (South Coast AQMD) jurisdiction, which includes the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties), and the Riverside County portion of the Salton Sea Air Basin and the non-Palo Verde, Riverside County portion of the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project: Amendments to the BACT Guidelines are proposed that would update the Overview, plus Parts A, B, C, and D to maintain consistency with recent changes to South Coast AQMD rules and regulations and state requirements.

The following amendments are proposed: 1) update the Overview to change the name of the division overseeing the BACT Guidelines from "Science and Technology Advancement" to "Engineering and Permitting" in accordance with Governing Board direction; 2) update the hyperlink to the list of current BACT Scientific Review committee (SRC) members in the Overview; 3) add a section in the Overview, Part A – Policy and Procedures for Major Polluting Facilities, and Part C – Policy and Procedures for Non-Major Polluting Facilities, to address the limited BACT exemption in Rule 1304 – Exemptions, which is applicable to new or modified permit units located at any facility currently or formerly subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM), for emission increases of particulate matter sized 10 microns or less (PM10) and sulfur oxides (SOx) associated with the installation or modification of add-on air pollution control equipment for controlling nitrogen oxide (NOx) emissions to comply with NOx Best Available Retrofit Control Technology (BARCT) emission limits.

The following amendments to Part B – Lowest Achievable Emission Rate (LAER) Determinations for Major Polluting Facilities, are proposed: 1) revise Section I – South Coast AQMD LAER/BACT Determinations, to add one new listing for Internal Combustion (I.C.) Engine– Stationary, Non-Emergency with Selective Catalytic Reduction (SCR), Natural Gas (NG) Fired, and to update three listings for: a) Boiler, Fire-tube, NG Fired less than (<) 20 million British Thermal Unit per hour (mmBTU/hr), b) Rotary Dryer-Aggregate Facility, NG Fired, and c) Roller Coater – Paper and Film, with Regenerative Thermal Oxidizer (RTO) for Volatile Organic Compound (VOC) Control; and 2) revise Section II – Other LAER/BACT Determinations, to add one new listing for Fumigation - Methyl Bromide (CH_3Br) Fumigation Chamber greater than or equal to (≥) 100,000 pounds (lbs) of CH_3Br per year, and to update one listing for I.C. Engine-Compression Ignition ≥ 1,000 brake horsepower (BHP) - Stationary Emergency including Non-Agricultural and Non-Direct Drive Fire Pump.

In addition, an amendment to Part C is proposed that would make the Maximum Cost-Effectiveness Values in Table 5 consistent with the third quarter 2021 Marshall and Swift equipment index in accordance with BACT Guidelines policy.

The following amendments to Part D – BACT Determinations for Non-Major Polluting Facilities, are proposed that would reflect equipment and processes which have been achieved in practice and to maintain consistency with recent changes to South Coast AQMD rules and state requirements by: 1) adding one new listing for I.C. Engine– Stationary, Non-Emergency, Electrical with SCR, NG Fired; and 2) updating four listings for: a) Composting, b) I.C. Engine, Stationary, Emergency, c) Open Process Tanks: Chemical Milling (Etching) and Plating, and d) Printing (Graphic Arts).

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) – Common Sense Exemption
CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

Reasons why project is exempt: South Coast AQMD, as Lead Agency, has reviewed the proposed project pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. Since the proposed project is comprised of new information and updates that reflect current practices of LAER/BACT determinations in the BACT Guidelines and the most current achieved-in-practice air pollution control equipment and/or processes, and makes administrative amendments without requiring physical modifications, 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 proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. The proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment, because the BACT Guidelines are designed to further protect or enhance the environment. Further, there is no substantial evidence indicating that any of the exceptions to the categorical exemption set forth in CEQA Guidelines Section 15300.2 – Exceptions, apply to the proposed project.

Date When Project Will Be Considered for Approval (subject to change):
South Coast AQMD Governing Board Public Hearing: September 2, 2022

CEQA Contact Person:	**Phone Number:**	**Email:**	**Fax:**
Sina Taghvaee	(909) 396-2192	staghvaee@aqmd.gov	(909) 396-3982
BACT Contact Person:	**Phone Number:**	**Email:**	**Fax:**
Bahareh Farahani	(909) 396-2353	bfarahani@aqmd.gov	(909) 396-3982

Date Received for Filing: _____ **Signature:** *(Signed and Dated Upon Board Approval)*
Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development, and
Implementation

PROPOSED UPDATES TO BACT GUIDELINES

Board Meeting

September 2, 2022

Background

- Best Available Control Technology (BACT) guidelines are periodically modified to reflect changes in technology
- Ensures new, modified, and relocated equipment meet BACT
- Implementation of BACT is required to meet state and federal requirements
- BACT Guidelines are published for commonly permitted equipment:
  - Based on category or class of source
  - Source is defined as an individual permit unit
    - Engine, boiler, spray booth, etc.
  - Technical feasibility considered for the class and category of source

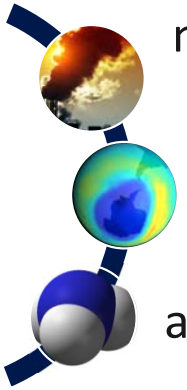
BACT is the most stringent emission limitation or control technique for a class and category of equipment that is:

- Achieved In Practice, or
- Contained In a State Implementation Plan (SIP), or
- Technologically Feasible and Cost-effective

When is BACT Required?

- BACT is a major element of Regulation XIII - New Source Review (NSR)
- During permitting, an NSR analysis is performed for all:
  - New sources
  - Relocated sources
  - Modifications to an existing source
- BACT is required if NSR analysis shows that:

There is an emissions increase ≥ 1.0 lb/day



nonattainment air contaminant (NOx, VOC, SOx, PM10)

ozone depleting compound

ammonia

Structure

BACT Guidelines

Overview

- Introduction
- Background
- Process

Major Source LAER/BACT

- Part A – Policies and Procedures
- Part B – Determinations

Non-Major (Minor) Source BACT

- Part C – Policies and Procedures
- Part D – Determinations

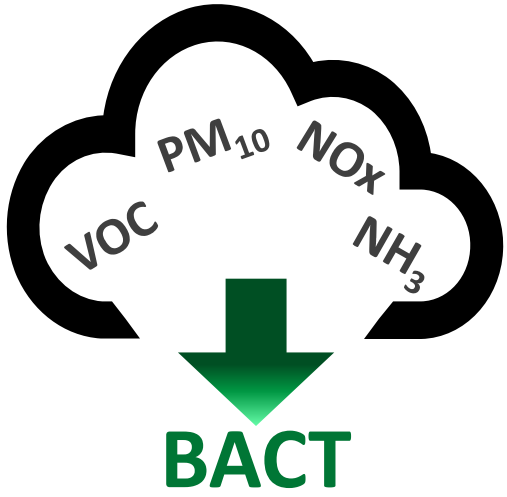
Prevention of Significant Deterioration (PSD)*

- Part E – Policies and Procedures
- Part F – Determinations

* Greenhouse Gases (GHG)

Proposal & Background

- Proposed changes to the BACT Guidelines:
  - New listings/clarifications and updates to existing listings
  - Add a limited BACT exemption for PM_{10} and SOx emissions to be consistent with amendments to Rule 1304
  - Update maximum incremental cost- effectiveness values
  - Other administrative changes
- New listings for Major and Non-Major Source:
  - Provide examples of achieved in practice; or
  - Result in emissions reductions for new or modified equipment as compared to current BACT/LAER
- Staff met with the Scientific Review Committee to discuss revisions to the BACT Guidelines



Summary of Proposed Updates to LAER/BACT Determinations

Equipment Category	Current LAER/BACT Limit	Proposed LAER/BACT Limit
Part B, Major Polluting Facilities		
Boiler, Fire-Tube, Natural Gas Fired <20 MMBTU/HR	NOx: 12 ppmv @ 3% O_2 dry	NOx: 7 ppmv @ 3% O_2 dry
Rotary Dryer, Aggregate Facility	NOx: 33 ppmv @ 3% O_2 dry	NOx: 33 ppmv @ 3% O_2 dry
Roller Coater – Paper and Film, with RTO for VOC Control	RTO overall control eff.: 95%	RTO overall control eff.: 97%
I.C. Engine – Stationary, Non-Emergency with SCR, NG Fired	Not established	Ammonia Slip: 10 ppm @ 15% O_2
Fumigation – Methyl Bromide Fumigation Chamber ≥ 100,000 lbs CH_3Br/year	Not established	Carbon Adsorption and Chemical Scrubber overall control eff.: 86%
I.C. Engine – Compression Ignition ≥1,000 BHP, Stationary Emergency	U.S. EPA' s Tier 2 emissions standards	U.S. EPA' s Tier 4 Final emissions standards
Part D, Non-Major Polluting Facilities		
I.C. Engine – Stationary, Non-Emergency, Electrical with SCR, NG Fired	Not established	Ammonia Slip: 10 ppm @ 15% O_2

Part B- LAER/BACT Determination for Major Polluting Facilities
Proposed New Listing

- **I.C. Engine – Compression Ignition ≥1,000 BHP, Stationary Emergency**
  - Achieved in practice case: I.C. engines at MWH Data Center, Quincy, WA
  - Each engine is equipped with Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) control technologies to meet emission requirements of EPA- Certified Tier 4 Final engines

Compliance Options to meet Tier 4 Final I.C. Engine:

- EPA-Certified Tier 4 Final Engines
- EPA-Certified Tier 2 engines equipped with exhaust aftertreatment equipment to meet EPA Tier 4 Final emissions standard

Air Districts with established BACT Guidance	Effective Date of Tier 4 F
Bay Area AQMD	January 1, 2020
Sacramento Metropolitan AQMD	June 4, 2021
San Joaquin Valley APCD	April 29, 2022

Part B- LAER/BACT Determination for Major Polluting Facilities
Proposed New Listing (Cont'd)

- **I.C. Engine – Compression Ignition ≥1,000 BHP, Stationary Emergency (Cont'd)**

Key Written Comments	Responses
▪ Concern over testing requirements for Compliant Tier 4 Final engines	▪ Testing is not a component of the BACT determination, however testing of the Compliant Tier 4 Final engine is needed to ensure compliance with the emissions limits
▪ Allow a single-load test and the use of a dilution system to reduce the test duration to save fuel and minimize the environmental impacts	▪ Staff is finalizing permitting guidance to address testing concerns, while ensuring compliance with the emission standards ▪ Guidance considers impacts on permit limits for testing and maintenance hours and minimizing emissions from testing ▪ Allows for additional certification procedures ▪ Staff continuing to work with Scientific Review Committee (SRC) members and manufacturers

Part B- LAER/BACT Determination for Major Polluting Facilities
Proposed New Listing (Cont'd)

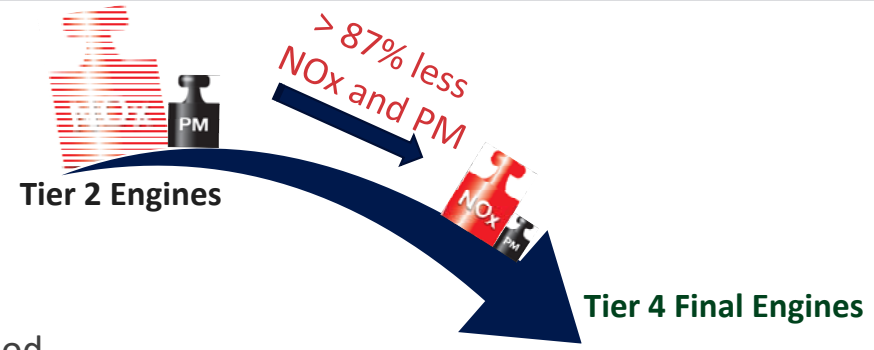
➢ **I.C. Engine – Compression Ignition ≥1,000 BHP, Stationary Emergency (Cont'd)**

Key Written Comments	Responses
▪ Concern about effectiveness of SCR technology during startup and low load operations; takes 20-30 minutes to reach temperatures for SCR to be effective for NOx reduction	▪ PM emissions are reduced by 87% whenever engine is operated ▪ 89% of NOx reductions achieved after the initial startup period of ~ 20 minutes ▪ NOx emissions during startup will be consistent with Tier 2 certified engines ▪ Faster startup period (<10 min) can be achieved with an integrated exhaust stream electrical load bank heater ▪ Based on a survey conducted by BAAQMD, ~ 80% of these engines operate at loads > 10% (when SCR is effective)

▪ **Comparison of EPA Standards:**

Pollutants	Tier 4 Final	Tier 2	% Reduction
NOx, g/bhp-hr	0.5	4.56	89%*
PM, g/bhp-hr	0.02	0.15	87%

*NOx reduction achieved after initial startup period



Part D- BACT Determination for Non-Major Polluting Facilities
Proposed New Listing

- **I.C. Engine – Stationary, Non-Emergency, Electrical with SCR, NG Fired**
  - Cogeneration unit, Lean Burn engine with Selective Catalytic Reduction (SCR) driving an electrical generator, rated at 1,573 BHP
  - 10 ppm Ammonia limit (15% O_2)
  - Found to be cost effective

California Environmental Quality Act (CEQA)

- **Proposed amendments to the BACT Guidelines qualify for a CEQA exemption because they are:**
  - Not expected to require physical modifications that would cause a significant adverse effect on the environment
  - Designed to protect the environment

Summary

- ✓ 6 Major Source LAER listings (Federal Title V facilities)
  - ✓ Tier 4 Final I.C. Engine BACT compliance options
  - ✓ Permitting guidance to support Tier 4 Final I.C. Engine testing
- ✓ 1 Non-Major Source BACT listing
- ✓ Update maximum incremental cost- effectiveness values
- ✓ Administrative updates to make consistent with rules and regulations

Recommended Actions

Determine that the proposed amendments to the BACT Guidelines are exempt from the requirements of the CEQA

Approve Proposed Amendments to the BACT Guidelines

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 31

PROPOSAL: Determine That Proposed Amended Rule 218.2 - Continuous Emission Monitoring System: General Provisions, and Proposed Amended Rule 218.3 - Continuous Emission Monitoring System: Performance Specifications, Are Exempt from CEQA; and Amend Rule 218.2 and Rule 218.3

SYNOPSIS: Rules 218.2 and 218.3 provide guidance for installation and operation of CEMS at non-RECLAIM and former RECLAIM facilities. The proposed amendments establish additional requirements for the installation and operation of CEMS including an alternative calibration procedure for dual range analyzers, specifications when measuring mass emissions and applying data substitution procedures, and extensions to recordkeeping and reporting requirements.

COMMITTEE: Stationary Source, June 17, 2022, Reviewed

RECOMMENDED ACTIONS:
Adopt the attached Resolution:

1. Determining that Proposed Amended Rule 218.2 - Continuous Emission Monitoring System: General Provisions, and Proposed Amended Rule 218.3 - Continuous Emission Monitoring System: Performance Specifications, are exempt from the requirements of the California Environmental Quality Act; and
2. Amending Rule 218.2 - Continuous Emission Monitoring System: General Provisions, and Rule 218.3 - Continuous Emission Monitoring System: Performance Specifications.

Wayne Nastri
Executive Officer

SR:MK:HF:YZ

Background
In March 2021, the Board adopted Rules 218.2 and 218.3 to update performance specifications for Continuous Emission Monitoring Systems (CEMS) and to harmonize requirements for units at non-RECLAIM, RECLAIM, and former RECLAIM facilities. A CEMS is the combination of equipment necessary to measure pollutant concentrations or emission rates on a continuous basis. Rules 218.2 and 218.3 provide specifications for CEMS operated at former RECLAIM facilities that were previously certified according to the RECLAIM program but have since exited RECLAIM, as well as specifications for CEMS operated at non-RECLAIM facilities that were previously certified or would have been certified according to Rules 218 and 218.1. The adoption of Rules 218.2 and 218.3 was part of the transition of NOx RECLAIM facilities to a command-and-control regulatory structure consistent with CMB-05 in the 2016 AQMP.

Rules 218.2 and 218.3 were developed to address compliance with command-and-control concentration-based emission limits; however, since their adoption, several command-and-control rules with CEMS requirements have been adopted or amended to include mass emission limits instead of concentration-based emission limits.

Public Process
Development of Proposed Amended Rules 218.2 and 218.3 (PAR 218.2 and PAR 218.3) was conducted through a public process. Staff held two Working Group meetings on January 27, 2022, and February 24, 2022. A Public Workshop was held on March 30, 2022, and a Public Consultation meeting was held on June 8, 2022. Staff also held individual meetings with stakeholders and U.S. EPA.

Proposed Amendments
PAR 218.2 will further specify the criteria for CEMS recertification and clarify that the Rules 218.2 and 218.3 exemption does not apply if the source specific rule or permit specified equivalent CEMS requirements are less stringent. It will also extend the required recordkeeping period from a minimum period of two years to three years to align with the California Code of Civil Procedure Section 338(k). Further, PAR 218.2 will allow facilities to submit the relative accuracy test audit report on or before the end of the quarter following the date of the test to align with existing RECLAIM requirement.

PAR 218.3 includes mass emission calculation methods and data substitution procedures to address units that must comply with mass emission limits, including for units with mass emission startup and shutdown limits on a per minute interval. In addition, PAR 218.3 will provide more detailed instructions for the linearity error test procedure, align the exemption provision with PAR 218.2 revision to add more specificity, and address a potential monitoring gap for a dual range analyzer. Finally, PAR 218.3 allows the owner or operator to report valid zero emissions data without requiring data substitution if the owner or operator can demonstrate the emitting source is non-operational.

Key Issues
Through the rulemaking process, staff has worked with the stakeholders to address comments and resolve key issues. Staff is not aware of any remaining key issues.

California Environmental Quality Act (CEQA)
Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3). A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and is included as Attachment H to this Board Letter. If the project is approved, the Notice of Exemption will file for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor's Office of Planning and Research.

Socioeconomic Impact Assessment
PAR 218.2 and PAR 218.3 are designed to provide additional clarification and data handing methods consistent with emission limits in permits or command-and-control rules. The proposed amendments are administrative in nature and are not expected to have socioeconomic impacts.

AQMP and Legal Mandates
PAR 218.2 and PAR 218.3 are related to 2016 AQMP Control Measure CMB-05 which addresses the transition of NOx RECLAIM facilities to command-and-control as they specify the CEMS requirements for command-and-control rules for non-RECLAIM and former RECLAIM facilities. PAR 218.2 and PAR 218.3 will be submitted to CARB and U.S. EPA for inclusion in the SIP.

Implementation and Resource Impacts
Existing staff resources are sufficient to implement the proposed rule amendments.

Attachments
A. Summary of Proposal
B. Key Issues and Responses
C. Rule Development Process
D. Key Contacts List
E. Resolution
F-1. Proposed Amended Rule 218.2
F-2. Proposed Amended Rule 218.3
G. Final Staff Report
H. Notice of Exemption from CEQA
I. Board Presentation

ATTACHMENT A

SUMMARY OF PROPOSAL

Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions
Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications

Summary of Proposed Amended Rule 218.2 (PAR 218.2)

Certification Requirements

- Adds clarification that the Executive Officer discretion on recertification requirement will only apply if modification would not impact data accuracy

Recordkeeping Requirements

- Extends the recordkeeping from a minimum period of two years to three years

Exemption

- Adds clarification that the Executive Officer discretion does not apply if the rule or permit specified CEMS requirements are less stringent

Summary of Proposed Amended Rule 218.3 (PAR 218.3)

Certification Test Requirements and Specifications

- Provides more detailed instruction on the test sequence and the number of data points required when conducting the linearity error check procedure

Data Handling

- Extends a low-level data validation option from being applicable to lowest vendor guaranteed span range to any span range
- Adds the mass emission calculation methodology
- Adds data substitution procedure when a facility is complying with a mass emission limitation
- Adds method to calculate mass emissions for a startup or shutdown period
- Adds data substitution procedures for startup or shutdown missing minute data when a facility is complying with a mass emission limitation for startup or shutdown
- Allows the owner or operator to report valid zero emissions data while the unit (emitting source) is not operating and no emissions are generated

Exemption

- Adds clarification that the Executive Officer discretion does not apply if the rule or permit specified CEMS requirements are less stringent

ATTACHMENT B

KEY ISSUES AND RESPONSES

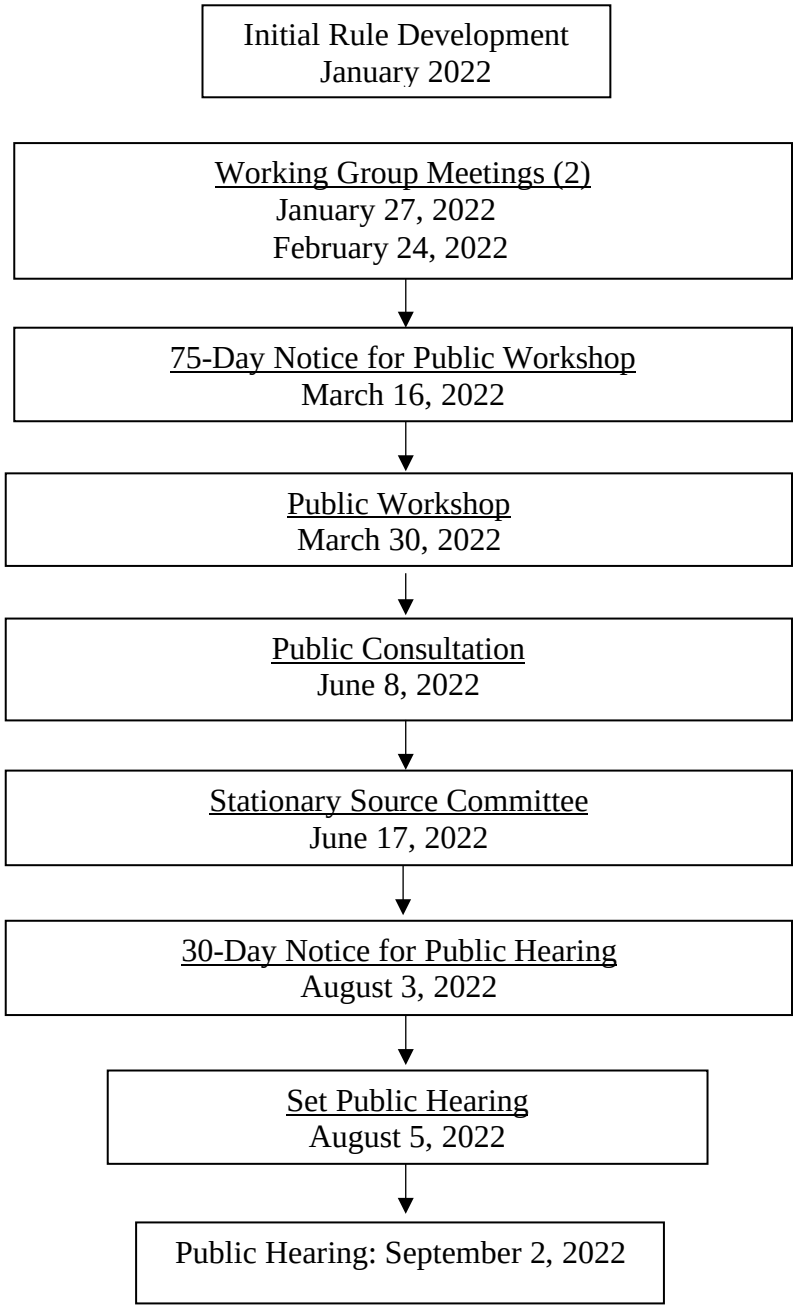
Proposed Rule 218.2 – Continuous Emission Monitoring System: General Provisions **Proposed Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications**
Throughout the rulemaking process, staff worked with stakeholders to address their comments. Staff is not aware of any remaining key issues.

ATTACHMENT C

RULE DEVELOPMENT PROCESS

Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions

Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications



Eight (8) months spent in rule development
Two (2) Working Group Meetings
One (1) Public Workshop
One (1) Public Consultation
One (1) Stationary Source Committee Meeting

ATTACHMENT D

KEY CONTACTS LIST

Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions

Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications

(listed alphabetically)

- AirKinetics Inc
- Almega Environmental
- AltAir Paramount
- Anheuser-Busch LLC
- California Air Resources Board (CARB)
- California Council for Environmental and Economic Balance (CCEEB)
- California Institute of Technology
- California Resources Corporation
- CEMTEK KVB-Enertec
- Cisco CEMS
- City of Glendale Water and Power
- City of Pasadena
- City of Riverside
- FERCo
- Inland Empire Utilities Agency
- Los Angeles County Sanitation District
- Los Angeles Department of Water and Power
- Marathon Petroleum
- Montrose Environmental
- Orange County Sanitation District
- Phillips 66
- Ramboll
- Rockwell Automation
- Signal Hill Petroleum
- Southern California Alliance of Publicly Owned Treatment Works (SCAP)
- Southern California Edison
- Southern California Gas Company
- Taylor Environmental Services
- United States Environmental Protection Agency (U.S. EPA)
- Valero Energy
- VIM Technologies
- Walnut Creek Energy
- Western States Petroleum Association (WSPA)
- Yorke Engineering

ATTACHMENT E

RESOLUTION NO.22_____

A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) determining that Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications are exempt from the requirements of the California Environmental Quality Act (CEQA).

A Resolution of the South Coast AQMD Governing Board amending Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications.

WHEREAS, the South Coast AQMD Governing Board finds and determines that Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 are considered a "project" as defined by CEQA; and

WHEREAS, the South Coast AQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l), and has conducted a CEQA review and analysis of the proposed project pursuant to such program (South Coast AQMD Rule 110); and

WHEREAS, the South Coast AQMD Governing Board finds and determines that after conducting a review of the proposed project in accordance with CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA, and CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA, that the proposed project is exempt from CEQA; and

WHEREAS, the South Coast AQMD Governing Board finds and determines that because the proposed project provides updates to technical guidelines for operating CEMS as required by South Coast AQMD rules or permit conditions such that no physical modifications are expected to occur, it can be seen with certainty that there is no possibility that the proposed project may have any significant adverse effects on the environment, and is therefore, exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption; and

WHEREAS, the South Coast AQMD 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 Amended Rule 218.2, Proposed Amended Rule 218.3, and supporting documentation, including but not limited to, the Notice of Exemption and Final Staff Report, were presented to the South Coast AQMD Governing Board and the South Coast AQMD Governing Board has reviewed and considered this information, as well as has taken and considered staff testimony and public comment prior to approving the project; and

WHEREAS, the South Coast AQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (Section 30.5(4)(D)(i) of the Administrative Code), that no modifications have been made to the proposed project since notice of public hearing was published that are so substantial as to significantly affect the meaning of Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 within the meaning of Health and Safety Code Section 40726 including the addition of an alternative data substitution option in clause (i)(13)(B)(i) of Proposed Amended Rule 218.3, which is not substantive and: further, (a) the changes do not impact emission reductions, (b) the changes do not affect the number or type of sources regulated by the rules, (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 proposed project is exempt from CEQA; and

WHEREAS, Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 will be submitted to the California Air Resources Board and the United States Environmental Protection Agency for inclusion into the State Implementation Plan; and

WHEREAS, Health and Safety Code Section 40727 requires that prior to adopting, amending, or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the Final Staff Report; and

WHEREAS, the South Coast AQMD Governing Board has determined that a need exists to amend Rule 218.2 and Rule 218.3 to further specify requirements for CEMS at non-RECLAIM and former RECLAIM which include providing an option to validate data for a dual range analyzer and adding specifications on mass emission calculations and data substitution procedures; and

WHEREAS, the South Coast AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections 39002, 40000, 40001, 40440, 40441, 40702, 40725 through 40728, and 41511 of the Health and Safety Code; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 are written or displayed so that their meanings can be easily understood by persons directly affected by them; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 do not impose the same requirements as any existing state or federal regulations, and the proposed amended rules are necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 reference the following statutes which the South Coast AQMD hereby implements, interprets or makes specific: Assembly Bill 617, Health and Safety Code Sections 39002 (primary responsibility for control of non-vehicular air pollution); 40001(a) (rules to meet air quality standards); 40440(a) (rules to carry out the plan); 40440(c) (rules to carry out programs efficiently and cost-effectively); 40702 (adoption of rules and regulations); and 41511 (requirements to determine emissions); 40725 through 40728.5 (adoption of rules and regulations); and

WHEREAS, the South Coast AQMD Governing Board finds that Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 do not impose new or more stringent monitoring, reporting, or recordkeeping requirements, and therefore the requirements of Health and Safety Code Section 40727.2 are satisfied under subsection (g); and

WHEREAS, the South Coast AQMD Governing Board has determined that the Socioeconomic Impact Assessment is not required, pursuant to Health and Safety Code Section 40440.8 or 40728.5, because Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 will not have a significant impact on air quality or emissions limitations; and

WHEREAS, the South Coast AQMD staff conducted a public workshop regarding Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 on March 30, 2022; and

WHEREAS, the public hearing has been properly noticed in accordance with the provisions of Health and Safety Code Section 40725 and 40440.5; and

WHEREAS, the South Coast AQMD Governing Board has held a public hearing in accordance with all provisions of state and federal law; and

WHEREAS, the South Coast AQMD specifies the Planning and Rules Manager of Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 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 South Coast AQMD Governing Board does hereby determine, pursuant to the authority granted by law, that the proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. This information was presented to the South Coast AQMD Governing Board, whose members exercised their independent judgement and reviewed, considered, and approved the information therein prior to acting on the proposed project; and

BE IT FURTHER RESOLVED, that the South Coast AQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 as set forth in the attached, and incorporated herein by reference; and

BE IT FURTHER RESOLVED, that the South Coast AQMD Governing Board requests that Proposed Amended Rule 218.2 and Proposed Amended Rule 218.3 be submitted for inclusion in the State Implementation Plan; and

BE IT FURTHER RESOLVED, that the Executive Officer is hereby directed to forward a copy of this Resolution, Proposed Amended Rule 218.2, and Proposed Amended Rule 218.3 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-1

(Adopted March 5, 2021)(Amended [*Date of Adoption*])

[*RULE INDEX TO BE ADDED AFTER RULE ADOPTION*]

PROPOSED AMENDED RULE 218.2 CONTINUOUS EMISSION MONITORING SYSTEM: GENERAL PROVISIONS

(a) Purpose

The purpose of this rule is to specify requirements for Continuous Emission Monitoring Systems (CEMS), Alternative Continuous Emission Monitoring System (ACEMS), and Semi-Continuous Emission Monitoring System (SCEMS). This rule refers to Rule 218.3 for requirements for certifications and quality assurance of CEMS, ACEMS, and SCEMS. Unless otherwise specified, the owner or operator of the CEMS, ACEMS, or SCEMS is responsible for compliance with the requirements specified in this rule.

(b) Applicability

(1) This rule shall apply to the owner or operator of a CEMS, ACEMS, or SCEMS that is required by a South Coast AQMD rule, regulation or permit condition, except for a system that is to monitor:

(A) Performance of the basic or control equipment and not to determine compliance with any rule emission limit or emission standard; or

(B) NOx or SOx emissions subject to Regulation XX - Regional Clean Air Incentives Market (RECLAIM).

(2) All requirements specified for CEMS in this rule shall be applicable for ACEMS and SCEMS, unless otherwise specified.

(c) Definitions

(1) ALTERNATIVE CONTINUOUS EMISSION MONITORING SYSTEM (ACEMS) means a system that uses process or control device operating parameter measurements and a conversion equation, a graph, or computer program to produce results in units of the applicable emission limitation or standard on a continuous monitoring basis, which is demonstrated to the Executive Officer as having the same precision, reliability, accessibility, and timeliness as the data provided by a certified

CEMS or certified CEMS component in accordance with Rule 218.2 and Rule 218.3.

(2) ANALYZER means the part of the continuous emission monitoring system (CEMS) that analyzes the appropriate gaseous constituents of the conditioned gaseous sample or measures stack gas volumetric flow and fuel flow rates, as applicable.

(A) Contaminant Analyzer - the part of the CEMS that detects the air contaminant and represents those concentrations in a signal output.

(B) Diluent Analyzer - the part of the CEMS that detects oxygen, carbon dioxide or other diluent gas concentrations and represents those concentrations in a signal output.

(C) Fuel Flowmeter - the part of the CEMS that detects the parameters of all essential measurement sub-systems (e.g., temperature, pressure, differential pressure, frequency, gas density, gas composition, heating value) and generates signal outputs which are a function of the fuel flow rate and all essential measurement sub-system parameters.

(D) Stack Flowmeter - the part of the CEMS that detects the parameters from all essential measurement sub-systems (e.g., temperature, static and atmospheric pressure, gas density, gas composition, molecular weight, gas moisture content) and generates signal outputs which are a function of the stack gas volumetric flow rate and all essential measurement sub-system parameters.

(3) CALIBRATION means a procedure performed to ensure that the CEMS accurately measures and records air contaminant or diluent gas concentration, flow rate and other parameters necessary to generate data.

(4) CALIBRATION ERROR TEST means a procedure performed to determine CEMS response to a given gaseous compound concentration by means of injecting a certified calibration gas mixture into the CEMS as close to the probe tip as practical.

(5) CEMS FAILURE means the CEMS or a component of the CEMS ceases normal operation, and thus is incapable of providing the required data to demonstrate compliance with the applicable limit or standard for which this CEMS is dedicated.

(6) CEMS FINAL CERTIFICATION LETTER means the final approval of CEMS certification or recertification, which at a minimum includes:

(A) Unit (emission source) and control equipment (if applicable) description.

(B) Stack description.

(C) Probe configuration and conditions.

(D) Instrument type, manufacturer, model number, and serial number for each of the contaminant analyzer (s), diluent analyzer, and fuel flowmeter (if applicable).

(E) Instrument type, manufacturer, and model number for:

(i) Sample conditioning system; and

(ii) Data acquisition and handling system and programmable logic controller.

(F) Certified span range(s) for each of the contaminant analyzer(s), diluent analyzer, and fuel or stack flowmeter (if applicable).

(7) CEMS MODIFICATION means a modification to a CEMS component that is identified on the CEMS final certification letter, or a modification which may include, but not be limited to the CEMS sampling interface, gas conditioning system, analyzer, or data acquisition and handling system that has a potential for adversely affecting the ability of the CEMS to provide accurate, precise and timely data representative of emissions for the unit being monitored.

(8) CERTIFIED CEMS means a CEMS certified and maintained to meet the performance specifications pursuant to the applicable requirements of Rules 218.2 and 218.3.

(9) CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) means the total combined equipment and systems, including the sampling interface, analyzers, and data acquisition and handling system, required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent (as applicable).

(10) CONTINUOUS MONITORING means monitoring in which a minimum of one measurement (e.g., concentration, mass emission, flow rate) is taken and recorded each minute.

(11) DATA ACQUISITION AND HANDLING SYSTEM (DAHS) means the part of the CEMS that processes data generated by the analyzer and

records the results, thus creating a permanent record of the output signal in terms of concentration, flow rate, and/or any other applicable parameter necessary to generate the required data in units of applicable standard. The DAHS consist of all equipment such as a computer and the software required to convert the original recorded values to any values required for reporting.

(12) DILUENT GAS means a constituent of the flue gas that is measured by the CEMS in order to provide values to calculate emission levels.

(13) FORMER RECLAIM FACILITY means a facility, or any of its successors,

that was in the NOx Regional Clean Air Incentives Market (RECLAIM) as of January 5, 2018, as established in Regulation XX, that has received a final determination notification, and is no longer in the NOx RECLAIM program.

(14) LABORATORY APPROVAL PROGRAM (LAP) means a program administered by the South Coast AQMD for granting test-method-specific approvals to independent testing laboratories or firms that perform tests to determine source compliance with the South Coast AQMD rules and regulations.

(15) MAINTENANCE means preventive evaluation and adjustment (if necessary) of CEMS performed to preclude system failure. Maintenance may be performed as recommended by the manufacturer or a documented standard operating procedure determined through operating experience and approved by the Executive Officer. Repairs to a malfunctioning system are excluded from this definition.

(16) PUBLICLY OWNED SEWAGE-WATER-LANDFILL FACILITY means a sewage treatment facility, water delivery facility, or landfill gas control or processing facility, that is owned and operated by a public agency.

(17) RECLAIM means the REgional CLean Air Incentives Market program.

(18) RECLAIM FACILITY – means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX.

(19) SAMPLING INTERFACE means that part of the CEMS that performs sample acquisition using one or more of the following operations:

extraction, physical/chemical separation, transportation, or conditioning of a representative sample from a designated source.

(20) SEMI-CONTINUOUS EMISSION MONITORING SYSTEM (SCEMS) means an emission monitoring system that is different from a regular CEMS on response time and data acquisition frequency. SCEMS continuously takes and records measurements (e.g. concentration, mass emission, flow rate) at a minimum of once in every fifteen (15) minutes. SCEMS includes but is not limited to gas chromatography, integrated sensitized tape analyzer, other sample integration based technologies, and time-shared CEMS.

(21) TIME-SHARED CEMS means an emission monitoring system where the analyzer, and possibly the associated sample conditioning system, is used on more than one source. A time-shared CEMS is categorized as a type of SCEMS under Rules 218.2 and 218.3.

(22) UNIT for the purposes of this rule means the combustion source for which the certified continuous emission monitoring system, or alternative continuous emission monitoring system, monitors the combustion source's emissions.

(d) Implementation Schedule

(1) Prior to the implementation date specified in paragraphs (d)(2) through (d)(5), the owner or operator shall comply with:

(A) Rules 218 and 218.1 for a CEMS that is subject to paragraph (d)(2) or (d)(5); or

(B) Rule 2012 for a CEMS that is subject to paragraph (d)(3).

(2) For a CEMS certified to comply with Rules 218 and 218.1, the owner or operator of the CEMS shall meet the requirements of this rule no later than:

(A) The date an application is submitted to the Executive Officer between January 1, 2022 and January 1, 2025 for any CEMS certification or recertification pursuant to paragraph (f)(2) or (f)(3);

(B) January 1, 2025, for any CEMS that was certified prior to January 1, 2022 but without an application submitted to the Executive Officer between January 1, 2022 and January 1, 2025 for a CEMS recertification pursuant to paragraph (f)(2) or (f)(3); or

(C) The implementation date of a source-specific rule for which the CEMS shall be certified or recertified pursuant to paragraph (f)(2) or (f)(3) as part of the implementation.

(3) For a CEMS certified to comply with Rule 2012, the owner or operator of the CEMS shall meet the requirements of this rule no later than:

(A) The date an application is submitted to the Executive Officer for any CEMS certification or recertification pursuant to paragraph (f)(2) or (f)(3) that is within twenty-four (24) months after the NOx RECLAIM facility has been notified as a former RECLAIM facility;

(B) Twenty-four (24) months after the NOx RECLAIM facility has been notified as a former RECLAIM facility, if there is no CEMS recertification pursuant to paragraph (f)(2) or (f)(3) during this 24-month period; or

(C) The implementation schedule of a source specific rule for which the CEMS shall be certified or recertified pursuant to paragraph (f)(2) or (f)(3) as part of the implementation.

(4) If a CEMS that is subject to paragraph (d)(2) is sharing the sampling interface or other component(s) with another CEMS that is subject to paragraph (d)(3), the owner or operator of the CEMS shall meet the requirements of this rule based on the later implementation date specified in paragraphs (d)(2) and (d)(3).

(5) The owner or operator of a publicly owned sewage-water-landfill facility that has a CEMS certified to comply with Rules 218 and 218.1, shall meet the requirements of this rule no later than January 1, 2025, or by the implementation date of a source-specific rule requiring the CEMS to be certified or recertified, whichever is later.

(e) Monitoring Requirements

(1) The owner or operator of a CEMS shall install, maintain and operate the CEMS for continuous measurement according to all applicable requirements in Rules 218.2 and 218.3.

(2) If there is a CEMS failure, the owner or operator of a CEMS shall:

(A) Not be subject to the requirements of paragraph (e)(1) for up to 96 hours, provided that the CEMS is:

(i) Undergoing maintenance pursuant to the Quality Assurance and Quality Control Program for the CEMS; or

(ii) Damaged as a result of circumstances beyond the control of the owner or operator of the CEMS;

(B) Submit a notification pursuant to paragraph (i)(3), if the CEMS failure or shut down has occurred for more than 24 hours; and

(C) Submit a notification to the Executive officer for time extension beyond the time period specified in subparagraph (e)(2)(A) for an additional 96 hours, if the unit is not operating and no emissions are generated, as demonstrated pursuant to paragraph (e)(4).

(3) If a unit does not operate for a minimum of 168 consecutive hours, as demonstrated pursuant to paragraph (e)(4), the owner or operator of the CEMS is not subject to the requirements of paragraph (e)(1) after zero emissions have been recorded for a minimum of 4 hours after the unit shutdown, provided that the owner or operator of the CEMS:

(A) Maintains the CEMS operation pursuant to paragraph (e)(1) to record zero emissions for a minimum of 4 hours after the unit shutdown;

(B) Submits the notifications and report in accordance with paragraph (i)(4);

(C) Resumes CEMS operation and meet the requirements of paragraph (e)(1) for a minimum of 4 hours before the unit resumes operation or at which time any emissions are generated; and

(D) Conducts a calibration error test for each CEMS analyzer before any emissions are detected.

(4) Demonstrating a unit is not operating and no emissions are generated

(A) For a unit in which fuel combustion is the only source for the CEMS monitored emissions, the owner or operator of the CEMS shall meet one or more of the following provisions for the entire duration:

(i) Disconnect the fuel line to the unit and place blind flange(s) to prevent fuel flow;

(ii) Demonstrate there is no fuel flow to the unit based on a dedicated fuel flow meter that is quality assured according to manufacturer's recommendation;

(iii) Provide one or more gas bills indicating zero fuel consumption for the unit or the fuel line associated with the unit that is not operating; or

(iv) Demonstrate the unit is not operational based on a stack flow monitoring system certified according to subdivision (f), or any other monitoring system approved by the Executive Officer which shows the exhaust flow is less than the lowest quantifiable rate measurable by South Coast AQMD Methods 1-4.

(B) For a unit in which fuel combustion is not the only source for the CEMS monitored emissions, the owner or operator of the CEMS shall:

(i) Request the Executive Officer's written approval of the method(s) to demonstrate that the unit is not operating and no emissions are generated; and

(ii) Include the above approved method(s) in the QA/QC plan.

(f) Certification Requirements

(1) The owner or operator of a CEMS shall certify or recertify any CEMS that is:

(A) Installed after [*Date of Adoption*];

(B) Modified for any component that is either listed on the certification letter, Technical Guidance Document R-002, or Quality Assurance/Quality Control Plan, unless the Executive Officer determines that such modification would not impact data accuracy and certification or recertification is not necessary; or

(C) Determined by the Executive Officer that a CEMS recertification is required because the QA/QC or performance requirements for the CEMS cannot be achieved in accordance with Rule 218.3 subdivision (g).

(2) The owner or operator of the CEMS shall certify or recertify the CEMS, according to requirements set forth in Rule 218.3 subdivisions (e) and (f) and shall:

(A) Submit a CEMS application form pursuant to paragraph (f)(4);

(B) Obtain an initial approval of the application pursuant to paragraph (f)(5);

(C) Conduct the certification tests for the CEMS pursuant to paragraph (f)(6); and

(D) Obtain a final approval of the application for the CEMS final certification letter pursuant to paragraph (f)(7).

(3) For a CEMS modification required within 30 days due to CEMS failure, the owner or operator of the CEMS shall:

(A) Submit a written notification to the Executive Officer prior to the modification that includes the date and description of the planned modification;

(B) Submit a CEMS application form pursuant to paragraph (f)(4) within 30 days of the CEMS modification and obtain an interim approval of the application pursuant to paragraph (f)(5), except that the owner or operator of the CEMS may commence the CEMS modification without receiving notification from the Executive Officer pursuant to subparagraph (f)(5)(D);

(C) Conduct the certification tests for the CEMS pursuant to subparagraphs (f)(6);

(D) Recertify and operate the CEMS pursuant to Rule 218.3 subdivisions (e) and (f); and

(E) Obtain a final approval of the application for the CEMS final certification letter pursuant to paragraph (f)(7).

(4) The owner or operator of the CEMS shall submit an CEMS application form, FORM ST-220 or its updated version, and any other information specified in the form.

(5) The owner or operator of the CEMS shall receive an initial approval of the CEMS application from the Executive Officer prior to the CEMS installation or modification.

(A) The initial approval of the CEMS application shall be based on the information submitted in the application form that is:

(i) Complete; and

(ii) Accurate in providing information that reflects the unit and CEMS.

(B) Executive Officer shall notify the applicant that the application is complete, in writing within 60 calendar days of receipt of an

application for a new CEMS, or within 30 calendar days of receipt of an application for a modification to an existing CEMS.

(C) If the owner or operator of the CEMS receives notification from the Executive Officer that the application meets the requirements of subparagraph (f)(5)(A), the owner or operator of the CEMS may commence the CEMS installation or modification.

(D) If the owner or operator of the CEMS receives notification from the Executive Officer that the application for initial certification does not meet the requirements of subparagraph (f)(5)(A), the owner or operator of the CEMS shall provide the Executive Officer the specific information needed to meet the requirements of subparagraph (f)(5)(A) within the time specified by the Executive Officer in the notification.

(E) Upon receipt of any complete resubmittal or additional information, plans or specifications after the application has been deemed incomplete, a new 30-day period shall begin during which the Executive Officer shall notify the applicant if the application is complete and grant the initial approval.

(6) Certification Tests

(A) If the unit is operating at the time of completion of the CEMS installation, within 90 days of installation or modification of a CEMS, the owner or operator of a CEMS shall:

(i) Conduct the applicable certification tests specified in Rule 218.3 subdivision (f) for certification of any new CEMS or recertification of a modified CEMS; or

(ii) Meet the testing requirement for each type of CEMS modification in accordance with the latest South Coast AQMD Technical Guidance Documents R-002 and R-003 for recertification of a modified CEMS.

(B) If the unit is not operating at the time of completion of the CEMS installation, then the owner or operator of the CEMS shall conduct the certification tests of the CEMS within 90 days from the start-up and normal operation of the unit monitored by the CEMS in accordance with clause (f)(6)(A).

(C) The certification tests shall be performed by a testing laboratory approved under the South Coast AQMD Laboratory Approval Program.

(i) No later than 14 days before the certification test is conducted, the owner or operator of the CEMS shall notify the Executive Officer in writing the facility name, facility identification number, the device identification number, the certification test date(s) and time(s).

(ii) No later than 45 days of completing a certification test, the owner or operator of the CEMS shall submit the test report to the Executive Officer.

(7) Final Approval

(A) The Executive Officer will issue a CEMS final certification letter as the final approval, if the information in the application form and the certification test reports are determined to meet the requirements specified in Rule 218.3 subdivisions (e) and (f).

(B) The owner or operator of the CEMS shall be notified of the expected issuance date of the CEMS final certification letter by the Executive Officer within 60 days of receiving the certification test report(s) specified in paragraph (f)(6).

(C) The owner or operator of the CEMS shall be notified of a new issuance date of the CEMS final certification letter by the Executive Officer if additional data and/or test(s) are required prior to final approval. This new issuance data will be determined by the Executive officer within 60 days of receiving the additional data and/or test(s).

(8) Modification of CEMS Component Listed in the Technical Guidance Document R-002

For a CEMS modification on a component that is not identified on the CEMS final certification letter but is listed on the South Coast AQMD Technical Guidance Document R-002, the owner or operator of the CEMS shall either meet the requirements specified in paragraph (f)(2), or (f)(3) or the alternative CEMS certification requirements. The owner or operator of the CEMS that elects to meet the alternative CEMS certification requirements shall:

(A) Provide a written notification to the Executive Officer prior to the modification that includes the date and description of the planned CEMS modification;

(B) Conduct the required quality assurance tests, in accordance with the South Coast AQMD Technical Guidance Document R-002, within 60 days following the CEMS modification; and

(C) Submit the test reports to the Executive Office within 60 days after completing the tests.

(D) Subject to any further assessment instructed by the Executive Officer to validate the reliability, precision, or accuracy of the CEMS.

(9) The owner or operator of the CEMS that receives written notification from the Executive Officer that an alternative CEMS recertification submitted pursuant to subparagraph (f)(8) is disapproved, shall meet the requirements specified in paragraph (f)(2) or (f)(3) for that specific CEMS modification.

(10) Modification of CEMS Component Listed in Quality Assurance/Quality Control Plan

For a CEMS modification on a component that is not identified on the CEMS final certification letter or listed in the South Coast AQMD Technical Guidance Document R-002, but is listed in the Quality Assurance/Quality Control Plan, the owner or operator of the CEMS shall:

(A) Provide a written notification to the Executive Officer prior to the modification that includes the date and description of the planned CEMS modification;

(B) Submit a modified Quality Assurance/Quality Control Plan to the Executive officer within 30 days of notification; and

(C) Subject to any testing requirement and/or further assessment instructed by the Executive Officer if the modification is deemed to affect the reliability, precision, or accuracy of the CEMS.

(11) Emission Data During CEMS Certification or Recertification

(A) Upon completion of a successful calibration error test pursuant to Rule 218.3 subparagraphs (f)(1)(B) and (f)(1)(C) and prior to the Executive Officer's approval of final CEMS certification or recertification, all the emission data measured and recorded by the

CEMS shall be considered as valid quality assured data, beginning at the hour of passing the calibration error test. The calibration error test for this purpose must be passed before any of the required certification tests pursuant to paragraph (f)(6) is commenced but no more than 14 days prior to the completion of all the required certification tests.

(B) If the Executive Officer disapproves the final CEMS certification or recertification, the valid emission data pursuant to subparagraph (f)(11)(A) shall be retroactively considered invalid data and shall not be utilized for compliance demonstration or considered as available for CEMS data availability calculation, until the hour of the next time completing all the required certification tests pursuant to paragraph (f)(6).

(12) Operation of CEMS During Certification Testing

CEMS shall be certified as configured for the normal operation of the CEMS with respect to sample acquisition, sample conditioning, pollutant/diluent detection, data requirements, and reporting.

(13) SCEMS and ACEMS Certification and Recertification

(A) The owner or operator subject to this rule may elect to certify the following emission monitoring systems:

(i) A SCEMS, not including time-shared CEMS, provided that:

(~~I~~A) Only commercially available SCEMS instrumentation is capable of accurately and precisely measuring the particular air contaminant concentration or other parameters used to calculate the emission concentration; and

(~~H~~B) The concentrations and/or emissions required to be monitored would be equivalent to that monitored by a CEMS for the applicable averaging period.

(ii) A time-shared CEMS, provided that the units to be monitored by the time-shared CEMS are:

(~~I~~A) Physically close to one another, and the proposed time-shared CEMS is approximately equidistant from all monitored units;

(~~H~~B) Similarly sized and configured, and their gaseous emissions are of approximately the same compositions and concentrations; and

(~~HH~~C Subject to a similar concentration limit.
)

(iii) An ACEMS, provided that the system, being designed to provide direct or indirect emission data, has the same precision, reliability, accessibility, and timeliness as a certified CEMS.

(B) Owners or operators of the SCEMS or ACEMS shall comply with the requirements specified in paragraphs (f)(1) through (f)(12) for the SCEMS or ACEMS certification and recertification.

(g) Quality Assurance/Quality Control (QA/QC) Plan

The purpose of a QA/QC plan is to ensure that the CEMS generates, collects and reports valid data that is precise, accurate, complete, and of a quality that meets the requirements, performance specifications, and standards of Rules 218.2 and 218.3.

(1) The owner or operator of the CEMS shall develop and store on site a QA/QC plan, which at a minimum shall include the step-by-step procedures and operations for the quality assurance tests, preventive maintenance, corrective action, recordkeeping, and reporting, in accordance with Guidelines for Continuous Emission Monitoring System Quality Assurance and Quality Control Plan.

(2) For a new CEMS QA/QC Plan, the owner or operator of the CEMS shall submit to the Executive Officer for approval a CEMS QA/QC Plan within 45 days of CEMS installation and no later than 30 days before the certification tests.

(3) For a revised CEMS QA/QC Plan, the owner or operator of CEMS shall submit to the Executive Officer for approval a CEMS QA/QC Plan within 30 days if:

(A) A CEMS modification was conducted and subject to the requirements specified in paragraphs (f)(2), (f)(3), (f)(8) or (f)(10); or

(B) A QA/QC plan revision is required by a provision of Rules 218.2 and 218.3 or requested by the Executive Officer.

(4) Alternative Quality Assurance Practices

The owner or operator of a CEMS may develop alternative CEMS operational test requirements to be included in the CEMS QA/QC procedures that assure data of at least the equivalent quality. These alternative QA/QC procedures shall be submitted with the facility QA/QC Plan and are subject to the approval of the Executive Officer.

(h) Recordkeeping Requirements

(1) The owner or operator of the CEMS, shall maintain records for any CEMS data measured and calculated:

(A) In accordance with Rule 218.3 paragraph (e)(4) and Rule 218.3 subdivision (i); and

(B) For the purpose of demonstrating compliance with any applicable, rule, regulation, or permit condition.

(2) The owner or operator of the CEMS, shall:

(A) Maintain records for the date, time, and description of the occurrence of the CEMS non-operation pursuant to paragraphs (e)(2) and (e)(3);

(B) Maintain a copy of the reports specified in subdivision (i);

(C) Record the cause, date, time period, and corrective action taken for any CEMS out-of-control period;

(D) Record the date, time, and description of the occurrence of any repair, adjustment, or maintenance to the CEMS;

(E) Record the date, time, and emission data of any measurement or test conducted for CEMS certification or recertification; and

(F) Maintain on site all records of any activity conducted according to the QA/QC plan, including but not limited to logbook, measured data and data processing, test reports, and certificates of calibrations gases being used.

(3) Records specified by paragraphs (h)(1) and (h)(2) shall be:

(A) Maintained for a minimum period of three~~two~~ years or a period specified in any rule or permit condition, whichever is longer; and

(B) Made available to the Executive Officer upon request.

(i) Reporting Requirements

(1) Semi-Annual Reporting

(A) The owner or operator of the CEMS shall provide a summary of the concentration and/or emission rate data, as applicable, obtained from the CEMS, as well as any additional information specified by the Executive Officer, to evaluate the accuracy and precision of the measurements.

(B) Unless a more frequent reporting schedule is required in another South Coast AQMD rule or permit condition, the owner or operator of the CEMS shall submit a summary of the information specified in subparagraph (i)(1)(A) to the Executive Officer for every six-month period, from January 1 to June 30 and from July 1 to December 31, respectively, no later than 60 days after the six-month period.

(2) Excess Emission Reporting

The owner or operator of the CEMS shall notify the Executive Officer by calling 1-800-CUT-SMOGof the concentration level and/or emission rate, as applicable, in excess of the emission limit specified in the applicable rule within 24 hours or the next business day, whichever is later, after such occurrence that includes:

(A) Time intervals, date, and magnitude of the excess concentration level, nature and cause of the excess concentration (if known), corrective action(s) taken, preventive measure(s) adopted, specific location of CEMS, the equipment or CEMS involved and the facility contact person.

(B) The averaging period used for data reporting shall correspond to the averaging period specified in applicable rule or permit condition limiting the concentration and/or emission rate.

(3) CEMS Failure Reporting

(A) If there is a CEMS failure pursuant to paragraph (e)(2) that lasts more than 24 hours, the owner or operator of the CEMS shall notify the Executive Officer by calling 1-800-CUT-SMOG within 24 hours or the next business day, , whichever is later, after CEMS failure occurs.

(B) The notification shall include, at a minimum, the following information:

(i) The cause of the CEMS failure;

(ii) The time or estimated time when the monitoring device became non-operational;

(iii) The time or estimated time the monitoring device returned (or will return) to normal operation; and

(iv) The maintenance performed or corrective and preventative actions taken to prevent future non- operational conditions.

(4) CEMS Shutdown Reporting

In the event of a scheduled CEMS shutdown pursuant to paragraph (e)(3), the owner or operator of the CEMS shall submit:

(A) An initial notification by calling 1-800-CUT-SMOG, at least 96 hours prior to the scheduled CEMS shutdown, specifying the scheduled date and time for unit non-operation and CEMS shutdown;

(B) A written report, within 24 hours of CEMS shutdown that the unit is non-operational and there are no emissions during the period of unit shutdown pursuant to paragraph (e)(4); and

(C) A final notification by calling 1-800-CUT-SMOG, at least 8 hours prior to the scheduled CEMS restart, specifying the scheduled time for the CEMS restart and unit restart.

(5) CEMS Relative Accuracy Test Audit (RATA) Reporting

The owner or operator of the CEMS shall submit the RATA report on or before the end of the quarter following the date of a required test~~within 60 days upon completion of the test~~ and shall include all measured data for each run, and relative accuracy or *de minimis* value being calculated.

(j) Posting of Written Approval of CEMS Certification

The owner or operator of a certified CEMS shall affix a written notice of approval or copy thereof, upon the unit or within 26 feet of the unit as prescribed in Rule 206 – Posting of Permit to Operate, in a manner such that it is clearly visible, legible, and safely accessible. In the event that the unit is constructed or operated that the notice of approval or copy cannot be so placed, such notice or copy shall be mounted on a location approved by the Executive Officer.

(k) Exemption

(1) If a rule or permit specify CEMS requirements that are different than requirements specified in Rule 218.2~~3~~, the owner or operator shall adhere to CEMS requirements in the rule or permit, unless ~~otherwise notified by~~ the Executive Officer provides written notice to the owner or operator that the rule or permit specified CEMS requirements are less stringent than Rule 218.2.

ATTACHMENT F-2

(Adopted March 5, 2021)(Amended [*Date of Adoption*])

[*RULE INDEX TO BE ADDED AFTER RULE ADOPTION*]

PROPOSED AMENDED RULE 218.3 CONTINUOUS EMISSION MONITORING SYSTEM: PERFORMANCE SPECIFICATIONS

(a) Purpose

The purpose of Rule 218.3 is to establish performance specifications on certification and quality assurance and quality control program for Continuous Emission Monitoring Systems (CEMS), Alternative Continuous Emission Monitoring System (ACEMS), and Semi-Continuous Emission Monitoring System (SCEMS). Unless otherwise specified, the owner or operator of the CEMS, ACEMS, or SCEMS is responsible for compliance with the requirements specified in this rule.

(b) Applicability

(1) This rule shall apply to an owner or operator of a CEMS, ACEMS, or SCEMS that is required by a South Coast AQMD rule, regulation or permit condition, except for a system that is to monitor:

(A) Performance of the basic or control equipment and not to determine compliance with any rule emission limit or emission standard; or

(B) NOx or SOx emissions subject to the Regulation XX - Regional Clean Air Incentives Market (RECLAIM).

(2) All requirements specified for CEMS in this rule shall be applicable for ACEMS and SCEMS, unless otherwise specified.

(c) Definitions

(1) ALTERNATIVE CONTINUOUS EMISSION MONITORING SYSTEM (ACEMS) means a system that use process or control device operating parameter measurements and a conversion equation, a graph, or computer program to produce results in units of the applicable emission limitation or standard on a continuous monitoring basis, which is demonstrated to the Executive Officer as having the same precision, reliability, accessibility, and timeliness as the data provided by a certified CEMS or certified CEMS component in accordance with Rule 218.2 and Rule 218.3.

(2) ANALYZER means the part of the continuous emission monitoring system (CEMS) that analyzes the appropriate gaseous constituents of the conditioned gaseous sample or measures stack gas volumetric flow and fuel flow rates, as applicable.

(A) Pollutant Analyzer - the part of the CEMS that detects the air pollutant concentrations and represents those concentrations in a signal output.

(B) Diluent Analyzer - the part of the CEMS that detects oxygen (O_2), carbon dioxide (CO_2) or other diluent gas concentrations and represents those concentrations in a signal output.

(C) Fuel Flowmeter - the part of the CEMS that detects the parameters of all essential measurement sub-systems (e.g., temperature, pressure, differential pressure, frequency, gas density, gas composition, heating value) and generates signal outputs which are a function of the fuel flow rate and all essential measurement sub-system parameters.

(D) Stack Flowmeter - the part of the CEMS that detects the parameters from all essential measurement sub-systems (e.g., temperature, static and atmospheric pressure, gas density, gas composition, molecular weight, gas moisture content) and generates signal outputs which are a function of the stack gas volumetric flow rate and all essential measurement sub-system parameters.

(3) CALIBRATION means a procedure performed to ensure that the CEMS accurately measures and records the concentration of the specific air pollutant or diluent gas, flow rate and other parameters necessary to generate the required data, as evidenced by calibration error tests and achieved by periodic manual or automatic adjustment.

(4) CALIBRATION DRIFT - change in the CEMS output or response over a specific period of normal continuous operation when the air pollutant or diluent gas concentration at the time of the measurements is the same known value.

(5) CALIBRATION ERROR means the ratio of the absolute value of the difference between the air pollutant or diluent gas concentration indicated

by the CEMS and the known concentration of the calibration gas, to the upper span value, expressed as a percentage.

(6) CALIBRATION ERROR TEST means a procedure performed to determine CEMS response to a given gaseous compound concentration by means of injecting a certified calibration gas mixture into the CEMS as close to the probe tip as practical.

(7) CEMS MODIFICATION means a modification to a CEMS component that is identified on the CEMS final certification letter, or a modification to the CEMS sampling interface, analyzer, or data acquisition and handling system that is deemed by the Executive Officer to have a potential for adversely affecting the ability of the CEMS to provide accurate, precise and timely data representative of emissions for the unit being monitored.

(8) CERTIFIED CEMS means a CEMS installed, tested, operated, maintained, and calibrated according to the applicable requirements of Rules 218.2 and 218.3; that has met the applicable performance specifications of Rule 218.3 and, has received written approval and conditions thereto applying, from the Executive Officer.

(9) CONFIDENCE COEFFICIENT means the 2.5 percent error confidence coefficient for the 95 percent confidence interval of a series of tests.

(10) CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) means the total combined equipment and systems required to continuously determine air pollutants and diluent gas concentrations and/or mass emission rate of a source effluent (as applicable). The CEMS consists of three major subsystems: sampling interface, analyzer, and data acquisition and handling system.

(11) DATA ACQUISITION AND HANDLING SYSTEM (DAHS) means the part of the CEMS that records and processes data generated by the analyzer, thus creating a permanent record of the output signal in terms of concentration, flow rate, and any other applicable parameter *necessary* to generate the required data in units of applicable standard. The DAHS consists of all equipment such as a computer and software required to record data and convert the original recorded values to any values required for reporting.

(12) DILUENT GAS means a constituent of the flue gas that is measured by the CEMS, not because it is a pollutant, but because its measurement can be used to provide values used to calculate emission levels.

(13) FORMER RECLAIM FACILITY means a facility, or any of its successors, that was in the NOx Regional Clean Air Incentives Market (RECLAIM) as of January 5, 2018, as established in Regulation XX, that has received a final determination notification, and is no longer in the NOx RECLAIM program.

(14) LINEARITY ERROR means the percentage error in linearity expressed in terms of the ratio of the absolute value of the difference between the reference value and the mean CEMS response value, to the reference value.

(15) LOWEST VENDOR GUARANTEED SPAN RANGE means the lowest span range that the vendor guarantees to be capable of meeting all current certification requirements of Rules 218.2 and 218.3, as applicable.

(16) MAINTENANCE means the preventive evaluation and adjustment (if necessary) of CEMS performed at specified intervals to preclude system failure. Maintenance may be performed as recommended by the manufacturer or a documented standard operating procedure determined through operating experience and approved by the Executive Officer. Repairs to a malfunctioning system are excluded from this definition.

(17) NINETY-FIVE PERCENT CONFIDENCE INTERVAL means the statistical estimation denoting a range of values which is expected to include a true value with a 95 percent probability.

(18) PUBLICLY OWNED SEWAGE-WATER-LANDFILL FACILITY means a sewage treatment facility, water delivery facility, or landfill gas control or processing facility, that is owned and operated by a public agency.

(19) QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) PLAN means a written document in which the specific procedures for the operation, calibration and maintenance of a certified CEMS are described in detail, including additional quality assurance assessments and the corrective action system. The purpose of this plan is to ensure that the CEMS generates, collects and reports valid data that is precise, accurate,

complete, and of a quality that meets the requirements, performance specifications, and standards of Rules 218.2 and 218.3.

(20) RECLAIM means the Regional Clean Air Incentives Market.

(21) RECLAIM FACILITY means a facility, or any of its successors, that was in the Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX.

(22) REFERENCE METHOD means the official test method employed by the South Coast AQMD to determine compliance with the rules or permit conditions. A list of reference methods is identified in Table 1.

(23) RELATIVE ACCURACY means the absolute mean difference between the gas concentration or emission rate determined by the CEMS and the value determined by the RM plus 2.5 percent error of confidence coefficient of a series of tests, divided by the mean of the RM tests.

(24) RELATIVE ACCURACY TEST AUDIT means the relative accuracy test expressed in terms of the ratio of the sum of the absolute mean difference between the CEMS-generated data and the value determined by the applicable reference method or applicable standard, and the absolute confidence coefficient, to the mean of the reference method or applicable standard value for concentration, flow, or mass emission rate. The calculation is based on raw measured data that are not corrected by diluent gas.

(25) RESPONSE TIME means the time interval from a step change in the air pollutant or gas diluent concentration to the time when 95 percent of the corresponding final value is reached as displayed on the CEMS data recorder or acquisition system. The response time is determined by introducing a certified gas mixture into the CEMS upstream of the sampling interface and as close to the probe inlet as practicable.

(26) SAMPLING INTERFACE means the part of the CEMS that performs sample acquisition using one or more of the following operations: extraction, physical/chemical separation, transportation, or conditioning of a representative sample from a designated unit.

(27) SEMI-CONTINUOUS EMISSION MONITORING SYSTEM (SCEMS) means an emission monitoring system that is different from a regular CEMS on response time and data acquisition frequency. SCEMS continuously takes and records measurements (e.g. concentration, mass

emission, flow rate) at a minimum of once in every fifteen (15) minutes. SCEMS includes but is not limited to gas chromatography, integrated sensitized tape analyzer, other sample integration based technologies, and time-shared CEMS.

(28) SPAN RANGE means the full range that is 0% to 100% of the data display output that a monitor component has been calibrated to measure.

(29) SYSTEM BIAS means the difference between the gas concentrations exhibited by the CEMS when a calibration gas is introduced at a location upstream of the sampling interface, and as close to the sampling probe inlet as practicable, and when the same calibration gas is introduced directly to the analyzer.

(30) TIME-SHARED CEMS means an emission monitoring system where the analyzer, and possibly the associated sample conditioning system, is used on more than one source. A time-shared CEMS is categorized as a type of SCEMS under Rules 218.2 and 218.3.

(31) UNIT means, for the purposes of this rule, a combustion source for which the continuous emission monitoring system, semi-continuous emission monitoring system, or alternative continuous emission monitoring system, monitors the source's emissions.

(32) UNIT OPERATING HOUR means a clock hour during which a unit combusts any fuel either for part of the hour or for the entire hour.

(33) UPPER SPAN VALUE means the upper range value of a span range that is 100% of the data display output that a monitor component has been calibrated to measure.

(34) ZERO GAS means a gas containing less than a specified amount of the pollutant or diluent gas which, when periodically injected into the CEMS, is used to check CEMS' response to the absence of the air pollutant or diluent gas.

(d) Implementation Schedule

(1) Prior to the implementation date specified in paragraphs (d)(2) to (d)(5), the owner or operator shall comply with:

(A) Rules 218 and 218.1 for a CEMS that is subject to paragraph (d)(2) or (d)(5); or

(B) Rule 2012 for a CEMS that is subject to paragraph (d)(3).

(2) For a CEMS certified to comply with Rules 218 and 218.1, the owner or operator of the CEMS shall meet the requirements of this rule no later than:

(A) The date an application is submitted to the Executive Officer between January 1, 2022, and January 1, 2025, for any CEMS certification or recertification pursuant to paragraph (f)(2) or (f)(3) of Rule 218.2;

(B) January 1, 2025, for any CEMS that was certified prior to January 1, 2022, but without an application submitted to the Executive Officer between January 1, 2022, and January 1, 2025, for a CEMS recertification pursuant to paragraph (f)(2) or (f)(3) of Rule 218.2; or

(C) The implementation date of a source-specific rule for which the CEMS shall be certified or recertified pursuant to paragraph (f)(2) or (f)(3) of Rule 218.2 as part of the implementation.

(3) For a CEMS certified to comply with Rule 2012, the owner or operator of the CEMS shall meet the requirements of this rule no later than:

(A) The date an application is submitted to the Executive Officer for any CEMS certification or recertification pursuant to paragraph (f)(2) or (f)(3) of Rule 218.2 that is within twenty-four (24) months after the NOx RECLAIM facility has been notified as a former RECLAIM facility;

(B) Twenty-four (24) months after the NOx RECLAIM facility has been notified as a former RECLAIM facility, if there is no CEMS recertification pursuant to paragraph (f)(2) or (f)(3) of Rule 218.2 during this 24-month period; or

(C) The implementation schedule of a source specific rule for which the CEMS shall be certified or recertified pursuant to paragraph (f)(2) or (f)(3) of Rule 218.2 as part of the implementation.

(4) If a CEMS that is subject to paragraph (d)(2) is sharing the sampling interface or other component(s) with another CEMS that is subject to paragraph (d)(3), the owner or operator of the CEMS shall meet the requirements of this rule based on the later implementation date determined by paragraphs (d)(2) and (d)(3).

(5) The owner or operator of a publicly owned sewage-water-landfill facility that has a CEMS certified to comply with Rules 218 and 218.1, shall meet the requirements of this rule no later than January 1, 2025, or the implementation date of a source-specific rule requiring the CEMS be certified or recertified, whichever is later.

(e) Pre-Certification Requirements

Prior to any certification, recertification, or relative accuracy test, the owner or operator of the CEMS shall meet all of the following standards:

(1) CEMS Location

The CEMS shall be installed at a location that enables measurements of air pollutant and diluent gas concentration, and flow rates are representative of the stack emissions of the unit.

(2) Sampling Location

(A) The monitoring system sampling probe tip and the reference method sampling port locations shall be determined according to the South Coast AQMD Method 1.1.

(B) The monitoring sampling probe shall be located where the sample obtained is representative of emissions.

(C) Each probe shall not interfere with any other probe when in use.

(D) The owner or operator may choose other sample locations subject to a written approval of the Executive Officer.

(E) If an alternate location is chosen as allowed in subparagraph (e)(2)(D) which does not conform with the South Coast AQMD Method 1.1:

(i) The absence of cyclonic flow for a stack flow monitor probe shall be demonstrated using the South Coast AQMD method 1.1, Section 2.4 in the Test Manual, Chapter X, Section 1.4 - "Alternative Site Selection Method", or 40 CFR, Part 60, Appendix A, Method 1, Section 11.4 – "Verification of Absence of Cyclonic Flow"; and

(ii) The absence of stratification shall be demonstrated using the South Coast AQMD method in the Test Manual, Chapter X, Section 13 - "Determination of Gaseous Constituent Stratification"; or

(iii) In the presence of stratification, alternatives to sampling site selection shall comply with the requirements specified in Attachment B section (C).

(3) Span Range

(A) The span range for air pollutant and diluent analyzers shall be set such that all data points are within 10 to 95 percent of the upper span value under normal operating conditions for the unit.

(B) For air pollutant analyzers:

(i) The upper span value shall be set between 150 and 200 percent of the concentration limit.

(ii) The upper span value may be set outside of the 150 to 200 percent of the concentration limit, but no lower than 120 percent, provided that:

(~~I~~A) The owner or operator of the CEMS demonstrates that the span range will not be exceeded. Such demonstrations shall include, but not limited to, historical emissions data, historical process information, and historical operational information.

(~~II~~B) A written approval from the Executive Officer shall be obtained prior to the upper span value being modified outside of the 150 to 200 percent of the concentration limit.

(C) If the owner or operator of the CEMS cannot meet both requirements specified in subparagraphs (e)(3)(A) and (e)(3)(B), the owner or operator of the CEMS shall be exempt from subparagraph (e)(3)(A), provided that the air pollutant analyzer is set at a span range approved by the Executive Officer that allows data points to fall at or below 10 percent of the upper span value.

(D) If an air pollutant analyzer monitors a unit with the concentration limit less than 5 ppm, the owner or operator of the CEMS shall be exempt from subparagraph (e)(3)(B), and the air pollutant analyzer shall be set at a span range approved by the Executive

Officer, provided that the approved upper span value for the analyzer is not higher than 10 ppm.

(E) The owner or operator of a CEMS analyzer with multiple span ranges shall set the span ranges for this analyzer pursuant to subparagraphs (e)(3)(A) through (e)(3)(D), for each span range or the combined span ranges, except for:

(i) The higher span range of a dual range analyzer; or

(ii) The highest span range of an analyzer with more than two span ranges.

(F) For diluent monitors, the span range shall be set such that the full range of oxygen and carbon dioxide concentrations can be measured. The upper span value shall be set at 25.0 percent O_2 (maximum) and 1.0 percent CO_2 (minimum) concentrations, or at a value approved by the Executive Officer.

(4) The Data Acquisition and Handling System (DAHS) of the CEMS shall meet the following requirements:

(A) Record data from monitored parameters at least once every minute for CEMS.

(B) Record data from monitored parameters at least once every 15 minutes for SCEMS.

(C) The acquisition rate shall be set at a constant rate such that the data points are equally spaced.

(D) The sample acquisition rate during certification and relative accuracy test audit(s) shall be the same as the sample acquisition rate during CEMS or SCEMS normal operation.

(E) Record all status codes specified in Table 2 for all data points.

(F) Utilize all valid data points to determine compliance with applicable limit(s), certification testing, and relative accuracy test audit(s).

(G) Incorporate all applicable data handling requirements specified in subdivision (i).

(5) Operational Period

The CEMS operational period prior to any certification tests shall be a minimum of 168 continuous hours.

(f) Certification Test Requirements and Specifications

The owner or operator of the CEMS shall perform a series of certification tests to demonstrate the acceptability of CEMS performance for a CEMS certification or recertification. Unless specified otherwise, the required certification tests and specifications shall, at a minimum, include the following:

(1) Seven-Day Calibration Drift Testing

The owner or operator of a CEMS shall perform a seven-day calibration drift test for each span range for pollutant analyzers, diluent analyzers, and stack flow monitors.

(A) A seven-day calibration drift test shall be comprised of a series of eight (8) calibration error tests during a seven-day period performed once each day with an interval of 24 hours plus a 2-hour grace period for each test, when the CEMS is in continuous operation.

(B) Each calibration error test shall be performed for:

(i) Pollutant and diluent analyzers, at the low and high ranges, which is at 0 to 20, and 80 to 100 percent of the upper span value; and

(ii) Stack flow monitors, by introducing a zero-reference value to the transducer or transmitter.

(C) Calibration error for each calibration error test during the entire testing period, as calculated using Equation 1 in Table 3, shall not exceed:

(i) 2.5 percent of the upper span value for pollutant and diluent analyzers, and

(ii) 3.0 percent of the upper span value for stack flow monitors.

(2) Analyzer Enclosure

(A) The analyzer shall be contained in an environmentally controlled enclosure and equipped with an alarm and temperature recording device that provides an audible alert that the temperature drift for the analyzer enclosure exceeds the manufacturer's recommended specifications. The owner or operator of the CEMS shall make corrective actions within 8 hours of receiving the audible alert.

(B) In lieu of subparagraph (f)(2)(A), the owner or operator of the CEMS shall perform the 2-hour calibration error tests in meeting

the analyzer enclosure requirement, provided that the 2-hour calibration error is performed:

(i) Once every two hours as close to 2-hour intervals as practicable, with total of thirteen consecutive tests performed;

(ii) When ambient temperature is expected to vary diurnally at least 30 degree Fahrenheit (°F); and

(iii) At the low and high ranges, which is at 0 to 20, and 80 to 100 percent of each span range respectively.

(iv) With calibration error meeting the requirements specified under subparagraph (f)(1)(C).

(C) The owner or operator of the CEMS shall be exempt from subparagraph (f)(2)(A), provided that the CEMS is located:

(i) In a geographic area where seasonal high and low temperatures do not exceed the operational temperature specifications for the analyzer;

(ii) In a geographic area where monthly maximum temperature variation is less than 30°F for all months of the year; and

(iii) The CEMS is located in a site that is protected from radiation and convection heating sources.

(3) Relative Accuracy Test Audit

The owner or operator of a CEMS shall perform a relative accuracy test audit for pollutant concentration that is not corrected by diluent gas, O_2/CO_2 diluent gas concentration, stack flow, and mass emission rate, whichever is applicable to the CEMS, in the as-found unit operating condition.

(A) There shall be a minimum of nine sets of test data generated.

(B) If the number of tests exceeds nine sets, data may be discarded if it is identified as an outlier according to the South Coast AQMD Technical Guidance Document R-004 (TGD R-004), or for valid reasons (e.g., process upsets, CEMS malfunction, etc.) which must be substantiated with appropriate documentation and subject to approval by the Executive Officer.

(C) The relative accuracy shall be calculated according to Equation 4 in Table 3 and expressed as a percentage.

(D) Alternatively, a *de minimis* value shall be determined according to Equation 5, Equation 6, and Equation 7 in Table 3 for pollutant/diluent gas, stack flow, and mass emission respectively.

(E) The owner or operator of the CEMS shall meet the following relative accuracy or *de minimis* value (no more than):

(i) For pollutant concentrations, a relative accuracy of 20.0 percent of the mean value of the reference method, or the *de minimis* concentration as follows:

Pollutant	*De minimis*
NOx	0.5 ppm (or 1.0 ppm when the rule or permitted concentration limit for the unit is higher than 5.0 ppm)
SO_2	2.0 ppm
CO	2.0 ppm (or the rule or permitted concentration limit for the unit when it is lower than 2.0 ppm)
Reduced Sulfur Compounds	4.0 ppm

(ii) For diluent concentrations, a relative accuracy of 10.0 percent of the mean value of the reference method, or a relative accuracy of 20.0 percent when the measured diluent gas, O_2 or CO_2, is at or below 15 percent, or the *de minimis* value of 1.0 percent diluent gas.

(iii) For stack flow monitoring systems including stack flow monitors and fuel flow measuring devices in conjunction with F-factor in determining stack flow, a relative accuracy of 15.0 percent of the mean value of the reference method, or the *de minimis* value when the mean stack gas velocity obtained by the reference method test is less than 15 feet per second.

(iv) For mass emission rates, a relative accuracy of 20.0 percent of the mean value of the reference method for mass emission rates, or the *de minimis* value when the mean stack gas velocity obtained by the reference method test is less than 15 feet per second.

(4) Within fourteen days of a relative accuracy test audit, the owner or operator of the CEMS shall demonstrate compliance with the following requirements:

(A) Response Time

(i) The response time for CO CEMS shall not exceed 1.5 minutes except where there is a technical limitation, in which case the response time shall be 5 minutes; and

(ii) The response time for all other CEMS and stack flow monitoring system shall not exceed 5 minutes.

(B) NOx Converter Efficiency

NOx converter efficiency test shall be conducted to indicate an average converter efficiency greater than 90 percent.

(C) Sampling System Bias Check

(i) The CEMS system bias shall not exceed 5.0 percent of each upper span range for pollutant analyzers.

(ii) The owner or operator of the CEMS shall include in the facility QA/QC Plan, criteria for excessive drift (e.g. control limits on cumulative drift) and appropriate diagnostic techniques to identify sources of analyzer drift and system bias when control limits are exceeded.

(D) Concentration Stratification

The owner or operator of the CEMS shall demonstrate the absence of stratification and locate the CEMS probe in accordance with Attachment B.

(E) Cyclonic Flow

If the CEMS determines mass emission rate, the owner or operator of the CEMS shall perform the cyclonic flow test pursuant to clause (e)(2)(E)(i).

(F) Linearity Error for Pollutant and Diluent Gas Analyzers

(i) A linearity error test shall be comprised of three data points for each of the three calibration gases~~tests~~ for each span range.

(ii) Each test shall be performed by introducing calibration gas into the CEMS at the low, middle, and high ranges, which are 20 to 30, 50 to 60, and 80 to 100 percent of the upper span value, respectively.

(iii) The test sequence (low, middle, and high) shall be repeated until three data points have been acquired for each calibration gas. The same calibration gas shall not be used twice in succession during the linearity error tests.

(iv) Linearity error shall not exceed 5.0 percent of the calibration gas concentration, as calculated pursuant to Equation 3 in Table 3.

(v) In lieu of the requirement as specified in clause (f)(4)(F)(iv), for a pollutant analyzer with an upper span value less than or equal to 5 ppm, linearity error shall not exceed 5.0 percent of the upper span value, as calculated pursuant to Equation 3a in Table 3.

(5) Alternative Emission Monitoring System (ACEMS)

(A) In lieu of certifying a CEMS according to the requirements specified in paragraphs (f)(1) through (f)(4), the owner or operator shall request the Executive Officer to certify an alternative emission monitoring system that is at a minimum equivalent in relative accuracy, precision, reliability, and timeliness to a CEMS for that unit, according to the criteria specified in 40 CFR Part 75 Subpart E.

(B) Substitute criteria is acceptable if the applicant demonstrates to the satisfaction of the Executive Officer that the proposed alternative monitoring device is at minimum equivalent in relative accuracy precision, reliability, and timeliness to a CEMS for that unit.

(C) Upon approval by the Executive Officer, the substitute criteria specified in subparagraph (f)(5)(B) shall be submitted to the

federal Environmental Protection Agency as an amendment to the State Implementation Plan (SIP).

(6) All certification tests shall be performed by testing firms/laboratories who have received approval through the South Coast AQMD's laboratory approval program.

(g) Quality Assurance Testing Requirements and Specifications

After completing the certification testing pursuant to subdivision (f), the owner or operator of the CEMS shall operate and maintain the CEMS according to the following quality assurance testing requirements and specifications, for all applicable analyzer span ranges of the CEMS, unless otherwise specified.

(1) Calibration Error

The owner or operator of a CEMS shall perform the calibration error test for pollutant analyzers, diluent analyzers, and stack flow monitors. The calibration error test is not applicable to an ACEMS or a fuel flow measuring device in conjunction with F-factor in determining stack flow.

(A) A calibration error test shall be performed for:

(i) Pollutant and diluent analyzers, for every 24 hours with a 2-hour grace period during which emissions are generated, at the low (0 to 20 percent) and high (80 to 100 percent) of the upper span value of each span range that has recorded data since the last calibration error test; and

(ii) Stack flow monitors, for every 14-day period during which emissions flow through the stack, by introducing a zero reference value to the transducer or transmitter.

(B) A calibration error test shall be performed within 4 hours of the unit restart and normal operation, if the unit restart is after a period longer than the testing cycle specified in subparagraph (g)(1)(A) when no emissions are generated.

(C) A successful calibration error test, with the calibration error calculated using Equation 1 in Table 3, shall not exceed two times the calibration error specification in subparagraph (f)(1)(C) for each range.

(D) Any calibration error test result, which does not exceed two times the calibration error specification in subparagraph (f)(1)(C) but

is greater than the specification in subparagraph (f)(1)(C), shall be addressed by the QA/QC Plan for possible remediation.

(E) Data recorded by the CEMS pollutant and diluent analyzers are validated for 26 clock hours (i.e., 24 hours plus a 2-hour grace period) beginning from the hour of completing a successful calibration error test, and either ending after 26 hours, or ending at the hour of failing any quality assurance test specified under subdivision (g) within the 26-hour period.

(F) Data recorded by the CEMS at the unit restart that are prior to the hour of completing a successful calibration error test are validated starting from the hour of unit restart, if the owner or operator of the CEMS conducts a successful calibration error test in accordance with subparagraphs (g)(1)(B) and (g)(1)(C).

(2) Relative Accuracy Test Audit

The owner or operator of the CEMS shall conduct the relative accuracy test audit for pollutant concentration that is not corrected by diluent gas, O_2/CO_2 diluent gas concentration, stack flow, and emission rate, whichever is applicable to the CEMS.

(A) A relative accuracy test audit shall be performed annually no later than the end of the calendar quarter of the previous relative accuracy test, in the as-found unit operating condition.

(B) During any relative accuracy test audit, the owner or operator shall comply with all the requirements in paragraphs (f)(3) and (f)(4), except that the owner or operator of the CEMS:

(i) Is not required to conduct linearity error check.

(ii) May request a waiver from stratification and cyclonic flow requirements specified in subparagraphs (f)(4)(D) and (f)(4)(E) respectively, by submitting to the Executive Officer, for approval, any applicable documentation or previous test or historical data that meets the stratification and cyclonic flow requirements.

(C) The CEMS shall meet the relative accuracy or *de minimis* standards as specified in paragraph (f)(3).

(D) If the unit for which the CEMS is certified to monitor is not operating or generating emissions when a relative accuracy test

audit is due, the relative accuracy testing audit shall be performed within 14 days after the unit is restarted and resumes normal operation.

(3) Cylinder Gas Audit for Pollutant and Diluent Gas Analyzers

(A) The owner or operator of the CEMS shall conduct a cylinder gas audit:

(i) For every calendar quarter when relative accuracy test audit is not conducted, but in no more than three quarters in succession;

(ii) According to the provisions of 40 CFR 60, Appendix F; and

(iii) Using calibration gas as specified in subdivision (h).

(B) The owner or operator of the CEMS is not required to conduct the cylinder gas audit for a calendar quarter when it is due, provided that within that calendar quarter:

(i) The CEMS has passed a linearity error check according to subparagraph (f)(4)(F) or the provisions of 40 CFR 75, Appendix A; or

(ii) The accumulative unit operating hours are no more than 168 hours.

(4) The owner or operator of an ACEMS shall conduct:

(A) Daily checks with the ACEMS modeling software to:

(i) Verify that the emission values generated by the ACEMS modeling software are consistent as certified, given specific parameter inputs;

(ii) Perform the daily check pursuant to the same schedule specified in clause (g)(1)(A)(i) and subparagraph (g)(1)(B); and

(iii) Validate the same time period as defined in subparagraph (g)(1)(E) with a successful daily check.

(B) Periodic calibrations of the sensors pursuant to manufacturer's specifications for each component.

(5) The owner or operator of a stack flow monitor shall conduct:

(A) Daily flow monitor interference checks, according to the same schedule as specified in clause (g)(1)(A)(i) and subparagraph

(g)(1)(B), with each interference check validating the same time period as specified in subparagraph (g)(1)(E); and

(B) A leak detection check no later than the end of each calendar quarter, if the stack flow is determined by a differential pressure flow monitor.

(6) The owner or operator of a fuel flow measuring device in conjunction with F-factor in determining stack flow shall:

(A) Maintain the fuel flow measuring device in accordance with the manufacturer's recommendation; and

(B) Include the maintenance schedule and activities in the CEMS QA/QC plan.

(h) Calibration Gas and Zero Gas

(1) For the purpose of Rules 218.2 and 218.3, the owner or operator of the CEMS shall ulitilize the calibration gas identified in the following:

(A) U.S. EPA Protocol Gas that are calibration gas mixtures manufactured, analyzed and certified in accordance with the Section 2 "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards" - EPA-600/R-12/531, May 2012, or U.S. EPA's the most recently published protocol for certification of gaseous certification standards.

(B) National Institute of Standards and Technology (NIST) Standard Reference Materials (SRM).

(C) NIST Standard Reference Material-Equivalent Compressed Gas Primary Reference Materials that are calibration gas mixtures listed in a declaration of equivalence in accordance with subparagraph (h)(1)(A).

(D) NIST Traceable Reference Materials that are calibration gas mixtures tested by and certified by NIST to have a certain specified concentration of gases. NIST Traceable Reference Materials may have different concentrations from those of standard reference materials.

(E) NIST/EPA-approved certified reference materials (CRM) that are calibration gas mixtures approved by U.S. EPA and NIST as having specific known chemical or physical property values certified by a technically valid procedure as evidenced by a

certificate or other documentation issued by a certifying standard-setting body.

(F) For gas calibration standards not covered by programs specified in subparagraphs (h)(1)(A) through (h)(1)(E), the owner or operator of the CEMS shall obtain the Executive Officer's approval for using any of the following alternatives:

(i) The Manufacturer of Calibration Gas' Intermediate Standard that is a compressed gas calibration standard assayed and certified by direct comparison to a calibration gas identified under subparagraph (h)(1)(B), (h)(1)(C), (h)(1)(D), or (h)(1)(E), in accordance with Section 2.1.3.1 of the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards" - EPA-600/R-12/531, May 2012, or U.S. EPA's the most recently published protocol for certification of gaseous certification standards;

(ii) NIST Research Gas Mixture that is a calibration gas mixture developed by agreement of a requestor and NIST that NIST analyzes and certifies as "NIST traceable"; or

(iii) The manufacturer of calibration Gas' alternative certification protocol for the specific compound or compounds subject to the Executive Officer's approval.

(~~I~~A) The procedures of the U.S. EPA Protocol shall be used for gas calibration standards, except that the manufacturer of calibration gas must identify a recertification period and submit data documenting the applicability of this period. The manufacturer of calibration gas may submit alternative performance standards for calibration gas certification and recertification, based on supporting technical data also provided by the manufacturer of calibration gas.

(~~H~~B) If there is no existing National Institute of Standards and Technology (NIST) standard for

the measured parameter, the manufacturer of calibration gas may submit an alternative reference standard and the supporting technical data that define the stability, accuracy, and precision of the alternative reference standard.

(~~H~~C) The owner or operator of the CEMS may submit an alternative protocol to the U.S. EPA Protocol, provided that the owner or operator of the CEMS demonstrates through supporting technical data that the procedures therein are not applicable to the constituent in the calibration gas standard being certified.

(G) Compressed and/or filtered air, such as instrument air, may also be used instead of oxygen span gas provided that the owner or operator demonstrates, to the satisfaction of the Executive Officer, that it is of equivalent quality to the calibration gas standards above. As part of such documentation, the owner or operator shall include in their QA/QC plan the process or operation in producing such compressed and/or filtered air and periodically checking that compressed air and/or filtered air continues to meet the calibration gas standards.

(2) Zero Gas

The owner or operator of the CEMS shall ulitilize zero gases meeting the following criteria:

(A) For gaseous air pollutant monitors, the zero gas shall be certified by the manufacturer to contain no more than 0.1 ppm of the air pollutant analyzed by the subject monitor or 1.0 percent of the applicable standard, whichever is less.

(B) For carbon monoxide monitors, the zero gas shall be certified by the manufacturer to contain less than 0.5 ppm carbon monoxide or 1.0 percent of the applicable standard, whichever is less.

(C) For carbon dioxide and oxygen monitors, the zero gas shall be certified by the manufacturer to contain less than 1.0 ppm carbon dioxide or oxygen.

(D) Compressed and/or filtered air, such as instrument air, may also be used instead of zero gas provided that the owner or operator demonstrates, to the satisfaction of the Executive Officer, that it is of equivalent quality to the above zero gas standards. As part of such documentation, the owner or operator shall include in their QA/QC plan the process or operation in producing such compressed and/or filtered air and periodically checking that compressed air and/or filtered air continues to meet the zero gas standards.

(i) Data Handling

(1) Data Points Below 10 Percent of the Upper Span Value

If a data point falls below 10 percent of the upper span value, the owner or operator of the CEMS shall record and report that data point according to the following:

(A) For a CEMS analyzer with certified single span range, the owner or operator of the CEMS shall report any data point that falls below 10 percent of the upper span value, at the 10 percent value of the upper span value.

(B) For a CEMS analyzer with certified multiple span ranges, the owner or operator of the CEMS shall report a data point at:

(i) Ten (10) percent of the upper span value of the higher span range if the data point is below 10 percent of the upper span value of the higher span range but above 95 percent of the upper span value of the lower span range.

(ii) Ten (10) percent of the upper span value of the:

(~~I~~A) Lower span range if the data point is below 10 percent of the upper span value of the lower span range for a dual range analyzer; or

(~~II~~B) Lowest span range if the data point is below 10 percent of the upper span value of the lowest span range for an analyzer with more than two span ranges.

(iii) The monitored value if the data point is within 10 to 95 percent of the upper span value of any span range.

(C) In lieu of subparagraphs (i)(1)(A) and (i)(1)(B), in the event that any data point falls below 10 percent of the upper span value of anythe span range ~~that is the lowest vendor guaranteed span range for that CEMS analyzer~~, the owner or operator of the CEMS shall report the data point at:

(i) Ten (10) percent of the upper span value; or

(ii) The actual measured value, provided that the CEMS meets the Supplemental and Alternative Performance Requirements that are specified in Attachment A, Table A-1 of this rule.~~;~~ or

(iii) The actual measured value at or above the lowest non-zero value chosen in the span range tested, provided that the CEMS meets the Supplemental and Alternative Performance Requirements that are specified in Attachment A, Table A-2 of this rule.

(D) Data points recorded and reported pursuant to clause (i)(1)(A) and subparagraphs (i)(1)(B) and (i)(1)(C)(i), shall be flagged as below 10 percent of the upper span value for CEMS status code.

(2) Data Points Above 95 Percent of the Upper Span Value

If a data point is above 95 percent of the upper span value , the owner or operator of the CEMS shall record and report the data point according to the following:

(A) For a CEMS analyzer with certified single span range, the permit holder and operator of the CEMS shall record any data point that is above 95 percent of the upper span value, at the 95 percent of the upper span value.

(B) For a CEMS analyzer with certified multiple span ranges, the owner or operator of the CEMS shall report the data point at:

(i) Ten (10) percent of the upper span value of the higher span range, or a value determined pursuant to clause (i)(1)(C)(iii), if the data point is below 10 percent of the upper span value of the higher span range but above 95 percent of the upper span value of the lower span range.:

(ii) Ninety-Five (95) percent of the upper span value of:

(~~I~~A) The higher span range if it is above 95 percent of the upper span value of the higher span range for a dual range analyzer; or

(~~H~~B) The highest span range if it is above 95 percent of the upper span value of the highest span range for an analyzer with more than two span ranges.

(iii) The monitored value if the data point is within 10 to 95 percent of the upper span value of any span range.

(C) The owner or operator of the CEMS shall:

(i) Flag any data point that is recorded and reported pursuant to clause (i)(2)(A) and subparagraph (i)(2)(B)(ii) as above 95 percent of upper span value for CEMS status code; and

(ii) Calculate a spiking data percentage for each calendar quarter using the following equation:

Spiking Data Percentage = F/T x 100%

Where:

F is the numberof flagged one-minute data points recorded pursuant to clause (i)(2)(C)(i) for the calendar quarter during unit operation, excluding CEMS out-of-control period and the period when the unit is not subject to any emission limit; and

T is the total numberof one-minute data points recorded for the calendar quarter during unit operation, excluding CEMS out-of-control period and the period when the unit is not subject to any emission limit.

(D) The owner or operator of a CEMS shall submit a CEMS application within 30 days to certify an additional span range, if in any consecutive four calendar quarter period, there are two calendar quarters that for each quarter:

(i) The percentage determined pursuant to clause (i)(2)(C)(ii) is over 1.0 percent; and

(ii) The total unit operating hours for the quarter are more than 50 hours.

(3) If the owner or operator of a certified CEMS is meeting the quality assurance requirements as specified in subdivision (g), data recorded and reported pursuant to paragraphs (i)(1) and (i)(2) shall be valid data for quantification, and available for the purpose of determining CEMS data availability.

(4) Emission Data Averaging

The owner or operator of the CEMS shall perform emission data averaging according to the following methods:

(A) An hourly average shall cover the 60-minute period commencing on the hour. An hourly average shall be computed as follows utilizing all valid data points:

(i) For a full or partial unit operating hour, at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.

(ii) For any unit operating hour in which required maintenance or quality-assurance activities are performed:

(~~I~~A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or

(~~II~~B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.

(B) For continuous monitoring systems used to demonstrate compliance for a 15-minute interval, emission data may be averaged for each 15-minute quadrant of the hour in which the unit operates, utilizing all valid data points.

(C) For continuous monitoring systems used to demonstrate compliance for an interval greater than one-hour, emission data may be averaged for the required interval utilizing hourly averages computed in accordance with subparagraph (i)(4)(A).

(D) Pollutant concentration correction by diluent gas shall be performed with the averaged value at the interval required for compliance demonstration.

(E) Comparable emission data average requirements specified in source specific rules or permit conditions shall supersede subparagraphs (i)(4)(A) through (i)(4)(D).

(5) CEMS Data Availability

(A) On a quarterly basis, the owner or operator of the CEMS shall calculate data availability for each analyzer using the following equation:

Data Availability = Y/Z x 100%

Where:

Y is the total unit operating hours during the calendar quarter when the monitor provided data, excluding the operating hours identified under subparagraph (i)(5)(B) and CEMS out-of-control period specified under subparagraph (i)(6)(A); and

Z is the total unit operating hours during the calendar quarter, excluding the operating hours identified under subparagraph (i)(5)(B).

(B) An operating hour that includes any of the following periods shall be excluded from the data availability calculation:

(i) Startup and shutdown period that is not subject to any emission limit according to the permit condition or source specific rule;

(ii) CEMS maintenance, repair, or audit for up to 30 hours for each calendar quarter; and

(iii) A unit Breakdown that meets all Breakdown provisions of Rule 430 and is deemed as a valid Breakdown.

(C) CEMS data availability threshold and subsequent requirements

(i) When data availability of any analyzer falls below 95 percent for one calendar quarter, the owner or operator of the CEMS shall:

(~~I~~A) Conduct a relative accuracy test audit within 45 days after the end of the calendar quarter with data availability below 95 percent, unless

another relative accuracy test audit is scheduled for the same calendar quarter in compliance of any other rule or permit requirement; and

(~~H~~B) Report the incident and corrective actions in the semi-annual report pursuant to Rule 218.2 (h)(1) for the period covering that calendar quarter.

(ii) When data availability of any analyzer falls below 95 percent for two consecutive calendar quarters, the owner or operator of the CEMS shall:

(~~I~~A) Within 30 days after the end of those two consecutive calendar quarters, provide a temporary alternative monitoring method identified in subparagraph (i)(7); and

(~~H~~B) Within 180 days after the end of those two consecutive calendar quarters, modify or replace the CEMS, and recertify the CEMS.

(iii) The Executive Officer may request the owner or operator of the CEMS to revise the QA/QC plan whenever data availability of any analyzer falls below the 95 percent threshold.

(6) CEMS Out-of-Control Period

(A) A CEMS out-of-control period:

(i) Occurs when the owner or operator fails any QA/QC test specified under subdivision (g), or fails to conduct the test when it is due; Notwithstanding, for a publicly owned sewage-water-landfill facility, if the QA/QC test fails based on a calibration error test, the CEMS out-of-control period shall be determined in accordance with the applicable provision(s) of the Code of Federal Regulations, Title 40 – "Protection of Environment", Part 60 – "Standards of Performance for New Stationary Sources", Appendix F – "Quality Assurance Procedures".

(ii) Begins with the hour of completion of the failed test(s), or the hour when it becomes overdue, and ends with the hour of completion of a passing test.

(B) The CEMS data generated during the CEMS out-of-control period shall be deemed invalid for emission quantification in any compliance demonstration

(C) The CEMS during the CEMS out-of-control period shall be considered unavailable for the data availability calculation.

(7) Alternative Data Aquisition

The owner or operator of the CEMS may choose from the following options for alternative data acquisition for any period when the certified CEMS does not provide valid data. Data generated by the alternative options shall be considered valid for emission quantification, and quality-assurance for the data availability calculation.

(A) South Coast AQMD Method 100.1 in conjunction with South Coast AQMD Methods 1.1, 2.1, 3.1, and 4.1, or South Coast AQMD Method 100.1 in conjunction with South Coast AQMD Method 3.1 and EPA Method 19.

(B) A standby CEMS (such as in a mobile van or other configuration), if:

(i) The standby CEMS has been certified by the South Coast AQMD as being equivalent to the corresponding permanently installed CEMS on relative accuracy, reliability, reproducibility, and data handling based upon the approval of a submitted standby CEMS plan;

(ii) The use of the certified standby CEMS does not exceed a total of 6 months for any unit(s) within a calendar year;

(iii) The owner or operator of the CEMS has notified the Executive Officer within 24 hours of the replacement use of the certified standby CEMS;

(iv) During the first 30 days of the use of the certified standby CEMS, the owner or operator has conducted a Cylinder Gas Audit (CGA) of the standby CEMS;

(v) The owner or operator of the CEMS shall notify the Executive Officer within the 30-day period if the standby CEMS shall be used longer than 30 days; and

(vi) After the first 30 days of using the standby CEMS, the owner or operator of the CEMS shall conduct at least one relative accuracy test audit of the standby CEMS and the relative accuracy test audit shall be conducted within 90 days of the initial use of the standby CEMS. This test shall be performed by testing firms/laboratories who have received approval from the South Coast AQMD through its Laboratory Approval Program.

(C) An alternative data acquisition method approved by the Executive Officer as equivalent to a South Coast AQMD certified CEMS on relative accuracy, reliability, reproducibility, and data handling.

(8) Automatic Calibration Data

If automatic adjustments to the monitor settings are made, the owner or operator shall conduct the calibration tests in a way that the magnitude of the adjustments can be determined and recorded.

(9) F-Factors

The owner or operator of the CEMS shall use in the CEMS calculations the F-factors listed in 40 CFR Part 60, Appendix A, Method 19, Table 19-2, as applicable. Alternatively, the owner or operator may submit a plan for Executive Officer's approval to develop F-factors for fuels not listed in Method 19, Table 19-2.

(10) Mass Emission Calculation

The owner or operator of the CEMS shall determine hourly mass emission rate according to:

(A) Equation 9 in Table 5, when the CEMS measures stack gas concentration and volumetric flow rate;

(B) Equation 10 in Table 5, when the CEMS measures stack gas concentration, heat input rate, and oxygen concentration; or

(C) Equation 11 in Table 5, when the CEMS measures stack gas concentration, heat input rate, and carbon dioxide concentration.

(11) Data Substitution Procedure

For the purpose of determining data substitution procedures for units with mass emission limits when there is a missing data period that includes any hour without sufficient valid data points required by subparagraph (i)(4)(A), the owner or operator of the CEMS shall:

(A) Apply the data substitution procedure pursuant to subparagraph (i)(11)(B) for:

(i) Pollutant concentration when there is a missing data period for pollutant concentration;

(ii) Stack flow when there is a missing data period for stack flow; or

(iii) Pollutant mass emission rate when there is a missing data period for both pollutant concentration and stack flow.

(B) Determine substituted data using the:

(i) Average of the recorded emission data for the unit operation hour immediately before the missing data period and the unit operation hour immediately after the missing data period, if the missing data period is:

(A) Less than or equal to eight continuous hours; or

(B) Less than or equal to ten continuous hours for each occurrence and no more than 20 accumulative hours for each calendar year, when the owner or operator conducts a test specified in Attachment A by spiking the sample to the CEMS with a calibration standard gas.

(ii) Maximum hourly emission data recorded for the previous 30 days with unit operation, commencing on the day immediately prior to the day the missing data occurred, if clause (i)(11)(B)(i) is not applicable.

(C) In lieu of subparagraphs (i)(11)(A) and (i)(11)(B), the owner or operator may elect to substitute data using missing data substitution procedures specified in 40 CFR Part 75.

(12) Mass Emission Calculation for Startup or Shutdown

For the purpose of determining startup or shutdown mass emission limits based on a minute interval, the owner or operator of the CEMS shall:

(A) Calculate the mass emissions for each minute according to the Equation 9, Equation 10, or Equation 11 in Table 5, whichever is applicable, using minute-level data rather than hourly-level data; and

(B) Totalize the mass emissions for all minutes of the startup or shutdown period.

(13) Data Substitution Procedure for Missing Minute Data for Startup or Shutdown

For the purpose of determining data substitution procedures for units with mass emission limits based on a minute interval for startup or shutdown pursuant to paragraph (i)(12), the owner or operator of the CEMS shall:

(A) Use data in the startup period for substitution when data from a startup period is missing and data in the shutdown period for substitution when data from a shutdown period is missing.

(B) Substitute data for any missing data minute, using:

(i) The average of all the valid one-minute mass emission datapoints for the startup or shutdown period, or the one-minute mass emission average of the previous successfully completed startup or shutdown, if the sum of the missing data minutes is less than or equal to fifty percent of all the minutes for the period; or

(ii) The highest one-minute mass emission average calculated for a startup or shutdown during the period below, whichever is more recent, if the sum of the missing data minutes is greater than fifty percent of all the minutes for the period:

(A) The previous ten successfully completed startups or shutdowns; or

(B) All successfully completed startups or shutdowns that occurred during the 12-month period prior to and including the most recent startup or shutdown.

(C) Determine the startup or shutdown emissions utilizing the applicable uncontrolled emission factor specified in Table 6 and the equipment maximum capacity if records of emission data are

not available for data substitution pursuant to subparagraph (i)(13)(B).

(D) Maintain records pursuant to Rule 218.2 paragraph (h)(3) or for a period including the 12-month period prior to the most recent startup or shutdown, whichever is longer.

(14) The owner or operator of a CEMS installed on a unit that is not operating may report valid zero emissions for the hours the unit is not operating provided the owner or operator:

(A) Demonstrates the unit is not operating and not generating emissions in accordance with Rule 218.2 paragraph (e)(4);

(B) Maintains the records for a minimum period of three years; and

(C) Complies with applicable requirements specified in Rule 218.2 paragraphs (e)(2) and (e)(3).

(j) SCEMS Requirements

(1) The owner or operator of a SCEMS shall:

(A) Comply with the pre-certification and certification requirements pursuant to subdivisions (e) and (f), except for the requirements on response time specified in subparagraph (f)(4)(A), where the response time for any SCEMS shall not exceed 15 minutes;

(B) Comply with the quality assurance requirements specified in subdivision (g);

(C) Comply with the data handling requirements pursuant to subdivision (i); and

(D) Use 15-minute data points instead of one-minute data points for the calculation required by subparagraph (i)(2)(C).

(2) The owner or operator of a time-shared CEMS shall meet all the following additional requirements for the time-shared CEMS:

(A) All units shall have mutually compatible range(s) of air pollutant gases at all times.

(B) Each unit shall have a data-reading period, at a minimum, equal to three times the longest response time of the system.

(C) For shared systems the response time shall be measured at the input or probe at each unit.

(D) A demonstration of response time for each unit shall be made during certification testing.

(E) Data shall not be collected following a switch of sample unit until a period of time equal to one response time has passed.

(F) Data shall be recorded every 15 minutes for each unit.

(G) Perform and record zero and span calibrations for each unit, including the calibration factors and correction values before and after every automatic calibration.

(H) Uniquely identify each unit on the DAHS.

(k) Moisture Correction

(1) If a moisture correction in reporting flow and concentration is required, the owner or operator of a CEMS shall measure and monitor moisture in the stack gas used for emission data calculations in accordance with the South Coast AQMD Technical Guidance Document R-001(TGD-R-001).

(2) Alternatively, with Executive Officer approval, for equipment moisture that emanates only from fuel combustion, the owner or operator of the CEMS shall calculate the moisture content using fuel properties and ambient air humidity data or, for processes that saturate the exhaust gas with moisture, such as a wet scrubber system, the owner or operator shall use the saturation temperature for moisture content data

(l) Exemption

(1) If a rule or permit specify CEMS requirements that are different than requirements specified in Rule 218.3, the owner or operator shall adhere to CEMS requirements in the rule or permit, unless ~~otherwise notified by~~ the Executive Officer provides written notice to the owner or operator that the rule or permit specified CEMS requirements are less stringent than Rule 218.3.

Table 1
REFERENCE METHODS
RULE 218.3

South Coast AQMD Method 1.1 - Sample and Velocity Traverses for Stationary Sources

South Coast AQMD Method 1.2 - Sample and Velocity Traverses for Stationary Sources with Small Stack or Ducts

South Coast AQMD Method 2.1 - Determination of Stack Gas Velocity and Volumetric Flow Rate (S-type Pitot tube)

South Coast AQMD Method 2.2 - Direct Measurement of Gas Volume through Pipes and Small Ducts

South Coast AQMD Method 2.3 - Determination of Gas Velocity and Volumetric Flow Rate from Small Stacks or Ducts

South Coast AQMD Method 3.1 - Gas Analysis for Dry Molecular Weight and Excess Air

South Coast AQMD Method 4.1 - Determination of Moisture Content in Stack Gases

South Coast AQMD Method 6.1 - Determination of Sulfuric Acid and Sulfur Oxides from Stationary Sources

South Coast AQMD Method 7.1 - Determination of Nitrogen Oxide Emissions for Stationary Sources

South Coast AQMD Method 100.1 - Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling

South Coast AQMD Method 307.91 - Determination of Sulfur in a Gaseous Matrix

South Coast AQMD Method 10.1 – Determination of Carbon Monoxide, Carbon Dioxide, and Oxygen by Gas Chromatograph

EPA Method 6 - Determination of Sulfur Dioxide Emissions from Stationary Sources

EPA Method 19 - Determination of Sulfur Dioxide Removal Efficiency and Particulate, Sulfur Dioxide and Nitrogen Oxides Emission Rates from Electric Utility Steam Generator (40 CFR Part 60 Appendix A)

ASTM D4294 – 03 Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry

ASTM D2622 – 05 Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry

Table 2
Data Acquisition and Handling System (DAHS) Status Codes

RULE 218.3

Status Code for the Following Parameters (True as 1 and False as 0)
Valid data point
Calibration
Monitoring system off-line
Alternative data acquisition
CEMS out-of-control
Fuel switch
10% of upper span value[1] (concentration reported at 10% of upper span value when the monitored value was below 10% of upper span value)
Lower than 10% of upper span value[1] (Concentration reported at the actual monitored value when the monitored value was below 10% of upper span value)
Above 95% of upper span value[2]
Unit non-operational

1. 10% of upper span value of the lower span range for dual range analyzer or the lowest span range for multiple range analyzer
2. 95% of upper span value of the higher span range for dual range analyzer or the highest span range for multiple range analyzer

Table 3
Equations
RULE 218.3

Test	Eq. #	Equation	Where:
Calibration Error	1	$CE = \frac{\lvert C - A \rvert}{SR} \times 100$	C = Calibration gas concentration A = Actual response or the concentration indicated by the monitoring system SR = Upper span value of the instrument
Confidence Coefficient	2	$CC = t_{0.975} \frac{S_d}{\sqrt{n}}$	S_d = Standard deviation n = Number of data in a series of tests $t_{0.975}$ = t-value (see Table 4 below for t-Values)
Linearity Error	3	$LE = \frac{\lvert R - \overline{C} \rvert}{R} \times 100$	$\overline{C}$ = Mean of the CEMS response values R = Certified gas concentration as reference value
Linearity Error - For air pollutant analyzer with a span range at or below 5 ppm	3a	$LE = \frac{\lvert R - \overline{C} \rvert}{SR} \times 100$	$\overline{C}$ = Mean of the CEMS response values R = Certified gas concentration as reference value SR = Upper span value of the instrument
Relative Accuracy Test Audit – Relative Accuracy	4	$RA = \frac{\lvert \overline{d} \rvert + \lvert CC \rvert}{\overline{RM}} \times 100$	$\lvert \overline{d} \rvert$ = Absolute value of the mean difference |CC| = Absolute value of the 95% confidence coefficient $\overline{RM}$ = Average reference method value
Relative Accuracy Test Audit – *de minimis (Pollutant/Diluent Gas)*	5	$\lvert \overline{d} \rvert + \lvert CC \rvert$	$\lvert \overline{d} \rvert$ = Absolute value of the mean difference |CC| = Absolute value of the 95% confidence coefficient

Table 3
Equations - continued
RULE 218.3

Test	Eq. #	Equation	Where:
Relative Accuracy Test Audit – *de minimis* *(Stack Flow Monitoring System)*	6	$\|d\|+\|cc\| \leq 2$ feet per second x A x cf	|d| = Absolute value of the mean difference in units of standard cubic feet per hour. |cc| = Absolute value of the 95% confidence coefficient A = Stack cross sectional area in the plane of measurement. cf = Conversion factor to standard cubic feet per hour.
Relative Accuracy Test Audit – *de minimis* *(Mass Emission Rate)*	7	$\|d\|+\|cc\| \leq (c \times s \times A) \times cf$	|d| = Absolute value of the mean difference in units of standard cubic feet per hour. |cc| = Absolute value of the 95% confidence coefficient c = Pollutant *de minimis* or mean concentration obtained by reference test method, whichever is greater. s = 2 feet per second or mean stack gas velocity obtained by reference test method, whichever is greater. A = Stack cross sectional area in the plane of measurement. cf = Conversion factor to pounds per hour.
The Mean Difference $\bar{d}$	8	$\bar{d} = \frac{1}{n}\sum_{i=1}^{n} d_i$	$\sum_{i=1}^{n} d_i$ = Algebraic sum of the individual differences di n = Number of data points di = The difference between the reference method value and CEMS value, both in units of the applicable standard

Table 4
t-Values*
RULE 218.3

N	$t_{0.975}$	n	$t_{0.975}$	n	$t_{0.975}$
2	12.706	7	2.447	12	2.201
3	4.303	8	2.365	13	2.179
4	3.182	9	2.306	14	2.160
5	2.776	10	2.262	15	2.145
6	2.571	11	2.228	16	2.131

* The t-values in this table are already corrected for n-1 degrees of freedom. Use n equal to the number of data points.

Table 5 - Mass Emission Calculation Equations

Mass Emission Calculation	Eq. #	Equation*	Where:
Based on stack gas concentration and volumetric flow rate	9	$e = a \times c \times 1.214 \times 10^{-7}$	e = The mass emissions of nitrogen oxides in pounds per hour. a = The stack gas concentration of nitrogen oxides averaged hourly (ppmv). c = The stack gas volumetric flow rate averaged hourly (scfh).
Based on stack gas concentration, heat input rate, and oxygen concentration *(Oxygen F factor approach)*	10	$e = a \times c_f \times 1.214 \times 10^{-7}$ $c_f = [20.9/(20.9 - b)] \times (F \times d \times V)$	e = The mass emissions of nitrogen oxides in pounds per hour. a = The stack gas concentration of pollutant averaged hourly (ppmv). c_f = The stack gas flow rate determined by oxygen-based F factor approach averaged hourly (scfh). b = The stack gas concentrations of oxygen measured (%). F = The oxygen-based dry F factor for the type of fuel (scf/10^6 Btu). d = The fuel flow rate for the type of fuel measured. V = The higher heating value of the fuel**.
Based on stack gas concentration, heat input rate, and carbon dioxide concentration *(Carbon dioxide F factor approach)*	11	$e = a \times c_{f/c} \times 1.214 \times 10^{-7}$ $c_{f/c} = (F_c \times d \times V) \times 100/t$	e = The mass emissions of nitrogen oxides in pounds per hour. a = The stack gas concentration of pollutant averaged hourly (ppmv). $c_{f/c}$ = The stack gas flow rate determined by carbon dioxide-based F factor approach averaged hourly (scfh). F_c = The carbon dioxide -based dry F factor for the type of fuel (scf/10^6 Btu). d = The fuel flow rate for the type of fuel measured. V = The higher heating value of the fuel**. t = The stack gas concentrations of carbon dioxide measured (%).
*NOx conversion factor 1.214×10^{-7} is based on standard temperature of 60°F. ** Default value in Table 6, if applicable, or as measured in a method approved by the Executive Officer.			

Table 6 - Default Uncontrolled Emission factor and Higher Heating Value

Basic Equipment	Type of Fuel	Uncontrolled Emission Factor	Higher Heating Value of Fuel
Boilers, Ovens, Heaters, Furnaces, Kilns, Calciners, Dryers	Natural Gas	0.267 lb/mmBtu	1050 mmBtu/mmscf
	Refinery Gas	0.267 lb/mmBtu	1150 mmBtu/mmscf
	LPG, Propane, Butane	15 lb/mgal	94 mmBtu/mgal
	Diesel Light Dist. (0.05% S)	19 lb/mgal	137 mmBtu/mgal
	Fuel Oil	60 lb/mgal	150 mmBtu/mgal
Internal Combustion Engines	Natural Gas	4.080 lb/mmBtu	1050 mmBtu/mmscf
	LPG, Propane, Butane	139 lb/mgal	94 mmBtu/mgal
	Gasoline	102 lb/mgal	130 mmBtu/mgal
	Diesel Oil	469 lb/mgal	137 mmBtu/mgal
Gas Turbines	Natural Gas	0.393 lb/mmBtu	1050 mmBtu/mmscf
	Other Gaseous fuel	0.393 lb/mmBtu	N/A
	Diesel Oil	122 lb/mgal	137 mmBtu/mgal

ATTACHMENT A

SUPPLEMENTAL AND ALTERNATIVE CEMS PERFORMANCE REQUIREMENTS

A. Applicability of Supplemental and Alternative Performance Requirements

The owner or operator of the CEMS electing (or who may be required) to measure concentrations that fall below 10 percent of the upper span value of the lowest vendor guaranteed span range, shall satisfy the performance requirements as specified in Table A-1 listed below.

TABLE A-1
Alternative Performance Requirement(s) – Lowest Vendor Guaranteed Span Range

CEMS Certified per Rules 218.2 and 218.3~~Rule 218.1~~	Performance Requirement(s)			
Yes or No	LLSR/BFD	HLSR/BFD	LLR/BFD	LLCE
Yes	x		+	x
No	x	x	+	x

1. + (plus) denotes an additional performance requirement that shall be conducted if the mandatory performance requirement(s) cannot be met.

2. If the concentration of the CEMS is such that the specifications for the low level spike recovery/bias factor determination cannot be met, the owner or operator of the CEMS shall conduct a low level RATA/bias factor determination.

3. Abbreviations used in this Attachment are:

   Low Level Spike Recovery/Bias Factor Determination (LLSR/BFD)
   High Level Spike Recovery/Bias Factor Determination (HLSR/BFD)
   Low Level RATA/Bias Factor Determination (LLR/BFD)
   Low Level Calibration Error (LLCE)
   Relative Accuracy Test Audit (RATA)
   Relative Accuracy (RA)
   National Institute of Standards Traceability (NIST)

The owner or operator of the CEMS electing (or who may be required) to measure concentrations that fall below 10 percent of the upper span value of any range (other than the lowest vendor guaranteed span range), shall perform a linearity test according to the procedure in Attachment A, Section B(6), to satisfy the performance requirements as specified in Table A-2 listed below.

TABLE A-2
Linearity Performance Test – Ranges Other Than Lowest Vendor Guaranteed Span Range

Calibration Gas	Value
1	Lowest Non-Zero Value Chosen in Span Range Tested
2	Mid-point (40-60%) of Calibration Gases 1 and 3
3	Nominal Concentration at 10% of Span Range Tested

B. Test Definitions, Performance Specifications and Test Procedures

This section explains in detail how each performance requirement is to be conducted.

1. Low Level Calibration Error
The low level calibration error test is defined as challenging the CEMS (from probe to monitor) with certified calibration gases (e.g., NO in N2) at three levels in the 0-20 percent of the upper span value. Since certified gas mixtures or standards may not be available at the concentrations required for this test, gas dilution systems may be used, with the Executive Officer's approval, if they are used according to either the South Coast AQMD or EPA protocols as specified in Rule 218.~~1~~3, for the verification of gas dilution systems in the field. The CEMS high-level calibration gas may be diluted for the purpose of conducting the low level calibration error test.

   a. Performance Specifications
   Introduce pollutant concentrations at approximately the 20 percent, 10 percent, and 5 percent of the upper span value through the normal CEMS calibration system. No low level calibration error shall exceed 2.5 percent of the upper span value.

   b. Testing Procedures
      i. Perform a standard zero/span check; if zero or span check exceeds 2.5 percent of the upper span value, adjust monitor and redo zero/span check.

ii. After zero/span check allow the CEMS to sample stack gas for at least 15 minutes.

iii. Introduce any of the low level calibration error standards through the CEMS calibration system.

iv. Read the CEMS response to the calibration gas starting no later than three system response times after introducing the calibration gas; the CEMS response shall be averaged for at least three response times and for no longer than six response times.

v. After the low level calibration error check, allow the CEMS to sample stack gas for at least 15 minutes.

vi. Repeat steps iii through v until all three low level calibration error checks are complete.

vii. Conduct post test calibration and zero checks.

2. Spike Recovery and Bias Factor Determinations

Spiking is defined as introducing known concentrations of the pollutant of interest (e.g., gas standard to contain a mixture of NO and NO_2 is representative of the ratio of NO and NO_2 in stack gas) and an appropriate non-reactive, non-condensable and non-soluble tracer gas from a single cylinder (EPA Protocol as specified in Rule 218.~~1~~3 or NIST traceable to 2 percent analytical accuracy if no EPA Protocol is available) near the probe and upstream of any sample conditioning systems, at a flow rate not to exceed 10 percent of the total sample gas flow rate. The purpose of the 10 percent limitation is to ensure that the gas matrix (water, CO_2, particulates, interferences) is essentially the same as the stack gas alone. The tracer gas is monitored in real time and the ratio of the monitored concentration to the certified concentration in the cylinder is the dilution factor. The expected pollutant concentration (dilution factor times the certified pollutant concentration in the cylinder) is compared to the monitored pollutant concentration.

3. High Level Spike Recovery/Bias Factor Determination

The high level spike recovery/bias factor determination is used when it is technologically not possible to certify the CEMS per the standard Rule 218.~~1~~3 requirements. The spiking facility/interface shall be a permanently installed part of the CEMS sample acquisition system and accessible to the Executive Officer as well as the CEMS operator.

a. Performance Specifications

The CEMS shall demonstrate a RA ≤ 20 percent, where the spike value is used in place of the reference method in the normal RA calculation, as described below.

b. Testing Procedures

i. Spike the sample to the CEMS with a calibration standard containing the pollutant of interest and CO or other non-soluble, non-reacting alternative tracer gas (alternative tracer gas) at a flow rate not to exceed 10 percent of the CEMS sampling flow rate and of such concentrations as to produce an expected 40-80 percent of the upper span value for the pollutant of interest and a quantifiable concentration of CO (or alternative tracer gas) that is at least a factor of 10 higher than expected in the unspiked stack gas. The calibration standards for both pollutants of interest and CO (or alternative tracer gas) shall meet Rule 218.~~1~~3 requirements

ii. Monitor the CO (or alternative tracer gas) using an appropriate continuous (or semi-continuous if necessary) monitor meeting the requirements of Method 100.1 and all data falling within the 10-95 percent of the upper span value, and preferably within 30-70 percent of the upper span value.

iii. Alternate spiked sample gas and unspiked sample gas for a total of nine runs of spiked sample gas and ten runs of unspiked sample gas. Sampling times should be sufficiently long to mitigate response time and averaging effects.

iv. For each run, the average CEMS reading must be between 40 percent of the upper span value n and 80 percent of the upper span value. If not, adjust spiking as necessary and continue runs, but expected spike must represent at least 50 percent of the total pollutant value read by the CEMS.

v. Calculate the spike recovery for both the pollutant and the CO (or alternative tracer gas) for each run by first averaging the pre- and post-spike values for each run and subtracting that value from the spiked value to yield nine values for recovered spikes.

vi. Using the CO (or alternative tracer gas) spike recovery values for each run and the certified CO (or alternative tracer gas) concentration, calculate the dilution ratio for each run. Multiply the certified pollutant concentration by the dilution factor for each run to determine the expected diluted pollutant concentrations. Using the expected diluted

concentrations as the "reference method" value, calculate the Relative Accuracy. The RA shall be ≤ 20 percent.

4. Low Level Spike Recovery/Bias Factor Determination

The low-level spike recovery/bias factor determination is used to determine if a significant bias exists at concentrations near the 10 percent of the upper span value. The spiking facility/interface shall be a permanently installed part of the CEMS sample acquisition system and accessible to the Executive Officer staff as well as the owner or operator of the CEMS.

a. Performance Specifications

There are no pass/fail criteria with respect to the magnitude of the percent relative accuracy. There are performance criteria for the range of concentration on the CEMS the extent to which the spike must be greater than the background pollutant level.

b. Testing Procedures

i. Spike the sample to the CEMS with a calibration standard containing the pollutant of interest and CO or other non-soluble, non-reacting alternative tracer gas (alternative tracer gas) at a flow rate not to exceed 10 percent of the CEMS sampling flow rate and of such concentrations as to produce an expected 10-25 percent of the upper span value for the pollutant of interest and a quantifiable concentration of CO (or alternative tracer gas) that is at least a factor of 10 higher than expected in the unspiked stack gas. The calibration standards for both pollutants of interest and CO (or alternative tracer gas) shall meet Rule 218.3 requirements.

ii. Monitor the CO (or alternative tracer gas) using an appropriate continuous (or semi-continuous if necessary) monitor meeting the requirements of Method 100.1 and all data falling within the 10-95 percent of the upper span value, and preferably within 30-70 percent of the upper span value.

iii. Alternate spiked sample gas and unspiked sample gas for a total of nine runs of spiked sample gas and ten runs of unspiked sample gas. Sampling times should be sufficiently long to mitigate response time and averaging effects.

iv. For each run, the average CEMS reading must be below 25 percent of the upper span value and > 10 percent of the upper span value. If not, adjust spiking as necessary and continue runs; but expected spike shall represent at least 50 percent of the total pollutant value read by the CEMS.

v. Calculate the spike recovery for both the pollutant and the CO (or alternative tracer gas) for each run by first averaging the pre- and post-spike values for each run and subtracting that value from the spiked value to yield nine values for recovered spikes.

vi. Using the CO (or alternative tracer gas) spike recovery values for each run and the certified CO (or alternative tracer gas) concentration, calculate the dilution ratio for each run. Multiply the certified pollutant concentration by the dilution factor for each run to determine the expected diluted pollutant concentrations. Using the expected diluted concentrations as the "reference method" value, calculate the Relative Accuracy as specified in Rule 218.3. If the average difference is less than the confidence coefficient then no low level bias factor is applied. If the average difference is greater than the confidence coefficient and the average expected spike is less than the average CEMS measured spike, then no low level bias factor is applied. If the average difference is greater than the confidence coefficient and the average expected spike is greater than the average CEMS measured spike, then a low level bias factor equal to the absolute value of the average difference is added to data reported at or below the 10 percent of the upper span value.

5. Low Level RATA/Bias Factor Determination using Enhanced Reference Method 6.1

A low level RATA/bias factor determination is designed to determine if there exists a statistically significant bias at low level concentrations. It consists of nine test runs that measure the stack concentration and the CEMS concentration concurrently.

a. Performance Specifications

There are no pass/fail criteria with respect to the magnitude of the percent relative accuracy. There are performance criteria for the special RATA with respect to the reference method and range of concentration on the CEMS.

b. Testing Procedures

The reference method for the low level RATA/bias factor determination is Method 100.1

i. Perform a minimum of nine runs of low level RATA for CEMS versus the reference method at actual levels (unspiked).

ii. The span range for the reference method shall be such that all data falls with 20 - 95 percent of the upper span value.

iii. The reference method shall meet all Method 100.1 performance criteria.

iv. Calculate the average difference (d = CEMS - reference method, ppm) and confidence coefficient (cc = statistical calculated, ppm).

v. If $d > 0$ then the bias = 0 ppm; if $d < 0$ and $|d| > cc$ then bias = d; if $d < 0$ and $|d| < cc$ then bias = 0 ppm.

6. Linearity Error

The linearity error is defined as the percentage error in linearity, calculated pursuant to Equation 3 in Table 3, expressed in terms of the ratio of the absolute value of the difference between the reference value and the mean CEMS response value, to the reference value.

a. Performance Specifications

Introduce calibration gas concentrations in accordance with Table A-2. The linearity error shall not exceed 5.0 percent.

b. Testing Procedures

i. A linearity error test shall be comprised of three data points for each of three calibration gases listed in Table A-2 for each span range.

ii. Each low level linearity test shall be performed by introducing calibration gas into the CEMS at the span range values specified in Table A-2.

iii. The test sequence (low, middle, and high) shall be repeated until three data points have been acquired for each calibration gas. The same calibration gas shall not be used twice in succession during the linearity error tests.

iv. Linearity error shall not exceed 5.0 percent of the calibration gas concentration, as calculated pursuant to Equation 3 in Table 3.

C. Testing Frequency

The owner or operator of the CEMS shall perform the aforementioned performance requirements once a year thereafter. These annual assessments shall be completed within six months of the end of the calendar quarter in which the CEMS was originally certified.

ATTACHMENT B

Concentration stratification and CEMS probe location

A. Test for Concentration Stratification

The owner or operator of the CEMS shall demonstrate the absence of stratification through testing performed according to the method in Chapter X, Section 13 - "Non-Standard Methods and Techniques", of the District Source Testing Manual. The tests shall be conducted at:

1. One load level if the owner or operator demonstrates to the satisfaction of the Executive Officer that the equipment operates within a 20 percent load range for at least 80 percent of the time;
2. Two different load levels if the owner or operator demonstrates to the satisfaction of the Executive Officer that the equipment operates within a 50 percent load range for at least 80 percent of the time; or
3. Three different load levels if the equipment operates outside of the criteria in subclauses (f)(4)(E)(i)(~~I~~A) and (f)(4)(E)(i)-(~~H~~B).

B. Absence of Stratification

The absence of stratification is considered verified if the difference between the highest measured concentration (time normalized) and the lowest measured concentration (time normalized) divided by the average measured concentration (time normalized), when expressed as a percentage, is less than or equal to 10 percent. Upon verification of the absence of stratification:

1. The owner or operator of the CEMS may position the CEMS sampling probe at any point within the stack with the exception of those points that are adjacent to the stack wall;

2. The CEMS sampling probe shall be located in the stack at least one-third of the stack diameter; and

3. The reference method for RATA may be conducted at a single point within the stack that is not adjacent to the stack wall and does not interfere with the sampling and the operation of the facility CEMS.

C. Presence of Stratification

If the testing demonstrates the presence of stratification, the owner or operator of the CEMS shall elect one of the following alternatives:

1. If the stratification is greater than 10 percent but the difference between the highest measured concentration (time normalized) and the lowest measured concentration (time normalized) is less than or equal to 1.0 ppmv:
   a. Then the CEMS sampling probe may be located at any point within the stack except any points that is adjacent to the stack or adjacent to the highest measured concentration (time normalized) and the lowest measured concentration (time normalized); or
   b. If it is not possible to avoid using a point adjacent to either the highest measured concentration (time normalized) or the lowest measured concentration (time normalized), then the CEMS sampling probe shall be located such that the placement minimizes the difference between the concentration at the proposed probe location and the concentration at the point of highest measured concentration (time normalized) or the lowest measured concentration (time normalized).

2. Determine a representative CEMS probe location such that the following criteria are met:
   a. All traverse point concentrations are within 10 percent of the average of all traverse point concentrations (time normalized), or, the difference is less than or equal to 1.0 ppm, whichever is greater;
   b. There exists at least one traverse point concentration (Xr), not located next to the stack or duct wall, that is less than or equal to 10 percent of each adjacent traverse point concentration of Xr, or the difference is less than or equal to 1.0 ppm, whichever is greater; and
   c. The CEMS probe is located at (or as near as practical to) Xr with minimum adjacent traverse point concentration fluctuations as determined above in section (C)(2)(b).

3. Determine a representative multiple point sampling configuration as approved by the Executive Officer, following the guidance document prepared by Emission Measurement Technical Information Center, "Evaluation Procedure for Multi-Hole Sample Probes" (EMTIC GD-031) and the South Coast AQMD guidance document, “Multi-Point Probe Acceptance and Quality Assurance Standards”.

4. Modify the stack and/or CEMS sampling probe location and retest for the absence of stratification.

ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Staff Report
Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions
Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications

August 2022

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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BACKGROUND

Adopted in March 2021, South Coast Air Quality Management District (South Coast AQMD) Rules 218.2 and 218.3 provide specifications for continuous emission monitoring system (CEMS). A CEMS is the combination of equipment necessary to measure~~for the determination of~~ pollutant concentrations or emission rate on a continuous basis. It uses~~ing~~ analyzer measurements and a conversion equation, graph, or computer program to produce results in units of the applicable emission limitation or standard. Rules 218.2 and 218.3 provide performance specifications for CEMS operated at former Regional Clean Air Incentives Market (RECLAIM) facilities that were previously certified according to the RECLAIM program but have exited RECLAIM, as well as specifications for CEMS operated at non-RECLAIM facilities that were previously certified or would have been certified according to Rules 218 and 218.1. An implementation schedule is specified under Rules 218.2 and 218.3 to define the compliance date of each system. Prior to the compliance date, CEMS at RECLAIM facilities would continue to be subject to their current monitoring provisions under RECLAIM (i.e., Rule 2012 for NOx CEMS), and non-RECLAIM CEMS would continue to be subject to Rules 218 and 218.1.

Since the adoption of Rules 218.2 and 218.3, staff has been monitoring the implementation through discussions with facilities applying for CEMS certification, meetings with CEMS vendors regarding their progress on software adjustment and customer feedback, and monitoring landing rule amendments and proposals related to CEMS. As a result, staff identified certain concerns ~~were identified~~.

First, both rules were developed to address compliance with command-and-control concentration-based emission limits.~~;~~ H~~h~~owever, since their adoption, several command-and-control rules with CEMS requirements have been adopted or amended to include mass emission limits vs. concentration-based limits. Due to those recent rule changes, staff recognizes that additional guidance and specifications, including calculations and a data substitution procedure, are needed for owners or operators of CEMS complying with mass emission limits. ~~Next~~Second, the U.S. Environmental Protection Agency (U.S. EPA) recommended that staff include more specific requirements related to the extent of Executive Officer discretion in [discretion in what? Providing exemptions?] CEMS monitoring rules. Finally, s~~S~~takeholders subject to the rules ~~also~~ asked staff to address potential emission overestimation from dual range analyzers. Resolution of all these concerns requires rule amendments.

REGULATORY HISTORY FOR RULES 218.2 and 218.3

The South Coast AQMD has various rules, regulations and permit conditions that require the installation and operation of CEMS to determine compliance with an emission limitation or standard. Since January 1976, the South Coast AQMD has established CEMS monitoring rules to provide guidance and specifications for the CEMS installation and operation to ensure accuracy and precision of the CEMS. For facilities that are under a command-and-control regulatory structure and are not in the RECLAIM, CEMS provisions are specified in Rule 218 – Continuous Emissions Monitoring and Rule 218.1 – Continuous Emissions Monitoring Performance Specifications. For RECLAIM facilities, CEMS provisions are specified in Rule 2011 –

Requirements for Monitoring, Reporting, and Recordkeeping for SOx Emissions and Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for NOx Emissions.

Rule 218.2 – Continuous Emission Monitoring System: General Provision and Rule 218.3 – Continuous Emission Monitoring System: Performance Specification will eventually replace Rules 218, 218.1, and 2012. It should be noted that at this time, SOx RECLAIM is not transitioning to a command-and-control regulatory structure. Consequently, CEMS in SOx RECLAIM will continue to be subject to the requirements in Rule 2011.

Rules 218.2 and 218.3 were developed to include the requirements contained in Rules 218 and 218.1 as well as some of the requirements contained in Rule 2012. Rules 218.2 and 218.3 were adopted on March 5, 2021. The primary objectives of these rules are to:

- Develop one set of requirements that will apply to both non-RECLAIM and former RECLAIM facilities;
- Align CEMS requirements for RECLAIM facilities as they transition to command and control rules;
- Streamline requirements and provide more clarity to existing CEMS provisions; and
- Codify existing practices to provide more transparency.

PUBLIC PROCESS

The development of Proposed Amended Rules 218.2 and 218.3 (PAR 218.2 and PAR 218.3) has been conducted through a public process. Two Working Group meetings were held on January 27, 2022, and February 24, 2022, and a Public Consultation Meeting was held June 8, 2022. The Working Group and Public Consultation Meeting included a wide variety of stakeholders such as affected facilities, consultants, environmental and community groups, and other agencies. The objective of the meetings is to build consensus and resolve key issues with the stakeholders.

A Public Workshop was held on March 30, 2022. The purpose of the Public Workshop was to present the proposed rule language to the public and stakeholders to solicit comments. Staff also has had individual meetings with stakeholders and the U.S. EPA for issues related to the PAR 218.2 and PAR 218.3.

SUMMARY OF PROPOSAL

PAR 218.2 proposes minor revisions to include more specificity to the rule language on recertification requirements and an exemption related to Executive Officer discretion, extend the recordkeeping period to align with the California Code of Civil Procedure, and provides more time to submit the relative accuracy test audit (RATA) report.

PAR 218.3 proposes an option to validate and accept data that would fall in a monitoring gap for a dual range analyzer, adds specifications for mass emission calculations and data substitution procedures, and provides clarity on the method for linearity error checks. PAR 218.3 also proposes the same revision as PAR 218.2 to the exemption provision with regard to the specificity related to Executive Officer discretion.

PROPOSED AMENDMENT TO RULE 218.2

CEMS certification/recertification requires case-by-case evaluations. Executive Officer's discretion may be required for some unique cases. EPA advised staff to include more specificity to provisions that allow for Executive Officer's discretion.

Revise Certification Requirement Related to Executive Officer discretion – Subparagraph (f)(1)(B)

While paragraph (f)(1) defines situations when a CEMS shall be certified or recertified, subparagraph (f)(1)(B) allows an opportunity for the Executive Officer to identify unique modifications that would not require a recertification. Staff is proposing the following revision, specifying the basis of the determination on impact of data accuracy.

(f) Certification Requirements

(1) The owner or operator of a CEMS shall certify or recertify any CEMS that is:

(A) Installed after [Date of Adoption];

(B) Modified for any component that is either listed on the certification letter, Technical Guidance Document R-002, or Quality Assurance/Quality Control Plan, unless the Executive Officer determines that such modification would not impact data accuracy and certification or recertification is not necessary; or

(C) Determined by the Executive Officer that a CEMS recertification is required because the QA/QC or performance requirements for the CEMS cannot be achieved in accordance with Rule 218.3 subdivision (g).

Revise Exemption Provision Related to Executive Officer discretion – Subdivision (k)

Source specific rules or permits may have CEMS requirements that differ from the requirements in Rule 218.2. The CEMS requirements in a rule or permit are expected to be specific to the equipment or process and likely more stringent. Therefore, the exemption in subparagraph (k) allows rule or permit CEMS requirements to supersede Rule 218.2 requirements unless otherwise notified by the Executive Officer. Staff is proposing to clarify that the exemption does not apply if the rule or permit specified CEMS requirements are less stringent and the Executive Office will provide the facility written notice to inform them that they must comply with the requirements of Rule 218.2. Staff is proposing the following revision, specifying the basis of the Executive Officer discretion and correcting the typo from "218.3" to "218.2".

(k) Exemption

(1) If a rule or permit specify CEMS requirements that are different than requirements specified in Rule 218.~~3~~2, the owner or operator shall adhere to CEMS requirements in the rule or permit, unless ~~otherwise notified by~~ the Executive Officer provides written notice to the owner or operator that the rule or permit specified CEMS requirements are less stringent than Rule 218.2.

Extend the recordkeeping period – Paragraph (h)(3)

Paragraph (h)(3) currently requires records to be maintained for a minimum of two years. However, California Code of Civil Procedure, section 338(k), states the time for commencing actions other than for the recovery of real property is within three years for an action commenced under Division 26 (commencing with Section 39000) of the Health and Safety Code. Staff is proposing to align Rule 218.2 with the California Code of Civil Procedure and extend the recordkeeping period from a minimum period of two years to three years. It should be noted that this is a minimum period for maintaining records. Pursuant to a proposed amendment in Rule 218.3, subparagraph (i)(13)(C), in order to utilize certain substitute data procedures, records may be required to be kept longer.

Provide more time to submit the relative accuracy test audit report – Paragraph (i)(5)

Rule 218.2 paragraph (i)(5) currently requires a RATA report to be submitted within 60 days upon completion of the test. In response to stakeholders' request for aligning it with Rule 2012 Chapter 2 (B)(22) for RECLAIM RATA report submittal requirement, staff is proposing to extend the RATA report due date from 60 days upon completion of the test to on or before the end of the quarter following the date of a required test.

PROPOSED AMENDMENTS TO RULE 218.3

The proposed amendments to Rule 218.3 will address a concern raised for current requirements on dual range analyzers and include specifications for mass emission calculations and a missing data procedure. Those proposed amendments are all under subdivision (i) for data handling. In addition, staff recognizes the need to revise subparagraph (f)(4)(F) to clarify the linearity error check method.

Clarify the Linearity Error Check Method – Subparagraph (f)(4)(F)

The method for linearity error check under this subparagraph remains the same. The revision is intended to provide more detailed instruction on the test sequence and the number of data points required when conducting the linearity error check procedure.

Revise Data Handling for Data Below 10 Percent of the Upper Span Value – Subparagraph (i)(1)(C); and Data Above 95 Percent of the Upper Span Value – Subparagraph (i)(2)(B)

For a dual range span analyzer, when 95 percent of the upper span value of the lower span range does not overlap with 10 percent of the upper span value of the higher span range, an unintended monitoring gap results. (See Figure 1 below.) Rule 218.3 paragraph (i)(1) requires data measured in monitoring gap to be reported as 10 percent of the upper span value of the higher span, which may overestimate the emissions. Stakeholders raised a concern that this could place the equipment out of compliance.

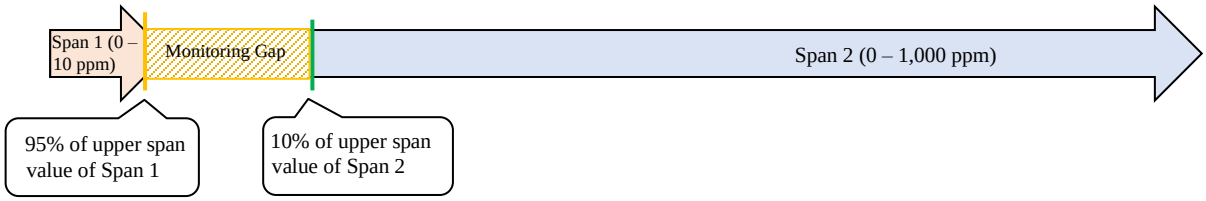


Figure 1: Dual Range Analyzer Monitoring Gap

Subparagraph (i)(1)(C) provides an option to validate data points that fall below 10 percent of the upper span value of the span range and report the data point at the actual measured value, but that is only applicable to the lowest vendor guaranteed span range for that CEMS analyzer. To utilize this option the owner or operator for the CEMS is required to conduct the validation tests specified in Rule 218.3 Attachment A: Supplemental and Alternative Performance Requirements.

To address the dual range analyzer monitoring gap concern, staff is proposing to extend a low level data validation option to any span range, provided the owner or operator conducts an additional procedure included in Attachment A to ensure data linearity. The additional procedure includes a three-point calibration at the lower level, in lieu of the current spike recovery procedure. The low-level calibration procedure provides a data validation procedure to ensure the accuracy of any data collected in the monitoring gap. This proposal would require revisions to both subparagraphs (i)(2)(B) and (i)(1)(C).

For a span range other than the lowest vendor guaranteed span range, the owner or operator for the CEMS are allowed to choose a lowest non-zero value to set the low end of the data range to be validated. The lowest non-zero value selected will depend on the analyzer's sensitivity. For example, for a dual range analyzer with a lower span range at 0-10 ppmv and a higher span range at 0-1000 ppmv, by current requirement the monitoring gap would be 9.5-100 ppmv. If a measurement fell within that monitoring gap, the owner or operator would have to replace the measured value with 10 percent of the upper span value, which is 100 ppmv in the above example. In the proposed amendment, the owner or operator may choose a lowest non-zero value in the monitoring gap to demonstration data linearity for data validation. If the owner or operator chooses a low point at 20 ppmv, a three-point calibration would include a low-point of 20 ppmv, a mid-point of 20 and 100 ppmv (e.g., 40 ppmv), and a high-point of 100 ppmv to validate data in the range of 20-100 ppmv. Even with the new procedure, there may still be a small data gap if the lowest non-zero value selected is not low enough to bridge the gap. For the above example the data gap will be from 9.5 ppmv to 20 ppmv. If a value is measured in the data gap, the owner or operator would have to replace the measured value with the lowest non-zero value in the three-point calibration, which is 20 ppmv in the above example instead of 100 ppmv as would be required under the current data gap procedure.

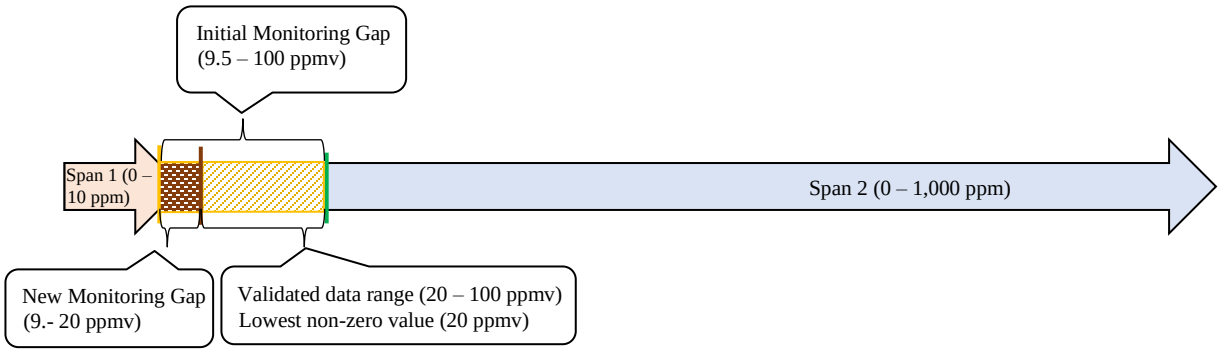


Figure 2: Proposed Dual Range Analyzer Monitoring Gap

Add Mass Emission Calculation Methodology – Paragraph (i)(10)

Rules 218.2 and 218.3 were developed for compliance with command-and-control rules, which typically establish concentration-based emission limits instead of a mass-based emission limit. As a result, the rules do not currently address a mass emission calculation. However, as some command-and-control rules are including mass emission limit compliance options, there is a need to specify data handling for mass emissions.

Staff is proposing to include three calculation methods under Rule 218.3 paragraph (i)(10) for determining hourly mass emission rates depending on the parameters being monitored. Those methods are consistent with the methodology used in Rule 2012 for RECLAIM facilities and are expressed in three equations listed in Table 5. The first equation is based on stack gas concentration and volumetric flow rate. The second equation is based on stack gas concentration, heat input rate, and oxygen concentration, referenced as the oxygen F factor approach. The third equation is based on stack gas concentration, heat input rate, and carbon dioxide concentration, referenced as the carbon dioxide F factor approach. The oxygen F factor approach may not be used in cases where enriched oxygen is used, non-fuel sources of carbon dioxide are present (e.g. lime kilns and calciners), or the oxygen content of the stack gas is 19 percent or greater. The carbon dioxide F factor approach may not be used in cases where enriched oxygen is used or non-fuel sources of carbon dioxide are present (e.g. lime kilns and calciners).

In regard to the three equations, RECLAIM CEMS are allowed to conduct measurements at either 60°F or 68°F, and thus utilize NOx conversion factor of 1.214×10^{-7} or 1.195×10^{-7} lbs/ft^3 to determine mass emissions. Rule 218.3 will be consistent with Rule 102 – Definition of Terms for the definition of standard conditions, which required measurements be conducted at 60°F; therefore, the NOx conversion factor of 1.214×10^{-7} lbs/ft^3 will be utilized in the Table 5 equations.

For the mass emission calculation when the higher heating value is required, Rule 218.3 will allow a default higher heating value listed in Table 6 or a measured heating value of the fuel determined by a method approved by the Executive Officer (see footnote of Table 5). A heating value determined by gas bills would be considered as a measured heating value.

Add Data Substitution Procedure – Paragraph (i)(11)

Missing or invalid data periods may occur during CEMS maintenance, system malfunctioning, or failed QA/QC tests. Missing or invalid CEMS data would create data gaps for those time periods. When mass emission limits must be demonstrated for specific averaging periods (e.g., 24 hours or 365-day rolling average), data substitution would be required to fill the data gaps.

Staff is proposing to include data substitution procedure specifications in Rule 218.3 paragraph (i)(11). The procedure aligns with the data substitution procedure specified in Rule 1109.1 – Emissions of Oxides of Nitrogen from Petroleum Refineries and Related Operations (Rule 1109.1), except that the rule requires the substituted data to be from a "unit operation hour" which is defined as "a clock hour during which a unit combusts any fuel either for part of the hour or for the entire hour." This is to avoid zero emission data being utilized for data substitution. According to the proposed procedure, when the missing data period is at or less than eight hours, the owner or operator of the CEMS would substitute the data using the average of the recorded emission data for the unit operation hour immediately before the missing data period and the hour immediately after the missing data period. When the missing data period is more than eight hours, the owner or operator of the CEMS would substitute the data using the maximum hourly emission data recorded for the previous 30 days with unit operation, commencing on the day immediately prior to the day the missing data occurred. The proposed amendment also addresses a missing data period that results from conducting a spiking test specified in Attachment A when the calibration standard gas is injected to the sampling port. Use of this approach to average data for substitution would be limited to up to ten hours for each occurrence, and no more than 20 cumulative hours for each calendar year. Data substitution would be required for mass emissions calculations including the BARCT Equivalent Mass Cap Plan (B-Cap) and the interim facility-wide NOx emission limit of 0.03 pounds/MMBtu for process heaters and boilers greater than or equal to 40 MMBtu/hr in Rule 1109.1.

Subparagraph (i)(11)(A) specifies when missing data procedures must be applied, e.g., when there is any hour with missing pollutant data, an hour with missing stack flow, or an hour with both missing pollutant and stack flow data. Subparagraph (i)(11)(B) includes the missing data procedure which varies depending on how much data is missing, e.g., missing more or less than eight hours of data. This subparagraph also allows the option to use missing data substitution procedures specified in 40 CFR Part 75.

For the purpose of filling the data gaps for mass emission calculations, the substituted data are only enforceable for a compliance demonstration on mass emission limits, not concentration limits (e.g., ppmv).

Add the method to calculate mass emissions for a startup or shutdown period – Paragraph (i)(12)

Some South Coast AQMD permits or rules may require a mass emission limit with minute increments for a defined startup or shutdown period. For example, a facility has a permit condition with a mass emission limit of 111 pounds for a cold startup of 166 minutes. As the general mass emission calculation specified in Rule 218.3 paragraph (i)(10) is for hourly data, there is a need to determine mass emissions on a per minute interval.

Staff is proposing to include the method for determining mass emissions for a permit or rule defined startup or shutdown period with minute increments in Rule 218.3 paragraph (i)(12). The owner and operator would calculate the mass emissions for each minute using the equations listed in Table 5, except that minute level should be used in the calculation rather than hourly parameters. The mass emissions for all minutes of the period would be totalized to demonstrate the compliance. The duration of the period is determined by the permit or rule, rather than Rule 218.2 and Rule 218.3.

Add data substitution procedures for startup or shutdown missing minute data – Paragraph (i)(13)

This subparagraph is for the purpose of determining mass emissions for a startup or shutdown pursuant to paragraph (i)(12). When there is any minute with no valid data, data substitution would be conducted. Data evaluated for substitution for the missing minutes should have the same operation status, e.g., only startup emissions can be substituted with startup emissions, only shutdown emissions can be substituted with shutdown emissions. If a permit or rule defines a more specific operation status, such as cold startup, only cold startup emissions can be substituted with cold startup emissions.

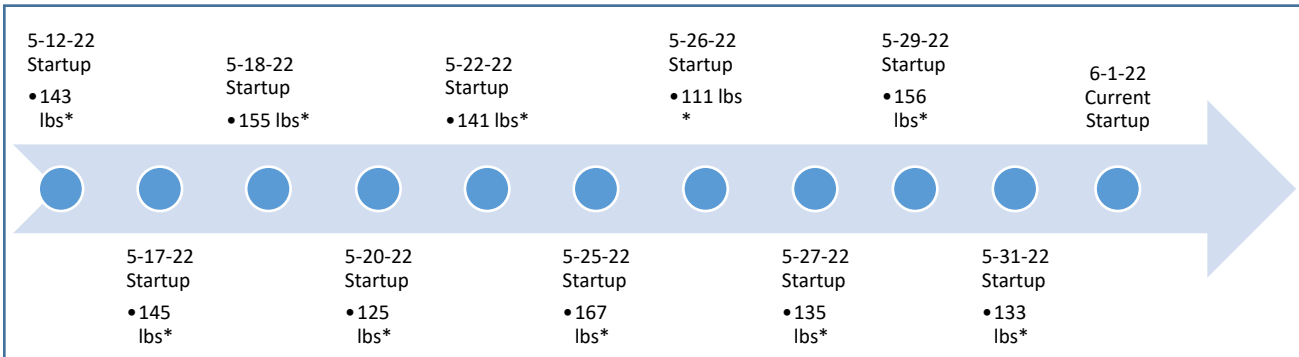
Staff is proposing to have the data substitution be dependent on the percent of missing data. If the sum of the minutes with no valid data is less than or equal to fifty percent of all the minutes for the period, the missing data minute(s) would be substituted with the average of all valid one-minute mass emission data for that startup or shutdown period. The following is an example of how this data substitution would work for a 15-minute startup period with two minutes of missing or invalid data:

MINUTE	NOx (lbs)	
1	15	
2	180	
3	190	
4	185	
5	invalid	
6	invalid	
7	170	
8	160	
9	154	
10	145	
11	134	
12	122	
13	72	
14	70	
15	71	
	1668	Sum of Valid Minutes (lbs)
	13	Number of Valid Minutes
	128.31	Valid One-Minute Mass Emissions (lbs) Average for this Startup
	1924.6	Mass Emissions (lbs) During 15-minte Startup

If the sum of the minutes with no valid data is more than fifty percent of all the minutes for the period, the missing data minutes would be substituted with the highest of the one-minute mass emission averages of the previous ten startups or shutdowns, or all startups of shutdowns during the 12 months period before the completion of last startup or shutdown, whichever is more recent. For this purpose, a one-minute mass emission average for each startup or shutdown is determined. In the example above, 128.31 lbs represents the one-minute mass emission average for that startup event. The operator would look back at the applicable previous startup events to determine if any startup event had a higher one-minute mass emission average.

Regarding the applicable period staff is proposing to require the owner to consider for the data substitution, the proposal considers two different scenarios. Some units have frequent startups and shutdowns, so considering the past 10 startup or shutdown events should provide a suitable characterization of how the unit operates during the startup or shutdown period. Alternatively, some units are rarely shutdown. In those instances, staff is proposing to require the owner to consider the previous shutdown or startup, which might have taken place several years prior to the startup or shutdown with the missing data. For those instances, the rule will require the owner or operator to consider the most recent startup or shutdown and look back to the 12 months prior to that startup or shutdown to see if any additional startups or shutdowns occurred. In either instance, the highest one-minute mass emission average will be used for data substitution.

The example in Figure 3 shows a unit with frequent startups. The previous 10 startups from 5/12/2022 to 5/31/2022 would be considered for data substitution and the one-minute mass emission average of 167 lbs from 5-25-2022 would be used to substitute the missing data from 6/1/2022.

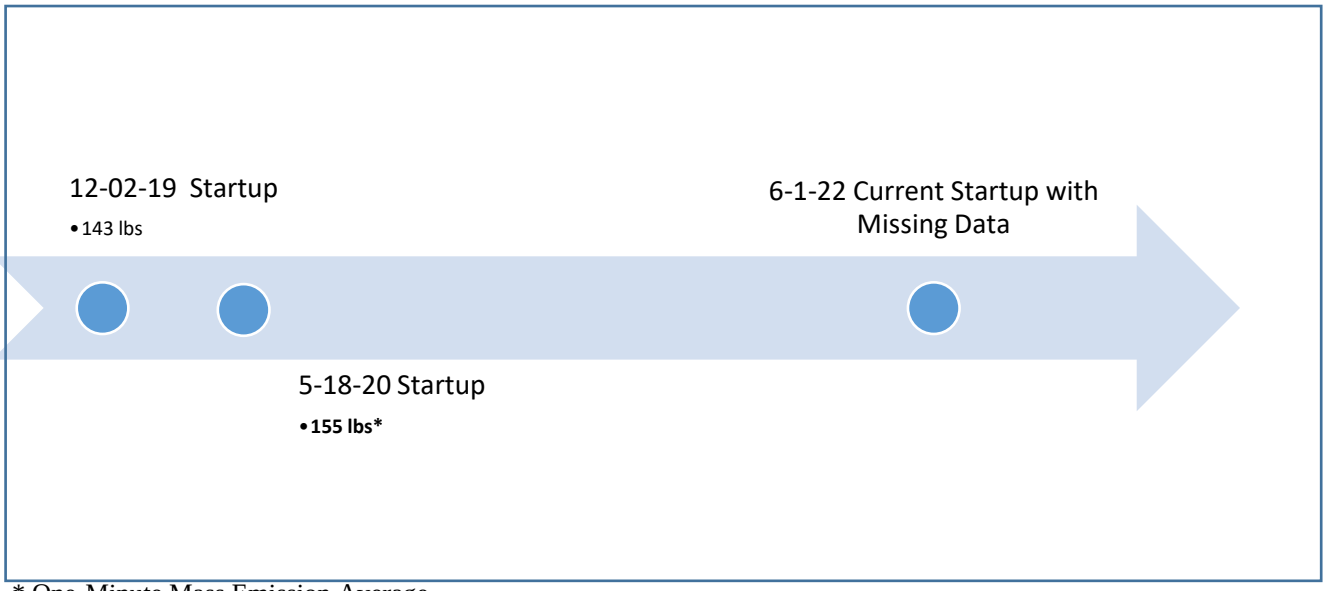


* One-Minute Mass Emission Average

Figure 3: Startup Missing Data Procedure for Unit Frequently Shutdown

The example in Figure 4 shows a unit with infrequent startup and shutdowns. The previous startup occurred over two years from the current startup. In that instance the owner or operator would consider the startup on 5-18-2020 and any startup that occurred in the 12 months prior, e.g., any startups from 5-18-2019 – 5-18-2020. The missing data in the example below will be determined

from the highest one-minute mass emission average between the 12-2-2020 startup and the 5-18-2020 startup. The one-minute mass emission average of 155 lbs from 5-18-2020 would be used to substitute the missing data from 6/1/2022.



* One-Minute Mass Emission Average

Figure 4: Startup Missing Data Procedure for Unit not Frequently Shutdown

Add recordkeeping requirements for data substitution procedures for startup or shutdown missing minute data – Subparagraph (i)(13)(C)

In order to ensure the records from previous startups or shutdowns are available for the proposed data substitution, staff is proposing to extend the recordkeeping requirement to include the 12-month period prior to the most recent startup or shutdown if this period is not covered by the Rule 218.2 paragraph (h)(3) recordkeeping requirement. For example, if a unit has been operating continuously for over three years, without a startup or shutdown, and there is a minimum three years recordkeeping requirement, no data would be available to substitute for the missing data. This provision would require the owner to maintain records beyond three years. The owner or operator would be required to retain records from the last startup or shutdown, and consider data from that startup or shutdown event and the 12 months that proceeded it. Failure to maintain appropriate records would not only be considered a potential rule violation, it would also preclude an owner or operator of the CEMS from utilizing this more favorable substitute data procedure.

Add uncontrol emission factors for units with no available startup or shutdown data – Subparagraph (i)(13)(D)

For an extreme situation when there is no record of previous startups or shutdowns, an uncontrol emission factor and the equipment maximum capacity would be used to determine the emissions of the missing startup or shutdown data. This situation would not occur if the owner or operator complies with the proposed recordkeeping requirement in subparagraph (i)(13)(C). However, if the owner or operator fails to maintain records accordingly, this provision could be utilized to determine the emissions.

Add a provision that allows for the owner or operator to report valid zero emission data when the base unit is not operating– Paragraph (i)(14)

Paragraph (i)(14) allows the owner or operator to report valid zero emissions data while the unit (emitting source such as a boiler or heater) is not operating and no emissions are generated. Staff is proposing to allow the owner or operator to report valid zero emission for those hours without requiring data substitution if the base unit non-operation is demonstrated in accordance with Rule 218.2 paragraph (e)(4). The provision requires the facility to maintain records for a minimum of three years .

Revise Exemption Provision Related to Executive Officer discretion – Subdivision (l)

Rule 218.3 subdivision (l) is identical to Rule 218.2 subdivision (k). Staff is proposing the same revision. See discussion on the revision for Rule 218.2 subdivision (k) for details.

AFFECTED FACILITIES

Based on the RECLAIM compliance year 2017 audit data, there are 83 RECLAIM facilities that in total operate 500 units with NOx emissions monitored by CEMS. It should be noted that one CEMS may monitor emissions for several units, which is common in petroleum refining facilities.

Based on the South Coast AQMD's database for non-RECLAIM CEMS applications, there are 126 non-RECLAIM facilities that previously installed one or more CEMS, with an estimate of approximately 250 units monitored by these CEMS. Since records do not indicate the current status of the CEMS, some of non-RECLAIM CEMS may no longer be active. The CEMS universe may change when some landing rules are adopted or amended and become applicable to RECLAIM facilities.

EMISSION REDUCTIONS

PAR 218.2 and PAR 218.3 are administrative rules that provide technical guidelines for installation and operation of CEMS required by South Coast AQMD rules or permit conditions. PAR 218.2 and PAR 218.3 do not directly regulate sources for emissions control; therefore, there are no emission reductions that will result from this rule development.

COST EFFECTIVENESS

While a source-specific rule determines when a CEMS would be required for emission monitoring, PAR 218.2 and PAR 218.3 provide administrative and technical guidelines on how to properly operate the CEMS. The cost-effectiveness of operating any CEMS is included in the related source-specific rule from which the CEMS is required.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (PAR 218.2 and PAR 218.3) is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3). A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and is included as Attachment H~~F~~ to the Board Letter. If the proposed project is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor's Office of Planning and Research.

SOCIOECONOMIC ANALYSIS

PAR 218.2 and PAR 218.3 provide clarification and data handing method to comply with permit or rule limits, and is expected to have no socioeconomic impacts.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

California Health and Safety Code Section 40727 requires that prior to adopting, amending, or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report. The following provides the draft findings.

Necessity: A need exists to propose Amended Rules 218.2 and 218.3 to provide administrative and technical specifications to continuous emission monitoring systems.

Authority: The South Coast AQMD obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code Sections 39002, 40000, 40001, 40440, 40441, 40702, 40725 through 40728, and 41511.

Clarity: PAR 218.2 and PAR 218.3 have been written or displayed so that their meaning can be easily understood by the persons affected by the rule.

Consistency: PAR 218.2 and PAR 218.3 are in harmony with, and not in conflict with or contradictory to, existing federal or state statutes, court decisions, or federal regulations.

Non-Duplication: PAR 218.2 and PAR 218.3 do not impose the same requirement as any existing state or federal regulation and is necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD.

Reference: In amending this rule, the South Coast AQMD hereby implements, interprets, or makes specific reference to the following statues: Health and Safety Code Sections 39002, 40001, 40702, 40440, 41511, and 40725 through 40728.5.

COMPARATIVE ANALYSIS

Health and Safety Code Section 40727.2(g) provides for a comparative analysis and is applicable when the proposed amended rules or regulations impose, or have the potential to impose, a new emissions limit or standard, or increased monitoring, recordkeeping, or reporting requirements. In this case, a comparative analysis is not required because the amendments do not impose such requirements.

INCREMENTAL COST EFFECTIVENESS

Health and Safety Code Section 40920.6 requires an incremental cost-effectiveness analysis for Best Available Retrofit Control Technology (BARCT) rules or emission reduction strategies when there is more than one control option that would achieve the emission reduction objective of the proposed amendments, relative to ozone, CO, SOx, NOx, and their precursors. PAR 218.2 and PAR 218.3 are not Best Available Retrofit Control Technology (BARCT) rules or emission reduction strategies; therefore, this provision is not applicable.

APPENDIX: RESPONSE TO PUBLIC COMMENTS

South Coast AQMD held a Public Workshop on March 30, 2022, and a Public Consultation Meeting on June 8, 2022, both via Zoom video conference. Comments were received during the Public Workshop and Public Consultation Meeting. Three comment letters were received during the comment period that ended on April 13, 2022, and one comment letter was received beyond the comment period.

The following responses summarize the key comments received during the Public Workshop and Public Consultation:

Comment WS-1: For a higher span range that is not often used, are tests such as linearity check and relative accuracy test audit (RATA) still required?

Response WS-1: Linearity check is required at the certification/recertification and it should be conducted for all spans. Linearity check is not required pursuant to Rule 218.3 clause (g)(2)(B)(i) for ongoing Quality Assurance and Quality Control (QA/QC).

RATA test is required at the certification/recertification and ongoing QA/QC. This test is conducted in the as-found unit operating condition, not depending on how often a span range is utilized.

Comment WS-2: Is low level spike recovery in Attachment A necessary? Suggest to allow CEMS down time for this determination.

Response WS-2: Low level spike recovery will be required if the owner or operator of the CEMS elects to validate the lowest vendor guaranteed range. This test is not required if the owner or operator elects to report 10 percent of the span range.

Rule 218.2 paragraph (e)(2) allows CEMS down time for up to 96 hours for each occurrence of maintenance pursuant to the QA/QC Program, and an additional 96 hours if the unit is not operating and no emissions are generated. As low level spike recovery test is part of the QA/is proposing to incorporate stakeholder's suggestion of aligning with the RECLAIM requirement and extend the RATA report due date from 60 days upon completion of the test to 90 days.

Comment WS-5: For the hours when the base unit is not operating and emission data are missing, data substitution should not be required.

Response WS-5: Staff agrees with the commentor and proposes to add a provision under subdivision (i) to allow the owner or operator to report valid zero emissions data while the base unit (emitting source) is not operating and no emissions

are generated. The non-operation should be demonstrated in accordance with Rule 218.2 paragraph (e)(4). Recordkeeping would also be required.

Comment WS-6: The required information and reporting method for semi-annual report are general, not specific enough.

Response WS-6: Staff understands the concern. Staff is developing a streamlined electronic reporting form and a guidance document to specify the required information in the report.

Comment WS-7: How long should the records, especially one-minute CEMS data, be maintained?

Response WS-7: Rule 218.2 subparagraph (h)(3)(A) currently specifies that records shall be maintained for a minimum period of two years or a period specified in any rule or permit condition, whichever is longer. Staff proposes to align with the California Code of Civil Procedure, section 338(k), and extend the recordkeeping period from a minimum period of two years to three years.

For a unit that has a permit or rule required mass emission limit with minute increments for a defined startup or shutdown period, records of one-minute CEMS data are needed to demonstrate compliance. For a missing data period, records of previous startups or shutdowns (one-minute data) are required for data substation, which may extend beyond previous three years if the unit rarely has a startup or shutdown. To comply with this provision, the owner or operator only needs to keep the minute records from startup or shutdown events.

Therefore, the recordkeeping is for a minimum period of three years, or a period required to demonstrate compliance with a permit or rule which often is source specific or relative to facility's operation plan.

Comment Letter #1

Hi Yanrong,

Thanks for including the revised paragraph (f)(1)(B) language in the proposed amended version of Rule 218.2. In looking through Rule 218.2 and 218.3, I think there is just one additional paragraph that is of possible concern with regard to director's discretion:

- Rule 218.2, paragraph (k)(1) and Rule 218.3, paragraph (l)(1), which consist of the language below:

  (1) If a rule or permit specify CEMS requirements that are different than requirements specified in Rule 218.3, the owner or operator shall adhere to CEMS requirements in the rule or permit, unless otherwise notified by the Executive Officer.

1-1

As with paragraph (f)(1)(B), I would recommend additional language that establishes some criteria by with the Executive Officer would determine that such notification is warranted. I'm not sure if data accuracy would be appropriate since the issues related to this provision could be different than with paragraph (f)(1)(B), but perhaps stringency could be an appropriate basis if the underlying purpose here is to streamline overlapping requirements. In addition, the term 'different' is of some concern since it is vague enough that it might be interpreted to allow less accurate or stringent requirements to take precedent over rule requirements. I would suggest the addition of language that narrows or clarifies the scope of 'different.' Alternately, if retaining that term is important to preserving some flexibility for the District, perhaps the inclusion of language to indicate that while these CEMS requirements in another rule or permit are different than Rule 218.3 requirements, they shall still assure compliance (or must be equivalent?) with Rule 218.3 requirements. Please call or email to discuss further if necessary.

Thanks,
Eugene

Eugene Chen
US EPA, Region 9
Air Division, Rules Office
75 Hawthorne Street (AIR-3-2)
San Francisco, CA 94105
(415) 947-4304

Response to Comment Letter #1

Response 1-1: Staff agrees that more specificity is needed to clarify the purpose. The rule or permit specified CEMS requirements are generally more stringent, in which case the owner or operator will adhere to CEMS requirements in the rule or permit instead of the equivalent requirements in Rules 218.2 and 218.3. Staff proposed to revise the exemption provision specifying that the basis of the exemption is on the requirement stringency. The Executive Officer will provide a written notice to the owner or operator if the rule or permit specified CEMS requirements are deemed less stringent and therefore the owner or operator must comply with the requirements in Rules 218.2 and 218.3.

Comment Letter #2

Michael Krause
Assistant Deputy Executive Officer
Planning, Rule Development, and Area Sources
South Coast Air Quality Management District
mkrause@aqmd.gov

Dear Mr. Krause:

The South Coast AQMD released a draft Proposed Amended Rule 218.3 on March 18, 2022. One of the primary purposes of the amendment is to address facilities' concerns over the monitoring data gap for dual range analyzers. The draft amended Rule 218.3(i)(1)(C) and Attachment A (Table A-2) provide a new supplemental/alternative test approach that most facilities can apply. In the draft rule, AQMD expanded the applicability of the new approach to any non-lowest vendor guaranteed span range which would have potential impacts on the rich-burn engine CEMS operated at our Joint Water Pollution Control Plant (JWPCP) located in Carson, CA.

The JWPCP operates five rich-burn engines equipped with NOx controls and NOx, CO and O_2 CEMS for compliance. As designed, the rich-burn engine NOx emissions and O_2 concentrations are typically measured as zero or near zero (within the margin of error) during normal operations. Historically, the NOx and O_2 values have consistently been zero or near zero as demonstrated during annual compliance source tests and CEMS RATA tests. We believe that the proposed linearity error checks in Table A-2 should not be required for rich-burn engine NOx CEMS at such low levels; for instance, EPA Part 75 exempts a CEMS from the quarterly linearity checks if the span range is ≤ 30 ppm.

We understand that Rules 218.2 and 218.3 are intended to provide general requirements and specifications for facilities to comply with AQMD rules and permit conditions. The intent of the amendments is to address the monitoring data that may fall below 10% of the span of the high range of a dual range analyzer which is normally more than 1000 ppm. In addition, it is our understanding that R218.3(i)(1)(C) and Attachment A only apply to pollutant CEMS, but not O_2 CEMS since all combustion units, except rich-burn engines, would not have any readings below 10% of the O_2 analyzer range. Therefore, we believe R218.3(i)(1)(C) and Attachment A should not be applicable to the very limited number of rich-burn engines operating within SCAQMD jurisdiction. 2-1

We recommend that AQMD consider an exemption for rich-burn engine NOx and O_2 CEMS from the Rule 218.3(1)(1)(C) and Attachment A requirements. We would also like to meet and discuss with your team further on the potential impacts and challenges for these rich-burn engine CEMS, if possible.

Sincerely,

Mathew L. Watson, P.E.
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562-908-4288 ext. 2117
mathewwatson@lacsd.org

LOS ANGELES COUNTY SANITATION DISTRICTS
Converting Waste Into Resources
Website | Facebook | Twitter | Instagram | YouTube

Response to Comment Letter #2

Response 2-1: The l~~L~~inearity check addressed in Attachment A Table A-2 is only applicable when the facility elects to validate data that fall below 10 percent of the span range that is not the lowest vendor guaranteed span range. For example, if the analyzer has two span ranges, 0-10 ppm and 0-200 ppm. Span range 0-10 could be the lowest vendor guaranteed span range. In this case, the linearity check is only applicable when the facility elects to validate data in the monitoring gap of 9.5-20 ppm. The linearity check is not required to validate data below 1 ppm, which is below 10 percent of the lowest vendor guaranteed span range.

Rule 218.3 (i)(1)(C) and Attachment A provide an additional option on how to report data below 10 percent of the upper span value of a span range. Previously, this additional option was only provided to validate data below 10 percent of the upper span value of the lowest vendor guaranteed span range. The rule now proposes to also provide this option to validate data below 10 percent of the upper span value of other higher span range. Since it is an additional option, the facility may choose not to refer to R218.3(i)(1)(C) and Attachment A. Instead, the facility may continue previous practice by complying with R218.3(i)(1)(A)&(B) and reporting data below 10 percent of the upper span value of any span range at the 10 percent value.

Comment Letter #3

April 13, 2022

Ms. Yanrong Zhou
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Ms. Zhou:

Subject: Los Angeles Department of Water and Power's (LADWP) Comments on Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications

LADWP appreciates the opportunity to provide comments on the proposed amendments to Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications. LADWP remains committed to working with the South Coast Air Quality Management District (SCAQMD) to develop effective policies for monitoring emissions from major facilities in order to meet air quality goals in the South Coast Air Basin.

LADWP operates seven combined cycle units, four boilers units, and 14 simple cycle units, each with a dedicated Continuous Emission Monitoring System (CEMS) currently certified under SCAQMD Rules 2012, 218, 218.1, and 40 CFR Part 75. Six of the seven combined cycle units and six of 14 simple cycle units are dual fuel units capable of combusting both natural gas and diesel fuel, with the latter only used for emergency. The CEMS for these dual fuel units are certified to measure NOx and CO emissions from both natural gas and diesel combustion.

Comments on Proposed Amendments to Rules 218.2

1. Section f.1.B – Certification Requirements

The rule requires the owner or operator of a CEMS to certify or recertify any CEMS that is modified for any component that is either listed on the certification letter, Technical Guidance Document R-002, or Quality Assurance/Quality Control (QA/QC) Plan, unless the Executive Officer determines that such modification would not impact data accuracy and certification or recertification is not necessary.

Typically, a CEMS unit has hundreds of consumable parts (as listed in Attachment 1-Sample List of Parts) that are periodically (monthly, quarterly, yearly) maintained and/or replaced. Multiplying the number of CEMS consumable parts by the number of LADWP generating units will result in an enormous number of recertification events that must be completed in a quarter. With the amount of testing needed, scheduling with source test companies and coordinating with energy dispatch will be very difficult. 3-1

In addition, CEMS breakdowns which can happen on a weekend require immediate action to keep the percent availability above 95%. Asking for a determination from the Executive Officer whether each repair activity will affect accuracy of the CEMS or not, may cause delays in getting the CEMS back in service and collecting valid data. Applying for recertification of the CEMS each time a part of a CEMS component is replaced will be onerous and expensive.

LADWP suggests that the requirement to recertify CEMS be limited only to replacement of major components listed in the CEMS Certification and ST220 form. Components/Parts listed in Quality Assurance Plan (QAP) that are subject to periodic preventative and corrective maintenance should be exempt from this requirement. LADWP requests clarification on the distinction between a CEMS modification and CEMS preventative/corrective maintenance. The definition of "CEMS modification" should be updated to clarify the distinction and reiterate that this does not apply to "preventative and corrective maintenance".

Comments on Proposed Amendments to Rules 218.3

1. Mass Calculation

LADWP combustion turbine units have NOx mass permit limits for startups and shutdowns. In addition, some of these units have a NOx mass rate limit for startup. Currently, LADWP calculates NOx mass emissions every minute during startup and shutdown durations. The mass calculation is based on stack gas concentration, heat input rate and oxygen concentration Oxygen F-Factor approach). The valid minutes are added up to determine compliance with the permit limits.

3-2

LADWP appreciates SCAQMD for allowing the use of the Higher Heating Value (HHV) of 1050 Btu/hour to calculate mass emissions as outlined in Table 5. However, the use of the HHV results in the over-reporting of mass emissions. LADWP requests that SCAQMD allow the use of the Heating Value provided in the monthly gas company bills as an approved alternative method to avoid over-reporting of mass emissions during periods of startups and shutdowns. This method is consistent with 40 CFR Part 75 which allows the use of heating value provided by the gas company every month. The heating value is applied starting on the date of receipt of the gas bill until the date of receipt of the following month's gas bill.

2. Data Substitution Procedure

The proposed Data Substitution Procedure in section i.11.A if applied to invalid hours during startup and shutdown may result in the exceedance of startup and shutdown permit mass limits which constitutes a violation. In the following example, if hours 12 and 13 were invalid, the cold start limit of 600 pounds would have been exceeded based on the proposed mass substitution procedure using the average of the hour before and after the invalid data period.

3-3

Date/Time (Local)	Unit ID	Unit Status	Gross MWH	Net MWH	Natural Gas (KCFH)	O2 Dry (%)	NOx BA (PPM)	NOx Cor (PPM)	NH3 Cor (PPM)	CO Cor (PPM)	Stack Flow BA (msc	NOx Rate BA (lbs/I	Startup lbs
10/13/2018 0:00	51	9	0	0	0	20.925	0	0	0	0	0	0	
10/13/2018 1:00	51	9	0	0	0	20.912	0	0	0	0	0	0	
10/13/2018 2:00	51	9	0	0	0	20.897	0	0	0	0	0	0	
10/13/2018 3:00	51	9	0	0	0	20.89	0	0	0	0	0	0	
10/13/2018 4:00	51	9	0	0	0	20.894	0	0	0	0	0	0	
10/13/2018 5:00	51	9	0	0	0	20.933	0	0	0	0	0	0	
10/13/2018 6:00	51	9	0	0	0	20.89	0	0	0	0	0	0	
10/13/2018 7:00	51	9	0	0	0	20.869	0	0	0	0	0	0	
10/13/2018 8:00	51	9	0	0	0	20.901	0	0	0	0	0	0	
10/13/2018 9:00	51	9	0	0	0	20.942	0	0	0	0	0	0	
10/13/2018 10:00	51	9	0.932	0.932	146.14	20.477	1.899	5.655	0	44.23	14.594	14.928	14.928
10/13/2018 11:00	51	7	18.493	18.493	870.77	17.91	23.173	45.491	0.758	26.196	55.666	173.41	173.41
10/13/2018 12:00	51	7	17.658	17.658	845.34	17.95	12.234	24.483	0	24.457	54.799	90.295	142.91
10/13/2018 13:00	51	7	17.88	17.88	847.56	17.501	12.827	22.295	0	18.885	47.881	82.432	142.91
10/13/2018 14:00	51	7	22.848	22.848	880.31	17.48	16.881	29.26	0.279	37.626	49.304	112.4	112.4
10/13/2018 15:00	51	7	66.995	66.995	1124.1	15.482	12.893	15.093	1.267	33.628	40.258	68.758	64.75
10/13/2018 16:00	51	9	4.533	4.533	202.67	20.274	3.743	7.498	1.072	10.354	31.388	20.27	
10/13/2018 17:00	51	7	30.628	30.628	867.06	16.079	19.871	24.143	0.048	23.816	34.39	91.929	
10/13/2018 18:00	51	9	36.863	36.863	783.9	16.652	17.183	19.578	3.515	21.041	40.128	79.945	
10/13/2018 19:00	51	9	8.207	8.207	342.31	19.59	4.244	8.27	0.145	8.771	24.301	21.637	
10/13/2018 20:00	51	7	42.225	42.225	937.34	15.784	28.867	33.462	1.091	20.527	34.94	136.17	
10/13/2018 21:00	51	0	125.07	125.07	1473.5	14.291	2.063	1.842	0.642	0.018	42.628	11.831	
10/13/2018 22:00	51	0	163.89	163.89	1761.8	14.232	2.276	2.015	0.938	0.043	50.509	15.483	
10/13/2018 23:00	51	0	163.86	163.86	1761.5	14.198	2.31	2.035	1.018	0.004	50.239	15.63	
											Startup Total		651.3

3-3

This procedure cannot be applied during startups and shutdowns because these events occur in a span of minutes during which the emissions per minute are added together to determine compliance with mass limits. Since unit startup (Status Code 7) and steady state operation (Status Code 0) can occur in the same hour, LADWP believes that calculating mass emissions per startup minute is a more accurate accounting of startup mass emissions. However, there are instances when startup minutes are deemed invalid and cannot be used in the calculation of startup or shutdown mass emissions. LADWP proposes that only valid minutes should be included in the total mass calculations for startups and shutdowns.

Substituted data at the hourly level should not be enforceable for startup and shutdown mass limits that are accumulated at the minute level. As soon as the startup ends, the NOx mass emissions are no longer accumulated towards determining compliance with mass limits. LADWP recommends omitting the phrase "for the purpose of determining mass emissions" under 218.3(i)(11) and revising the staff report to clarify that substituted data is not enforceable for mass emission and concentration limits and that only valid data will be used for compliance determinations.

3. Timing of Corrective Actions

PAR 218.3 section (f)(2)(A) states "The owner or operator of the CEMS shall make corrective actions within 8 hours of receiving the audible alert." It is not always possible to begin making corrective actions to repair the CEMS during off hours such as holidays and weekends when personnel may not be available. LADWP recommends revising this section to the following: "The owner or operator of the CEMS shall make corrective actions within eight hours of receiving the audible alert, except during off hours such as evenings, holidays, and weekends. The Operator will be allowed up to eight hours from the start of the next business day to begin making corrective actions." 3-4

LADWP requests SCAQMD's consideration of these comments and looks forward to working with SCAQMD on the development and refinement of these rules.

If you have any questions or would like additional information, please contact Ms. Andrea Villarin of my staff at (213) 367-0409.

Sincerely,

Katherine Rubin

Digitally signed by Katherine Rubin
Date: 2022.04.13 10:49:00 -07'00'

Katherine Rubin
Manager of Air and Wastewater Quality and Compliance

LL:

c: Mr. Michael Krauss
South Coast Air Quality Management District

Mr. Gary Quinn
South Coast Air Quality Management District

Ms. Heather Farr
South Coast Air Quality Management District

Ms. Andrea Villarin
Los Angeles Department of Water and Power

Response to Comment Letter #3

Response 3-1: CEMS components identified in its QA/QC plan are, or can be, unique to each system and could have a potential impact on the CEMS performance. Staff understands that some CEMS component modifications for periodic preventative and corrective maintenance may require some certification test. For example, sampler or analyzer filter replacement is preventative maintenance that would require a calibration according to Technical Guidance Documents R-002 (TGD R-002).

For the modification of a component that is identified in its QA/QC plan but not in the certification letter or TGD R-002, the owner or operator is only required to submit a notification and update the QA/QC plan. The owner or operator is not required to submit the application form ST220, or obtain an approval to conduct this type of modification. The notification provides the Executive Officer an opportunity to determine if such modification, especially in a unique case, would impact data accuracy and whether certain test(s) would be required.

Rule 218.2 (f) has been streamlined and codified existing practices for certification and recertification. Maintaining the existing case by case evaluation allows for flexibility to both staff and the CEMS owner who will be made aware of those potentially impacted components. During the Executive Officer's review for approval of the QA/QC plan, staff will be able to work with the owner or operator and determine which, or any, components that will be exempted from the alternative recertification process for a future modification.

Response 3-2: Rule 218.3 proposes to allow a measured heating value of the fuel determined by a method approved by the Executive Officer (see footnote of Table 5). Staff agrees that a heating value determined by gas bills should be considered as a measured heating value.

Response 3-3: Staff recognizes some South Coast AQMD permits or rules may require a mass emission limit with minute increments for a defined startup or shutdown period, and agrees that there is a need to determine mass emissions on a per minute interval.

Staff is proposing to include a method for determining mass emissions for a permit or rule defined startup or shutdown period with minute increments in Rule 218.3. The owner or operator would calculate the mass emissions for each minute using the equations listed in Table 5, except that minute level should be used in the calculation rather than hourly parameters. The mass emissions for all minutes of the period would be totalized to demonstrate compliance. The owner or operator would use data in the

startup period for substitution when data from a startup period is missing and data in the shutdown period for substitution when data from a shutdown period is missing.

Response 3-4: A controlled temperature enclosure/environment is necessary for analyzers to operated properly. When temperature in the analyzer enclosure changes and falls out of manufacturer's recommended range, the analyzer measurements may drift and become inaccurate. Taking corrective action in a timely manner is essential for maintaining data accuracy. The current requirement of making corrective actions within eight hours has included the consideration for both data accuracy and operation practice.

Comment Letter #4

July 21, 2022

Ms. Yanrong Zhu
Air Quality Specialist
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
Email: yzhu1@aqmd.gov

Subject: Comments on Revised Proposed Amended Rule 218.3 - Continuous Emission Monitoring System: Performance Specifications

Dear Ms. Zhu:

AES is grateful to have been consulted during the amendment process for Rule 218.3 (Continuous Emission Monitoring System: Performance Specifications) and appreciates the opportunity to comment on the latest version of the Draft Proposed Amended Rule (PAR) 218.3 dated June 10, 2022. AES' comments are as follows:

1. AES supports the addition of the proposed Low-Level Linearity Performance Test (LLLPT) as a method to quality assure data falling in the "Monitoring Gap" between 95% of a lower span range and 10% of an upper span range. However, the current PAR 218.3 requires a Low-Level Calibration Error (LLCE) test in addition to the LLLPT despite the acceptance criteria of the LLLPT being significantly more stringent. The table below shows reference gas concentrations and allowable error for both tests based on the example contained in the PAR 218.2/218.3 Revised Preliminary Draft Staff Report dated June 2022. For the span ranges in the example, the allowable error of the LLLPT expressed in parts per million (ppm) is as low as 1 ppm while the allowable error for the LLCE is 25 ppm. Therefore, AES believes that with the requirement of the LLLPT the LLCE test is unnecessary for quality assuring the "Monitoring Gap" between ranges. AES requests that the LLCE test requirement be removed for ranges other than the lowest vendor guaranteed span range. 4-1

Lower Range: 0 – 10 ppmv, Upper Range: 0 – 1000 ppmv					
Low-Level Linearity Performance Test (LLLPT)			**Low Level Calibration Error Test (LLCE)**		
Gas Level	Ref. Gas Concentration	Allowable Error (5% of Ref.)	Gas Level (% of Span)	Ref. Gas Concentration	Allowable Error (2.5% of Span)
L	20 ppm	**1 ppm**	5%	50 ppm	**25 ppm**
M	60 ppm	**3 ppm**	10%	100 ppm	**25 ppm**
H	100 ppm	**5 ppm**	20%	200 ppm	**25 ppm**

2. The current PAR 218.3 specifies "10% of Span Range Tested" for the upper value of the Low-Level Linearity Performance Test in Table A-2. AES requests this to be changed to 4-2

"Approximately 10% of Span Range Tested" to allow for minor variation between the requested reference gas concentration ordered and the actual concentration delivered by the gas supplier. 4-2

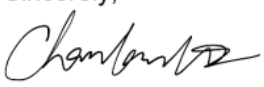
3. The current PAR 218.3 Section (i)(2)(B)(i) is inconsistent with the changes proposed in Section (i)(1)(C). AES recommends Section (i)(2)(B)(i) be updated in accordance with the proposed change to Section (i)(1)(C). 4-3

4. The current PAR 218.3 Section (i)(13)(C) requires data substitution using data from previous completed startups or shutdowns if a startup or shutdown has more than fifty percent of missing 1-minute mass emission data. AES requests the "completed" startups or shutdowns in this rule section to be revised to "successfully completed" startups or shutdown, so that data from completed but non-representative startups or shutdowns due to equipment breakdown issues would be excluded from emission calculations. 4-4

5. The current PAR 218.3 Section (i)(11)(A) requires data substitution for hourly pollutant concentration, stack flow, and pollutant mass emission rate for any hour with missing data. AES requests update of the rule language in this section to clarify the definition of "any hour". The current PAR 218.3 Section (i)(4)(A) defines how the hourly average should be calculated based on the number of 15-minute quadrants with valid data in the unit operating hour and if maintenance or quality assurance activities occurred during the operating hour. AES suggests the current PAR 218.3 Section (i)(11)(A) be updated to only require data substitution on any hour that does not meet the emission data averaging requirements outlined in the current PAR 218.3 Section (i)(4)(A). 4-5

Please feel to contact us with any questions.

Sincerely,



Charlene He
Environmental Manager
AES Alamitos Energy

Ben Morgan
Environmental Manager
AES Huntington Beach Energy

cc: Weikko Wirta/AES Southland Energy
Heather Farr/South Coast AQMD
Michael Krause/ South Coast AQMD
Dipankar Sarkar/ South Coast AQMD
Bill Welch/ South Coast AQMD

The AES Corporation | 21730 Newland Street | Huntington Beach, CA 92646

Response to Comment Letter #

Response 4-1: Staff agrees with the commentor and has updated the proposed rule language to not require longer LLCE test requirements for ranges other than the lowest vendor guaranteed span range.

Response 4-2: Staff agrees and updated Table A-2 to include the term "Nominal Concentration at 10% of Span Range Tested.".

Response 4-3: Staff agrees and revised Rule 218.3 clause (i)(2)(B)(i) to be consistent with the proposed revision to Rule 218.3 subparagraph (i)(1)(C).

Response 4-4: Staff agrees and incorporated the commenter's suggestion.

Response 4-5: To clarify the requirement, staff has included the sentence "any hour without sufficient valid data points required by subparagraph (i)(4)(A)" to provide more specificity for the hours requiring a data substitution.

Comment Letter #5

August 2, 2022

Ms. Yanrong Zhou
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Ms. Zhou:

Subject: Los Angeles Department of Water and Power's (LADWP) Comments on Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications

LADWP appreciates the opportunity to provide comments on the proposed amendments to Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications. LADWP is commenting on the proposed amended rule language presented during the Public Workshop held on June 8, 2022.

Comments on Proposed Amendments to Rule 218.3

1. Mass Calculation During Startup and Shutdown
   Comment 1: In the comment letter submitted on April 13, 2022, LADWP demonstrated that NOx mass emissions are calculated every minute during startup and shutdown since the permit time limit for these events are in minutes, not hours. LADWP appreciates SCAQMD's proposal to include a procedure for calculating mass emissions at the minute level during startup and shutdown in the rule language. 5-1

2. Data Substitution Procedure
   Comment 2: In the comment letter submitted on April 13, 2022, LADWP expressed the need for a Missing Data Procedure (MDP) at the minute level during startup and 5-2

111 N. Hope Street, Los Angeles, California 90012-2607 Mailing Address: PO Box 51111, Los Angeles, CA 90051-5700
Telephone (213) 367-4211 ladwp.com

Ms. Zhou
August 2, 2022

shutdown. LADWP appreciates SCAQMD's response by adding Section (i)(13) – Data Substitution for Missing Minute Data for Startup and Shutdown.

However as mentioned in the letter, some of LADWP's units have both a NOx mass (lbs) and a NOx mass rate (lbs/hr) limit for startup. While data substitution procedure at the minute level for NOx mass during startup was addressed in Section (i)(13), the data substitution procedure for hourly NOx mass rate during startup has not been addressed. 5-2

Comment 3: Section (i)(13)(B) MDP requires the use of the average of startup valid minutes for substitution if the total number of minutes with no valid data add up to less than fifty percent of the startup/shutdown duration. Plant operators closely monitor the NOx mass accumulation each minute during startup to ensure compliance with permit limits. Since they have to make quick operational decisions based on real time data, waiting for the startup to conclude to calculate the average value for the MDP makes it difficult to ensure compliance with the mass emission limit. LADWP suggests taking the minute average of the last successful start to substitute for invalid minutes for startups with less than fifty percent invalid data. This procedure would provide immediate data that operators need to make operational decisions. 5-3

Comment 4: For both Sections (i)(13)(B) and (C) MDP, LADWP suggests that the data used for substitution be captured from a similar startup category. For example, combined cycle unit startups are categorized as either cold or non-cold. NOx emissions are higher during cold startups compared to non-cold startups. Using emissions data during a cold startup to substitute for missing data during a non-cold startup may result in an exceedance of the NOx mass permit limit for a non-cold startup. In addition, data used for substitution should be captured from successfully completed startups and shutdowns. LADWP suggests the following changes to (i)(13)(C)(i) and (ii): 5-4

(i) The previous 10 **successfully** completed startups or shutdowns
(ii) All **successfully** completed startups or shutdowns that occurred during the 12-month period prior to the most recent startup or shutdown.

:

Ms. Zhou
August 2, 2022

Determination of Startup Duration when CEMS Data is Invalid

Comment 5: During a previous discussion with SCAQMD, LADWP cited instances when the CEMS goes out of control during startup and the exact time when compliance is finally achieved cannot be determined because the startup timer would continue counting startup minutes. For situations like this, AQMD suggested that the startup should end at the permit time limit. The mass accumulated will be determined based on the permit time limit. This solution, however, could result in the overcounting of mass emissions and consequently, the exceedance of the mass permit limit especially in cases when startup ends prior to reaching the permit time limit. LADWP suggests that AQMD reference ***Rule 429.2 - Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen from Electricity Generating Facilities*** where the end of startup is defined in Section (d)(4) as when the unit reaches stable conditions, the NOx post-combustion control equipment reaches minimum operating temperature, and all post-combustion NOx control equipment are fully deployed.

5-5

Online Calibration

Comment 6: Rule 218.3 requires calibration to be performed when the unit is operating. To minimize invalid data during startups, it is ideal to conduct calibration after the startup is completed. However, there are some instances in which the unit (peaking units in particular) can be called offline shortly after completion of startup, leaving very little time to complete an online calibration. LADWP requests that SCAQMD consider a calibration valid if initiated while the unit is online and completed after the unit shuts down. LADWP suggests the following rule language:

"In the event the generating unit has to shut down while a calibration is in progress, the calibration shall be allowed to proceed completion and shall be deemed valid.

5-6

LADWP requests SCAQMD's consideration of these comments and looks forward to working with SCAQMD on the development and refinement of these rules.

If you have any questions or would like additional information, please contact Ms. Andrea Villarin of my staff at (213) 367-0409.

Sincerely,

Katherine Rubin

Digitally signed by Katherine Rubin
Date: 2022.08.02 16:10:15 -07'00'

Katherine Rubin
Director of Environmental Affairs

LL:
c: Mr. Michael Krauss
South Coast Air Quality Management District

Ms. Heather Farr
South Coast Air Quality Management District

Ms. Andrea Villarin
Los Angeles Department of Water and Power

Response to Comment Letter #5

Response 5-1: Thank you for the comment.

Response 5-2: Proposed Amended Rule 218.3, as a general CEMS guidance rule, is proposing to include mass emission calculation and data substitution method for mass emissions with minute increments for a defined startup or shutdown period and mass emission with hour increments for general operation. Staff understands LADWP has a unique permit condition that for a defined startup or shutdown period (e.g., a cold startup of 166 minutes) the permit requires both a NOx mass (lbs) and a NOx mass rate (lbs/hr). Proposed Amended Rule 218.3 paragraphs (i)(12) and (i)(13) can be referenced to determine the NOx mass (lbs) for a startup or shutdown period. Proposed Amended Rule 218.3 paragraphs (i)(10) and (i)(11) for the general hourly data handling may be referenced for the mass emission rate (lbs/hr) if the permit condition intends it to be determined by block hours. Staff has consulted the permitting staff and verified that it is not common to have both emissions limits on mass and mass rate for the same period, and it can be very specific for the unit on the determination. Staff suggests it is more appropriate to specify this determination in the permit condition, rather than in Rule 218.3.

Response 5-3: Staff is proposing to incorporate this comment by adding an option for using the one-minute mass emission average of the previous successfully completed startup or shut down for data substitution if the sum of the missing data minutes is less than or equal to fifty percent of all the minutes for the period.

Response 5-4: Current Rule 218.3 proposal aligns with both points that the commenter suggests. The rule intends that the data used for substitution should be captured from a similar startup category. The staff report has noted that data evaluated for substitution for the missing minutes should have the same operation status. For further clarification, staff has updated the staff report adding that if a permit or rule defines a more specific operation status, such as cold startup, only cold startup emissions can be substituted with cold startup emissions. The rule has also added "successfully" to the corresponding language under Rule 218.3 paragraph (i)(13).

Response 5-5: Proposed Amended Rule 218.3 provides guidance on how mass emissions should be determined for a startup or shutdown period defined by a permit or rule but does not define the length of the startup or shutdown period. Staff suggests it is more appropriate to specify a startup or shutdown period in the permit condition with the consideration of Rule 429.2 specifications for electricity generating facilities.

Response 5-6: Rule 218.3 does not require calibration to be performed when the unit is operating. Staff understands this difference between Rule 218.3 and U.S. EPA CFR Part 75 for Electricity Generating Facilities regarding the unit operational status requirement during a calibration.

ATTACHMENT H

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

SUBJECT: **NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

PROJECT TITLE: **PROPOSED AMENDED RULE 218.2 – CONTINUOUS EMISSION MONITORING SYSTEM: GENERAL PROVISIONS, AND PROPOSED AMENDED RULE 218.3 – CONTINUOUS EMISSION MONITORING SYSTEM: PERFORMANCE SPECIFICATIONS**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

If the proposed project is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino Counties. The Notice of Exemption will also be electronically filed with the State Clearinghouse of the Governor's Office of Planning and Research for posting on their CEQAnet Web Portal which may be accessed via the following weblink: https://ceqanet.opr.ca.gov/search/recent. In addition, the Notice of Exemption will be electronically posted on the South Coast AQMD's webpage which can be accessed via the following weblink: http://www.aqmd.gov/nav/about/public-notices/ceqa-notices/notices-of-exemption/noe---year-2022.

NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

To:	County Clerks for the Counties of Los Angeles, Orange, Riverside and San Bernardino; and Governor's Office of Planning and Research – State Clearinghouse	**From:**	South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

Project Title: Proposed Amended Rule 218.2 – Continuous Emission Monitoring System: General Provisions, and Proposed Amended Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications

Project Location: The proposed project is located within the South Coast Air Quality Management District's (South Coast AQMD) jurisdiction, which includes the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties), and the Riverside County portion of the Salton Sea Air Basin and the non-Palo Verde, Riverside County portion of the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project: Amendments to Rules 218.2 and 218.3 are proposed that will complement recent rule development efforts for command-and-control rules with continuous emission monitoring system (CEMS) requirements. Proposed Amended Rule (PAR) 218.2 will: 1) include more specificity to the Executive Officer's discretion on CEMS recertification requirements and the exemption provision; 2) extend the recordkeeping period; and 3) provide more time for submitting the relative accuracy test audit (RATA) report. PAR 218.3 will: 1) include an option to validate and accept data that would fall in a monitoring gap for dual range analyzers; 2) add specifications for conducting mass emission calculations data substitution procedures; 3) clarify the method for linearity error checks; and 4) include more specificity to the Executive Officer's discretion on the exemption provision.

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) – Common Sense Exemption

Reasons why project is exempt: South Coast AQMD, as Lead Agency, has reviewed the proposed project (PAR 218.2 and PAR 218.3) pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. The proposed project provides updates to technical guidelines for operating CEMS as required by South Coast AQMD rules or permit conditions without requiring physical modifications to occur. Thus, it can be seen with certainty that implementing the proposed project would not cause a significant adverse effect on the environment. Therefore, the proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption.

Date When Project Will Be Considered for Approval (subject to change):
South Coast AQMD Governing Board Public Hearing: September 2, 2022

CEQA Contact Person:	**Phone Number:**	**Email:**	**Fax:**
Kevin Ni	(909) 396-2462	kni@aqmd.gov	(909) 396-3982
Rules Contact Person:	**Phone Number:**	**Email:**	**Fax:**
Yanrong Zhu	(909) 396-3289	yzhu1@aqmd.gov	(909) 396-3982

Date Received for Filing: _____ **Signature:** *(Signed and Dated Upon Board Approval)*

Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development, and Implementation

Proposed Amended Rule 218.2

Continuous Emission Monitoring System: General Provisions

Proposed Amended Rule 218.3

Continuous Emission Monitoring System: Performance Specifications

Board Meeting

September 2, 2022

South Coast AQMD

Background

- Continuous Emission Monitoring System (CEMS) rules provide specifications for CEMS installation and operation
- Rules 218.2 and 218.3 adopted on March 5, 2021:
  - Applies to former RECLAIM CEMS and Non-RECLAIM CEMS*
  - Aligns CEMS requirements for RECLAIM facilities as they transition to a command-and-control regulatory structure
- Staff has been monitoring Rules 218.2 and 218.3 implementation
  - Issues identified that require amendments

* *RECLAIM CEMS are currently subject to Rules 2011 and 2012; Non-RECLAIM CEMS were previously subject to Rules 218 and 218.1*

Proposed Rule Amendments

Key Revisions

- Includes new mass emission calculation and missing data procedure
- Includes new data validation for dual range analyzer

Other Revisions

- Includes specificity for recertification and exemption
- Provides more time for relative accuracy test audit report submittal
- Clarifies linearity error test procedure
- Extends the recordkeeping from a minimum period of two years to three years

Procedures for Mass Emissions

Rules 218.2 and 218.3 developed for command-and-control concentration limits

- Includes data handling procedures for concentration limits

Several recently adopted landing rules for facilities transitioning out of RECLAIM include mass-based limits

- Need data handling procedures for mass emissions

Mass emission calculation and data substitution proposed for:

- General operation; and
- Rule and permit defined startup or shutdown with a mass emission limit in minute interval

Table 5 - Mass Emission Calculation Equations

Mass Emission Calculation	Eq. #	Equation*	Where:
Based on stack gas concentration and volumetric flow rate	9	$e = a \times c \times 1.214 \times 10^{-7}$	e = The mass emissions of nitrogen oxides in pounds per hour. a = The stack gas concentration of nitrogen oxides averaged hourly (ppmv). c = The stack gas volumetric flow rate averaged hourly (scfh).
Based on stack gas concentration, heat input rate, and oxygen concentration ***(Oxygen F factor approach)***	10	$e = a \times c_f \times 1.214 \times 10^{-7}$ $c_f = [20.9/(20.9 - b)] \times (F \times d \times V)$	e = The mass emissions of nitrogen oxides in pounds per hour. a = The stack gas concentration of pollutant averaged hourly (ppmv). c_f = The stack gas flow rate determined by oxygen-based F factor approach averaged hourly (scfh). b = The stack gas concentrations of oxygen measured (%). F = The oxygen-based dry F factor for the type of fuel (scf/10^6 Btu). d = The fuel flow rate for the type of fuel measured. V = The higher heating value of the fuel**.
Based on stack gas concentration, heat input rate, and carbon dioxide concentration ***(Carbon dioxide F factor approach)***	11	$e = a \times c_{fc} \times 1.214 \times 10^{-7}$ $c_{fc} = (F_c \times d \times V) \times 100/t$	e = The mass emissions of nitrogen oxides in pounds per hour. a = The stack gas concentration of pollutant averaged hourly (ppmv). c_{fc} = The stack gas flow rate determined by carbon dioxide-based F factor approach averaged hourly (scfh). F_c = The carbon dioxide -based dry F factor for the type of fuel (scf/10^6 Btu). d = The fuel flow rate for the type of fuel measured. V = The higher heating value of the fuel**. t = The stack gas concentrations of carbon dioxide measured (%).

*NOx conversion factor 1.214×10^{-7} is based on standard temperature of 60°F.
** Default value in Table 6, if applicable, or as measured in a method approved by the Executive Officer.

Dual Range Analyzer

Existing requirement

- Results in data gap that potentially overestimates emissions

Proposed amendment

- Includes data validation procedure to minimize the data gap

- To utilize this option, the CEMS should meet the Supplemental and Alternative Performance Requirements in Attachment A of Rule 218.3

Impacts and Key Issues

No additional cost expected from the proposed amendment

- CEMS rules provide administrative and technical guidelines
- Proposed amendment provides clarification, alternative options, and additional guidance

No anticipated socioeconomic impacts

Staff is not aware of any key remaining issues

Staff Recommendations

- Adopt the Resolution:
  - Determining that Proposed Amended Rule 218.2, and Proposed Amended Rule 218.3 are exempt from the requirements of the California Environmental Quality Act; and
  - Amending Rule 218.2 and Rule 218.3

Back to Agenda

BOARD MEETING DATE: September 2, 2022 AGENDA NO. 32

PROPOSAL: Determine That Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen, is Exempt from CEQA; and Amend Rule 429

SYNOPSIS: Proposed Amended Rule 429 will provide an alternative limit from NOx and CO concentration limits in various rules in Regulation XI – Source Specific Standards when units are starting up and shutting down for specified durations. Proposed Amended Rule 429 will also include provisions limiting the frequency of scheduled startups, best management practices, and notification and recordkeeping requirements.

COMMITTEE: Stationary Source, June 17, 2022, Reviewed

RECOMMENDED ACTIONS:
Adopt the attached Resolution:
1. Determining that Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen, is exempt from the requirements of the California Environmental Quality Act; and
2. Amending Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen.

Wayne Nastri
Executive Officer

SR:MK:MM:IS

Background

Control Measure CMB-05 of the Final 2016 AQMP (2016 AQMP) included a five tons per day NOx emission reduction as soon as feasible but no later than 2025, and a direction to transition the RECLAIM program to a command-and-control regulatory structure requiring BARCT as soon as practicable.

Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen (PAR 429) is a companion rule to Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines (Rule 1134), Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146), Rule 1147 – NOx Reductions from Miscellaneous Sources (Rule 1147), Rule 1147.1 – NOx Reductions from Aggregate Dryers (Rule 1147.1), and Rule 1147.2 – NOx Reductions from Metal Melting and Heating Furnaces (Rule 1147.2). PAR 429, Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 facilitate the transition of the RECLAIM program to a command-and-control regulatory structure.

Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 establish NOx and CO emission limits. However, NOx and CO concentration limits will not apply during startup and shutdown events. PAR 429 is needed to establish requirements during startup and shutdown pursuant to U.S. EPA policies to regulate startup, shutdown, and malfunction.

Public Process
The development of PAR 429 was conducted through a public process. A working group was formed that included facility representatives, equipment vendors, other agencies, community and environmental groups, and other interested parties. One Working Group Meeting was held to discuss rule concepts. A Public Workshop was held on February 18, 2022, to present the proposed amended rule to the general public and to stakeholders.

Proposal
PAR 429 provides an exemption from NOx and CO concentration limits in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 during startup and shutdown for specified durations. PAR 429 also includes work practice requirements and specific control measure requirements during periods when equipment is starting up and shutting down to establish continuous emission limits pursuant to U.S. EPA policies to regulate startup, shutdown, and malfunction. Furthermore, PAR 429 specifies provisions limiting the frequency of scheduled startups, and notification and recordkeeping requirements.

Emission Reductions
No additional emission reductions are expected from implementing PAR 429; any emission reductions for the affected units will be attributed to implementing Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2.

Key Issues
Throughout the rulemaking process, staff worked with stakeholders to resolve key issues. Staff is not aware of any key remaining issues.

California Environmental Quality Act
Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (PAR 429) is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) and 15308. Further, there is no substantial evidence indicating that any of the exceptions in CEQA Guidelines Section 15300.2 apply to the proposed project. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and is included as Attachment H to this Board letter. If PAR 429 is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor's Office of Planning and Research.

Socioeconomic Analysis
PAR 429 does not impose any additional costs to the affected facilities and is not expected to result in any adverse socioeconomic impacts.

Resource Impacts
Existing staff resources are adequate to implement the proposed amendments.

Attachments
A. Summary of Proposal
B. Key Issues and Responses
C. Rule Development Process
D. Key Contacts List
E. Resolution
F. Proposed Amended Rule 429
G. Final Staff Report
H. Notice of Exemption from CEQA
I. Board Presentation

ATTACHMENT A

SUMMARY OF PROPOSED AMENDED RULE 429

Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen

Applicability

- Equipment using CEMS, ACEMS, or SCEMS that are subject to Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2

Exemption from Concentration Limits in Various Regulation XI Rules

- Establishes exemption from Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 NOx and CO concentration limits during startup and shutdown

Startup and Shutdown Limits

- Limits duration of time that operator is exempt from NOx and CO concentration limits for startup and shutdown events
- Limits frequency of scheduled startups

Requirements for Units with NOx Post-Combustion Control Equipment

- Operate NOx post-combustion control equipment when exhaust gas temperature reaches the minimum operating temperature of the NOx post-combustion control equipment and temperature is stable
- Install and maintain an annually calibrated temperature measuring device

Notification and Recordkeeping Requirements

- Notification for scheduled startups
- Maintain operating log, list of scheduled startups, and records of the minimum operating temperature of NOx post-combustion control equipment

Exemptions

- Exemptions for refractory dryout and when fuel is only used for the pilot light

ATTACHMENT B

KEY ISSUES AND RESPONSES

Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen

Throughout the rulemaking process, staff worked with stakeholders to resolve key issues. Staff is not aware of any key remaining issues.

ATTACHMENT C

RULE DEVELOPMENT PROCESS

Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen

Initiated Rule Development
December 2021

⬇

Working Group Meeting
January 6, 2022

⬇

75-Day Notice of Public Workshop
February 3, 2022

⬇

Public Workshop
February 18, 2022

⬇

Stationary Source Committee Meeting
June 17, 2022

⬇

30-Day Notice of Public Hearing
August 3, 2022

⬇

Set Public Hearing
August 5, 2022

⬇

Public Hearing
September 2, 2022

Ten (10) months spent in rule development
One (1) Public Workshop
One (1) Stationary Source Committee Meeting
One (1) Working Group Meeting

ATTACHMENT D

KEY CONTACTS LIST

All American Asphalt
Anheuser-Busch LLC
B Braun Medical, Inc
Berry Petroleum Company, LLC
Bridge Energy, LLC
California Institute of Technology
California State University, Fullerton
California Steel Industries
City of Riverside, Public Utilities Dept
Colton Power
Darling Ingredients, Inc.
Gold Bond Building Products, LLC
IBY, LLC
Imperial Irrigation District
Kimberly-Clark Worldwide Inc.
Loma Linda University
New-Indy Ontario, LLC
OLS Energy
Orange County
RJ Noble Company
Signal Hill Petroleum Inc
Thums Long Beach Co
U.S. EPA
University of California, Irvine
University of California, Riverside
University of California, Los Angeles

ATTACHMENT E

RESOLUTION NO. 22-_____

A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) determining that Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen is exempt from the requirements of the California Environmental Quality Act (CEQA).

A Resolution of the South Coast AQMD Governing Board amending Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen.

WHEREAS, the South Coast AQMD Governing Board finds and determines that Proposed Amended Rule 429 is considered a "project" as defined by CEQA; and

WHEREAS, the South Coast AQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l) and has conducted a CEQA review and analysis of the proposed project pursuant to such program (South Coast AQMD Rule 110); and

WHEREAS, the South Coast AQMD Governing Board finds and determines after conducting a review of the proposed project in accordance with CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA, and CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA, that the proposed project is exempt from CEQA; and

WHEREAS, the South Coast AQMD Governing Board finds and determines that, because Proposed Amended Rule 429 will not require physical modifications, it can be seen with certainty that implementing the proposed project would not cause a significant adverse effect on the environment, and is therefore exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption; and

WHEREAS, the South Coast AQMD Governing Board finds and determines that the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for the Protection of the Environment, because Proposed Amended Rule 429 is designed to further protect or enhance the environment by limiting the duration and frequency of startup and shutdown events which will, in turn limit NOx and CO emissions; and

WHEREAS, the South Coast AQMD Governing Board has determined that there is no substantial evidence indicating that any of the exceptions to the categorical

exemption as set forth in CEQA Guidelines Section 15300.2 – Exceptions, apply to the proposed project; and

WHEREAS, the South Coast AQMD staff has prepared a Notice of Exemption for the proposed project that is completed in compliance with CEQA Guidelines Section 15062 – Notice of Exemption; and

WHEREAS, Proposed Amended Rule 429 and supporting documentation, including but not limited to, the Notice of Exemption and Final Staff Report, were presented to the South Coast AQMD Governing Board and the South Coast AQMD Governing Board has reviewed and considered this information, as well as has taken and considered staff testimony and public comment prior to approving the proposed project; and

WHEREAS, the South Coast AQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (Section 30.5(4)(D)(i) of the Administrative Code), that the modifications to Proposed Rule 429 since the Notice of Public Hearing was published are clarifications that meet the same air quality objective and are not so substantial as to significantly affect the meaning of Proposed Rule 429 within the meaning of Health and Safety Code Section 40726 because the changes to paragraph (c)(5) and paragraph (c)(8) are made to clarify rule language and: (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 proposed project is exempt from CEQA; and

WHEREAS, Proposed Amended Rule 429 will be submitted for inclusion into the State Implementation Plan; and

WHEREAS, Health and Safety Code Section 40001(c) requires that prior to adopting any rule or regulation to reduce criteria pollutants, a district shall determine that there is a problem that the proposed amended rule or regulation will alleviate and that the rule or regulation will promote the attainment or maintenance of state or federal ambient air quality standards; and

WHEREAS, the South Coast AQMD Governing Board finds that there is an ozone problem that Proposed Amended Rule 429 will alleviate and will promote the attainment or maintenance of both the state and federal ambient air quality standards for ozone; and

WHEREAS, Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication,

and reference based on relevant information presented at the public hearing and in the Final Staff Report; and

WHEREAS, the South Coast AQMD Governing Board has determined that a need exists to adopt Proposed Amended Rule 429 to specify technological control requirements and work practice standards during startup and shutdown, limit the duration during startup and shutdown that a unit can exceed the applicable NOx or CO concentration limits in Rules 1134, 1146, 1147, 1147.1 and 1147.2, and limit the number of scheduled startups that were not addressed in recently amended rules and that are currently not regulated; and

WHEREAS, the South Coast AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code Sections 39002, 40000, 40001, 40440, 40702, 40725 through 40728, 41508, and 41511; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 429 is written and displayed so that its meaning can be easily understood by persons directly affected by it; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 429 is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 429 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 South Coast AQMD; and

WHEREAS, the South Coast AQMD Governing Board, in adopting Proposed Amended Rule 429, references the following statute which the South Coast AQMD hereby implements, interprets or makes specific: Health and Safety Code Sections 39002, 40000, 40001, 40440(a), 40702, 40725 through 40728.5, 41508, and 41511; and the federal Clean Air Act; and

WHEREAS, Health and Safety Code Section 40727.2 requires the South Coast AQMD to prepare a written analysis of existing federal air pollution control requirements applicable to the same source type being regulated whenever it adopts, or amends a rule, and the South Coast AQMD's comparative analysis of Proposed Amended Rule 429 is included in the Final Staff Report; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 429 will not result in increased costs to affected industries and therefore will not result in any adverse socioeconomic impact as described in the Socioeconomic Impact Assessment section of the Final Staff Report; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 429 does not include new Best Available Retrofit Control Technology (BARCT) requirements nor a feasible measure pursuant to Health and Safety Code Section 40914, therefore analyses for cost-effectiveness and incremental cost-effectiveness consistent with the Health and Safety Code Section 40920.6, are not applicable; and

WHEREAS, the South Coast AQMD staff conducted a public workshop on February 18, 2022 regarding Proposed Amended Rule 429; and

WHEREAS, the public hearing has been properly noticed in accordance with all provisions of Health and Safety Code Sections 40725 and 40440.5; and

WHEREAS, the South Coast AQMD Governing Board has held a public hearing in accordance with all provisions of law; and

WHEREAS, the South Coast AQMD specifies the Planning and Rules Manager of Proposed Amended Rule 429 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of the proposed amended rule is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

NOW, THEREFORE BE IT RESOLVED, that the South Coast AQMD Governing Board does hereby determine, pursuant to the authority granted by law, that Proposed Amended Rule 429 is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) – Common Sense Exemption and 15308 – Actions by Regulatory Agencies for Protection of the Environment. No exceptions to the application of the categorical exemption as set forth in CEQA Guidelines Section 15300.2 – Exceptions, apply to the proposed project. This information was presented to the South Coast AQMD Governing Board, whose members exercised their independent judgment and reviewed, considered, and approved the information therein prior to acting on Proposed Amended Rule 429; and

BE IT FURTHER RESOLVED, that the South Coast AQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Amended Rule 429 as set forth in the attached, and incorporated herein by reference; and

BE IT FURTHER RESOLVED, that the South Coast AQMD Governing Board requests that Proposed Amended Rule 429 be submitted for inclusion in 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 429 and supporting documentation to the California Air Resources Board for approval and

subsequently submitted to the U.S. Environmental Protection Agency for inclusion into the State Implementation Plan.

DATE: _____ _____

CLERK OF THE BOARDS

ATTACHMENT F

(Adopted May 5, 1989)(Amended December 21, 1990)
(PAR 429 September 2, 2022)

PROPOSED AMENDED RULE 429. STARTUP~~START-UP~~ AND SHUTDOWN ~~EXEMPTION~~ PROVISIONS FOR OXIDES OF NITROGEN

[Rule Index to be included after adoption]

(a) Purpose

The purpose of this rule is to provide an exemption from oxides of nitrogen (NOx) and carbon monoxide (CO) concentration limits during Startup and Shutdown and establish requirements during Startup and Shutdown to limit NOx and CO emissions.

(b) Applicability

(1) The provisions of this rule shall apply to equipment utilizing CEMS, ACEMS, or SCEMS that are subject to the following rules:

Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines;

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 1147.1 – NOx Reductions from Aggregate Dryers; and

Rule 1147.2 – NOx Reductions from Metal Melting and Heating Furnaces.

(c~~a~~) Definitions

For the purpose of this rule, the following definitions shall apply:

(1) AGGREGATE DRYER means equipment that is subject to Rule 1147.1, including any combustion equipment fired with gaseous fuel used to reduce or minimize the moisture content of aggregate material, including dryers, rotary dryers, fluidized bed dryers and rotary kilns, as defined in Rule 1147.1.

(2) ALTERNATIVE CONTINUOUS EMISSION MONITORING SYSTEM (ACEMS) means a system that uses process or control device operating parameter measurements and a conversion equation, a graph, or computer program to produce results in units of the applicable emission limitation or standard on a continuous monitoring basis, which is demonstrated to the Executive Officer as having the same precision, reliability, accessibility,

and timeliness as the data provided by a certified CEMS or certified CEMS component in accordance with Rule 218.2 and Rule 218.3.

(3~~1~~) BOILER or STEAM GENERATOR means equipment that is subject to Rule 1146, including any combustion equipment fired with solid fossil fuel, liquid and/or gaseous fuel (excluding landfill and digester gas) and used to produce steam or to heat water, and that is not used exclusively to produce electricity for sale, as defined in Rule 1146. Boiler or Steam Generator does not include any open heated tank, adsorption chiller unit, or waste heat recovery boiler that is used to recover sensible heat from the exhaust of a combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

(4) CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) means the total combined equipment and systems, including the sampling interface, analyzers, and data acquisition and handling system, required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent (as applicable).

(5) FORMER RECLAIM FACILITY means a facility, or any of its successors, that was in the NOx Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX – Regional Clean Air Incentives Market (RECLAIM), that has received a final determination notification, and is no longer in the RECLAIM program.

~~(2) GAS TURBINE is combustion equipment fired with solid, liquid and/or gaseous fuel and using a turbine to convert the energy derived from the combustion to produce mechanical energy to drive other equipment.~~

~~(3) PROCESS HEATER means any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to process streams.~~

(6) FURNACE means any metal melting furnace, metal heat treating furnace, metal heating furnace, or metal forging furnace as defined in Rule 1147.2.

(7) MINIMUM OPERATING TEMPERATURE means the minimum operating temperature specified by the manufacturer, unless otherwise defined in the permit issued by the South Coast AQMD.

~~(4) NITRIC ACID PRODUCTION UNIT means any facility producing nitric acid by either the pressure or atmospheric pressure process.~~

(8) NON-RECLAIM FACILITY is a facility, or any of its successors, that was not in the NOx Regional Clean Air Incentives Market as of January 5, 2018,

as established in Regulation XX – Regional Clean Air Incentives Market (RECLAIM).

(9) NOx POST-COMBUSTION CONTROL EQUIPMENT means air pollution control equipment which eliminates, reduces, or controls the issuance of NOx after combustion.

(10) PROCESS HEATER means equipment that is subject to Rule 1146, including any combustion equipment fired with liquid and/or gaseous fuel (excluding landfill and digester gas) and/or solid fossil fuel and which transfers heat from combustion gases to process streams, as defined in Rule 1146. Process Heater does not include any kiln or oven used for drying, curing, baking, cooking, calcining, or vitrifying; or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.

(11) RATED HEAT INPUT means the heat input as specified by the permit issued by the South Coast AQMD, or if not specified on the permit, as specified on the nameplate of the combustion unit. If the combustion unit has been altered or modified such that its maximum heat input is different than the heat input specified on the nameplate, the new maximum heat input shall be considered as the rated heat input. Heat input means the chemical heat released due to assumed complete combustion of fuel in a unit, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

(12) REFRACTORY DRYOUT means the initial application of heat under controlled rates to safely remove water from the refractory lining as part of the curing process prior to placing the unit in service.

(13) SCHEDULED STARTUP means a planned startup that is specified by January 1 of each year.

(14) SEMI-CONTINUOUS EMISSION MONITORING SYSTEM (SCEMS) means an emission monitoring system that is different from a regular CEMS on response time and data acquisition frequency. SCEMS continuously takes and records measurements (e.g. concentration, mass emission, flow rate) at a minimum of once in every fifteen (15) minutes. SCEMS includes but is not limited to gas chromatography, integrated sensitized tape analyzer, other sample integration based technologies, and time-shared CEMS.

(15) SHUTDOWN means the time period that starts when a Unit begins reducing load in advance of terminating fuel flow and ends in a period of zero fuel flow.

(16) STABLE CONDITIONS means that the fuel flow and fuel composition to a unit is consistent and allows for normal operations.

(17)(STARTUP~~START-UP~~ means the time period beginning when a Unit
~~5)~~ begins combusting fuel after a period of zero fuel flow. ~~is that period of time during which a boiler, gas turbine, or process heater is heated to its normal temperature range from a cold or ambient temperature or a nitric acid plant whose decomposer is preheated and the period of time immediately following introduction of feedstocks that is required to meet stable operating conditions.~~

~~(6)~~ ~~SHUTDOWN is that period of time during which a boiler, gas turbine, process heater or nitric acid production unit is allowed to cool from its normal temperature range to a cold or ambient temperature.~~

~~(7)~~ ~~A SCHEDULED START-UP AND SHUTDOWN PAIR is a combination that is included in a schedule plan submitted to the Executive Officer by January 1 of each year.~~

(18) STATIONARY GAS TURBINE means equipment that is subject to Rule 1134, which includes duct burners and cogeneration, combined cycle, compressor, recuperative, and simple cycle gas turbines, as defined by Rule 1134.

(19) TUNNEL KILN means equipment that is subject to Rule 1147, including any gaseous fired equipment which transfers heat from combusted fuel to air contained in the unit with exhaust moisture content above 30 percent using a continuous moving conveyor or vehicle, as defined in Rule 1147.

(20) UNIT means an Aggregate Dryer, Boiler, Furnace, Tunnel Kiln, Process Heater, or Stationary Gas Turbine.

~~(b)~~ ~~Applicability~~

~~(1)~~ ~~During scheduled shutdowns and scheduled start-ups following scheduled shutdowns this rule shall provide an exemption from the oxides of nitrogen emission limits of the following rules:~~

~~Rule 1109 - Emissions of Oxides of Nitrogen from Boilers and Process Heaters in Petroleum Refineries;~~

~~Rule 1134 - Emissions of Oxides of Nitrogen from Stationary Gas~~

~~Turbines;~~

~~Rule 1146 - Emissions of Oxides of Nitrogen from Industrial Institutional and Commercial Boilers, Steam Generators and Process Heaters; and~~

~~Rule 1159 - Nitric Acid Units - Oxides of Nitrogen.~~

~~(2)~~ ~~NOx emissions in excess of rule specific emission limits shall be mitigated to the extent demonstrable.~~

~~(3)~~ ~~Start-up or shutdown intervals may not last longer than is necessary to reach stable temperatures. In no case may the start-up or shutdown interval last longer than specified in the permit to operate. In the event that permit conditions do not specify a time limit, the start-up or shutdown may not exceed the following:~~

~~(A)~~ ~~Eight hours for boilers or process heaters of more than 40 MM Btu per hour of heat release per Rule 1109 - Emissions of Oxides of Nitrogen from Boilers and Process Heaters in Petroleum Refineries and per Rule 1146 - Emissions of Oxides of Nitrogen from Industrial Institutional and Commercial Boilers, Steam Generators and Process Heaters. The number of scheduled start-ups/shutdowns allowed for each unit is a maximum of 10 per year.~~

~~(B)~~ ~~Six hours for boilers or process heaters of equal to or less than 40 MM Btu per hour of heat release per Rule 1146 - Emissions of Oxides of Nitrogen from Industrial Institutional and Commercial Boilers, Steam Generators and Process Heaters. The number of scheduled start-ups/shutdowns allowed for each unit is a maximum of 10 per month.~~

~~(C)~~ ~~Fifteen minutes for simple cycle stationary gas turbines and two hours for stationary combined cycle and cogeneration cycle gas turbines per Rule 1134 - Emissions of Oxides of Nitrogen from Stationary Gas Turbines. The number of scheduled start-ups/shutdowns allowed for each unit is a maximum of 10 per year.~~

~~(D)~~ ~~Following the introduction of, or the removal of, feedstocks from nitric acid production units for one hour plus the time required to preheat or to cool the decomposer per Rule 1159 - Nitric Acid Units - Oxides of Nitrogen. The number of scheduled start-ups/shutdowns allowed for each unit is a maximum of 10 per year.~~

(d) Requirements

(1) An owner or operator of equipment is not subject to the applicable NOx and CO concentration limits and rolling average provisions in the rules specified in paragraph (b)(1) during Startup and Shutdown.

(2) An owner or operator of a Unit at a Former RECLAIM Facility or Non-RECLAIM Facility that exceeds the applicable NOx or CO concentration limit in the rules specified in paragraph (b)(1) during Startup or Shutdown shall not exceed the duration limits in Table 1.

TABLE 1: STARTUP AND SHUTDOWN DURATION LIMITS

Unit Type	Not to Exceed per Startup or Shutdown
Boilers and Process Heaters > 40 MMBtu/hour Rated Heat Input	8 hours
Boilers and Process Heaters ≤ 40 MMBtu/hour Rated Heat Input	6 hours
Simple Cycle Gas Turbines	15 minutes
Cogeneration, Combined Cycle, Compressor and Recuperative Gas Turbines	2 hours
Furnaces	24 hours
Aggregate Dryers	60 minutes
Tunnel Kilns	2 hours

(A) An owner or operator of a Unit at a Former RECLAIM Facility or Non-RECLAIM Facility shall not allow Startup to last longer than the time that is necessary to reach Stable Conditions and to reach the Minimum Operating Temperature of the NOx Post-Combustion Control Equipment, if applicable. Once a Unit reaches Stable Conditions and the Minimum Operating Temperature of the NOx Post-Combustion Control Equipment, if applicable, a Unit is subject to the applicable NOx and CO concentration limits in the rules specified in paragraph (b)(1).

(3) An owner or operator of a Unit at a Former RECLAIM Facility or Non-RECLAIM Facility shall not exceed the maximum number of Scheduled Startups specified in Table 2 per calendar year for each Unit.

TABLE 2: MAXIMUM NUMBER OF SCHEDULED STARTUPS

Unit Type	Maximum Number of Scheduled Startups per Calendar Year
Furnaces	35
All Other Units	10

(4) An owner or operator of a Unit at a Former RECLAIM Facility or Non-RECLAIM Facility shall take all reasonable and prudent steps to minimize emissions during Startup and Shutdown.

(5) An owner or operator of a Unit equipped with NOx Post-Combustion Control Equipment at a Former RECLAIM Facility or Non-RECLAIM Facility shall install and maintain in operation an annually calibrated temperature measuring device at the inlet of the NOx Post-Combustion Control Equipment.

(6) An owner or operator of a Unit at a Former RECLAIM Facility or Non-RECLAIM Facility with NOx Post-Combustion Control Equipment shall operate NOx Post-Combustion Control Equipment, including the injection of any associated chemical reagent into the exhaust stream to control NOx, if the temperature of the gas to the inlet of the NOx Post-Combustion Control Equipment is greater than or equal to the Minimum Operating Temperature of the NOx Post-Combustion Control Equipment and the temperature of the exhaust gas is stable.

(ee) Notification

An owner or operator of a Unit at a Former RECLAIM Facility or a Non-RECLAIM Facility shall notify the South Coast AQMD on or before January 1 each year of all Scheduled Startups for the upcoming calendar year by calling 1-800-CUT-SMOG, or by using other approved methods of notification as approved by the Executive Officer. The notification shall contain the date and time each Scheduled Startup will begin, the anticipated duration of the Scheduled Startup, and the associated application number(s) of the Unit(s).~~Prior notification of scheduled shutdowns and scheduled start-ups following scheduled shutdowns shall be made in a timely manner and form as specified by the Executive Officer. Shutdowns and start-ups must be scheduled in pairs with scheduled dates for each. Notification of scheduled start-ups and shutdowns is required only if an exemption~~

~~from the emissions limit is required. This notification shall contain the following information:~~

~~(1) Dates and times of the scheduled start-up and shutdown and its duration, and~~

~~(2) Any other process variables that are appropriate as determined by the Executive Officer.~~

(f~~d~~) Recordkeeping

~~Records shall be maintained and kept on-site and made available for two years indicating hour-by-hour firing rates, flue gas temperatures, NOx emissions and such process variables that are appropriate as determined by the Executive Officer.~~

(1) An owner or operator of a Unit at a Former RECLAIM Facility or Non-RECLAIM Facility shall maintain the following records on-site for 5 years:

(A) An operating log for Startup, Shutdown, and Refractory Dryout events which contains the date, time, duration, and reason for each event; and

(B) A list of Scheduled Startups.

(2) An owner or operator of a Unit equipped with NOx Post-Combustion Control Equipment at a Former RECLAIM Facility or Non-RECLAIM Facility shall maintain on-site documentation from the manufacturer of the Minimum Operating Temperature of the NOx Post-Combustion Control Equipment, unless the applicable permit issued by the South Coast AQMD specifies the required Minimum Operating Temperature of the NOx Post-Combustion Control Equipment.

~~(e) Compliance Date~~

~~The provisions of this rule shall become effective on July 1, 1989.~~

(g) Exemptions

(1) An owner or operator of a Unit at a Former RECLAIM Facility or Non-RECLAIM Facility is exempt from paragraphs (d)(2) and (f)(1) when fuel is burned exclusively in a pilot light.

(2) An owner or operator of a Unit at a Former RECLAIM Facility or Non-RECLAIM Facility is exempt from paragraph (d)(2) during Refractory Dryout.

ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Staff Report
Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen

September 2022

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County of San Bernardino

EXECUTIVE OFFICER:

WAYNE NASTRI

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Control Measure CMB-05 of the Final 2016 Air Quality Management Plan (2016 AQMP) included a five tons per day nitrogen oxides (NOx) emission reduction as soon as feasible but no later than 2025. That measure also included~~and~~ a direction to transition the Regional Clean Air Incentives Market (RECLAIM) program to a command-and-control regulatory structure requiring Best Available Retrofit Control Technology (BARCT) as soon as practicable. California State Assembly Bill 617 (AB 617), approved by the Governor on July 26, 2017, requires Air Districts to develop, by January 1, 2019, an expedited schedule for the implementation of BARCT no later than December 31, 2023 for facilities that are in the state greenhouse gas cap-and-trade program.

Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen (PAR 429) is a companion rule to Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines (Rule 1134), Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146), Rule 1147 – NOx Reductions from Miscellaneous Sources (Rule 1147), Rule 1147.1 – NOx Reductions from Aggregate Dryers (Rule 1147.1), and Rule 1147.2 – NOx Reductions from Metal Melting and Heating Furnaces (Rule 1147.2). PAR 429 and Rules 1134, 1146, 1147, 1147.1, and 1147.2 facilitate the transition of the RECLAIM program to a command-and-control regulatory structure.

Rules 1134, 1146, 1147, 1147.1, and 1147.2 establish NOx and CO emission limits. However, NOx and CO concentration limits will not apply during startup and shutdown events. PAR 429 is needed to establish requirements during startup and shutdown pursuant to U.S. EPA policies to regulate startup, shutdown, and malfunction.

A total of 60 units at twenty-five facilities will be affected by PAR 429. PAR 429 limits the duration of startup and shutdown events and the frequency of scheduled startups. PAR 429 also establishes best management practices for startup and shutdown events as well as notification and recordkeeping requirements.

PAR 429 was developed through a public process. Staff held a Working Group Meeting on January 6, 2022. In addition, a Public Workshop was held on February 18, 2022.

CHAPTER 1: BACKGROUND

INTRODUCTION

PAR 429 is a companion rule to Rules 1134, 1146, 1147, 1147.1, and 1147.2. Rules 1134, 1146, 1147, 1147.1, and 1147.2 establish NOx and CO emission limits for combustion equipment. PAR 429 exempts units from NOx and CO concentration limits and applicable rolling average provisions during startup and shutdown. PAR 429 also establishes requirements during startup and shutdown pursuant to U.S. EPA policies to regulate startup, shutdown, and malfunction. PAR 429 limits the duration units are exempt from NOx and CO limits during startup and shutdown and the frequency of scheduled startups. Additionally, PAR 429 establishes best management practices for startup and shutdown events and notification and recordkeeping requirements.

BACKGROUND

2016 AQMP Control Measure CMB-05

The 2016 AQMP includes Control Measure CMB-05 which committed to identifying approaches to make the RECLAIM program more effective. During the adoption of the 2016 AQMP, staff was directed to modify CMB-05 to achieve the five tons per day of NOx emission reductions commitment as soon as feasible, but no later than 2025, and to transition the RECLAIM program to a command-and-control regulatory structure requiring BARCT level controls as soon as practicable. A command-and-control regulatory structure establishes emission limits for each individual piece of equipment, in contrast to a market-based program such as RECLAIM, where an emission target is established in the aggregate. A command-and-control regulatory structure directly regulates an industry with requirements that state what is permitted and what is prohibited. The 'command' is the presentation of standards that must be complied with by facilities. The 'control' part signifies the negative sanctions that may result from non-compliance. In this instance, the command-and-control regulatory structure consists of NOx landing rules that prescribe emission limits and other requirements for specific equipment or industries.

Startup and Shutdown

Under the RECLAIM program, facilities are required to hold sufficient RECLAIM Trading Credits (RTCs) to reconcile actual emissions at the end of each annual compliance cycle, including the emissions that occur during startup and shutdown. A unit and/or associated control equipment is not operating under steady-state conditions during startup or shutdown, which may result in greater emissions. For example, during startup and shutdown of combustion equipment, the temperature of the unit and/or associated controls is in transition and requires the addition of excess air. This process results in increased NOx formation.

Under a command-and-control regulatory structure, an owner or operator is required to meet emission limits on each individual piece of equipment on a continuous basis. Consequently, units that can otherwise meet lower NOx concentration limits during steady-state conditions, may be unable to do so during periods of startup and shutdown. Therefore, provisions are needed to exclude emissions that occur during startup and shutdown from compliance determination with BARCT concentration limit(s).

U.S. EPA POLICY ON STARTUP, SHUTDOWN, AND MALFUNCTION (SSM)

U.S. EPA issued startup, shutdown, and malfunction (SSM) policies in 2015 and 2020, which provided differing guidance on the requirements necessary for State Implementation Plan (SIP) approval. The 2015 policy stated that an emission limitation must be applicable to the source continuously to be permissible in a SIP, whereas the 2020 policy stated that a SIP may contain exemption provisions to emission limits during SSM events if the SIP is composed of numerous planning requirements that collectively protect the National Ambient Air Quality Standards (NAAQS). On September 30, 2021, U.S. EPA issued a guidance memorandum to withdraw the 2020 SSM SIP Policy and reinstate the 2015 SSM SIP Policy[1]. PAR 429 is designed to meet the requirements for startup and shutdown provisions described in the 2015 SSM SIP Policy.

2015 Startup, Shutdown, and Malfunction State Implementation Plan Policy

In 2015, U.S. EPA issued a SSM SIP Policy which stated that exemptions from emission limitations during startup and shutdown events and affirmative defense provisions were inconsistent with the federal Clean Air Act (CAA)[2]. U.S. EPA asserted that an emission limitation must be applicable to the source continuously to be permissible in a SIP pursuant to CAA section 302(k). U.S. EPA's 2015 SSM SIP Policy stated that SIP emission limitations do not need to be numerical in format, do not have to apply the same limitation (e.g. numerical level) at all times, and may include alternative numerical limitations, other technological control requirements, or work practice requirements during startup and shutdown events, so long as those components of the emission limitations meet applicable federal CAA requirements.

U.S. EPA issued SIP calls to 36 states with SIP provisions that were substantially inadequate in meeting the CAA requirements. Subsequently, petitions for review were filed with the D.C. Circuit Court of Appeals regarding U.S. EPA's 2015 SSM Policy. In 2017, the D.C. Circuit postponed oral arguments at the request of U.S. EPA because U.S. EPA was reviewing the 2015 SSM SIP Policy. U.S. EPA then issued its October 9, 2020 Memorandum Inclusion of Provisions Governing Periods of Startup, Shutdown, and Malfunctions in State Implementation Plans (2020 SSM SIP Policy)[3]. However, on September 30, 2021, U.S. EPA withdrew the 2020 SSM SIP Policy and reinstated the 2015 SSM SIP Policy. Thus the 2015 SSM SIP Policy is the operative guidance document.

SOUTH COAST AQMD STARTUP AND SHUTDOWN PERMIT CONDITIONS

South Coast AQMD permits often contain startup and shutdown requirements. The permit conditions are tailored for specific equipment and may include limits to the frequency and duration of startups and shutdowns, in addition to mass emission limits, monitoring, and recordkeeping requirements for startups and shutdowns. Staff initially sought to rely on permit conditions to limit startup and shutdown events. However, U.S. EPA recommended that startup and shutdown be

[1] 2021 SSM Guidance Memorandum | U.S. EPA
[2] 2015 SSM Policy | U.S. EPA
[3] 2020 SSM Policy | U.S. EPA

included in rules to facilitate enforceability and ensure SIP approval. PAR 429 will include general restrictions for startup and shutdown events while permit conditions will provide tailored requirements and remain in effect after PAR 429 is amended. If a permit contains more stringent requirements than PAR 429, the more stringent permit requirements will continue to apply.

NOx CONCENTRATION AND MASS EMISSIONS DURING STARTUP AND SHUTDOWN

Low NOx concentration limits for stationary combustion sources can be achieved~~able~~ through steady-state, controlled operation of the combustion equipment. Emissions from startup and shutdown of combustion equipment, on the other hand, are not steady-state emissions and fluctuate more compared to emissions under normal controlled operations. NOx emissions are not well characterized during periods of startup and shutdown. These periods serve as transitional periods to help thermally stabilize the unit prior to and after full operation. For example, during startup and shutdown of combustion equipment, the temperature of the unit and/or associated controls is in transition and requires the addition of excess air. This process results in increased NOx formation. While NOx concentration can be higher than normal, this does not necessarily translate to higher NOx mass emissions since fuel rates are typically lower than normal operation since the units are not operating at full operational capacity. As mentioned earlier, a lower fuel rate will result in lower stack volumetric flow rate which is one of the factors in determining overall NOx mass emissions.

NOx mass emissions for major NOx sources such as process heaters and boilers that have a maximum rated capacity greater than or equal to 40 million Btu per hour are calculated using a certified Continuous Emissions Monitoring System (CEMS). CEMS measures several variables to calculate the mass flow rate of NOx in units of pounds per hour (lb/hour). Standard gas conditions are defined as a gas temperature of 60°F and a gas pressure of 760 mm Hg (14.7 pounds per square inch) absolute. Table 1-1 contains the measured variables generally used to determine NOx mass emissions.

TABLE 1-1
NOx MASS EMISSIONS VARIABLES FOR CEMS CALCULATIONS

Measured Variables
1. Stack NOx concentration and exhaust flow rate; OR
2. Stack NOx concentration, O2 concentrations, and fuel rate

From the measured variables, an hourly mass emissions flow rate is calculated and total daily mass emissions from each source is reported. Fuel flow measuring devices can be used for approximating stack flow in conjunction with F-factors. Each CEMS is required to conduct a semi-annual or annual assessment test of each CEMS known as a Relative Accuracy Test Audit (RATA).

Fundamentally, NOx mass emissions are calculated from the measured NOx concentration and measured stack gas volumetric flow rate. Alternatively, the stack gas volumetric flow rate can also

be approximated from measured fuel flow rate for each type of fuel used. Below are general equations to determine NOx mass emissions.

NOx mass emissions are calculated according to the following:

lbs/hour = (Stack Gas Concentration) x (Stack Gas Volumetric Flow Rate) x (1.195×10^{-7})

- Stack Gas NOx concentration as measured in ppmvd
- Stack Gas Volumetric Flow Rate in dscfh

Alternatively, determination of stack flow rate from fuel flow is based on the following equation:

Stack Flow Rate = [20.9/(20.9 - O_2 concentration)] x (dry F-factor x Fuel flow rate x HHV)

- O_2 concentration is measured at the stack in percent (%)
- Oxygen based dry F-factor of the fuel in dscf/MMBtu
- Fuel flow rate*
- Higher heating value of fuel, HHV*

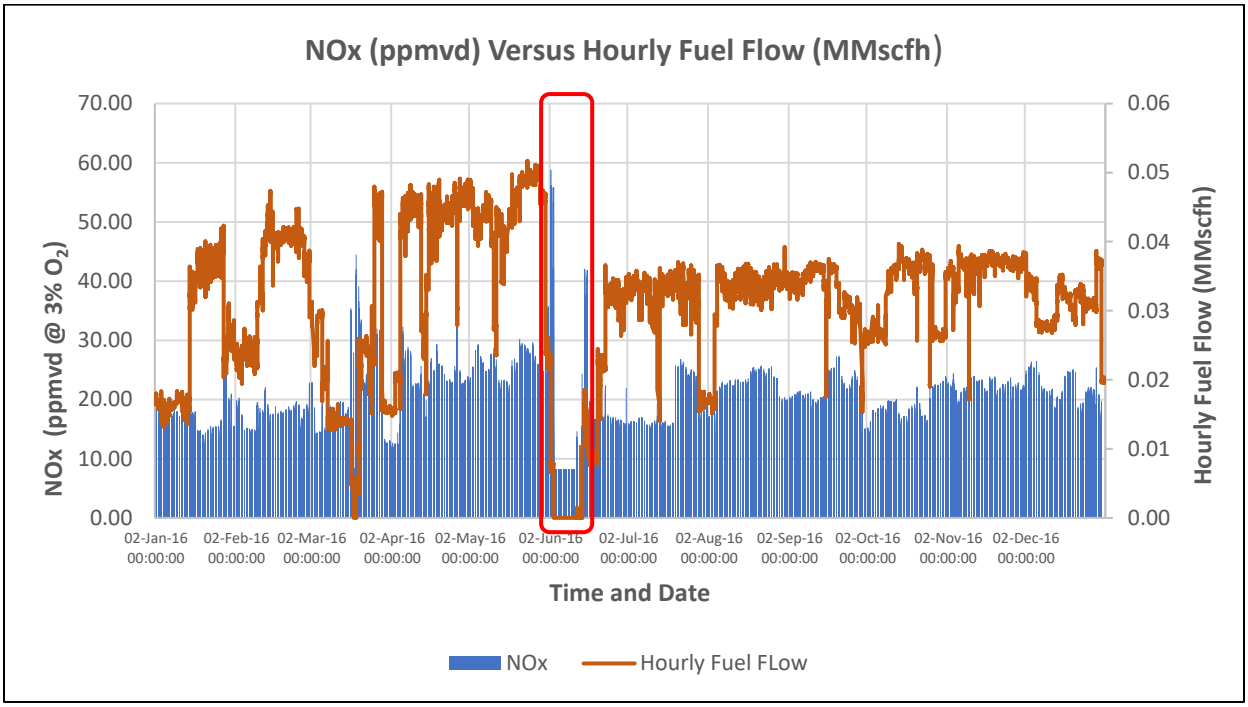
*The product of the fuel flow rate and HHV in MMBTU/hr

Below are two examples of startup/shutdown periods and associated NOx emissions for units equipped with NOx controls. The first example is of a process heater with low-NOx burners (LNB) only and the second example is of a boiler with a LNB and selective catalytic reduction (SCR).

Example One: 82 MMBtu/hr Process Heater with LNB

Figure 1-1 is an example of CEMS data that staff analyzed for an 82 MMBtu/hr process heater equipped with LNB. To show relationship between NOx and fuel, the primary y-axis represents NOx emissions in ppmvd and secondary y-axis represents fuel flow in MMscfh. Based on CEMS data, staff identified several periods as potential startup/shutdown scenarios – typically characterized by the ramping down and up of fuel. According to the data there are instances of NOx excursions, but the corresponding fuel usage was dramatically lower, so overall NOx mass emissions were also lower. Fuel usage can be up to 80% less than normal operation during these startup/shutdown periods. NOx excursions during these periods only occurred for short durations where the unit was in a transitional state. This excursion is expected since manufacturer guarantees for combustion control equipment performance are at steady-state operations and not transitional or startup/shutdown periods.

Figure 1-1 – CEMS and fuel data for 82 MMBtu/hr process heater with low NOx burners



Please note the data analyzed by staff was raw unaudited CEMS data that was not annotated with events specifying startup or shutdown periods. Table 1-2 contains a sample NOx emissions calculation comparison based on the process heater in Example 1.

TABLE 1-2
NOx EMISSION CALCULATION FOR 82 MMBTU/HR PROCESS HEATER WITH LNB

	Steady-State Operation	Startup/Shutdown
NOx Concentration @ 3% O2 (ppmvd)	14.7	55.8
Hourly Fuel Flow (MMscfh)	0.03807	0.00738
HHV(Btu/scf)	1,294	1,220
Measured O_2 (%)	5.3	10.1
Calculated Stack Flow rate (dscfh)	574,853	151,760
NOx Emissions (lb/hr)	1.01	1.0009

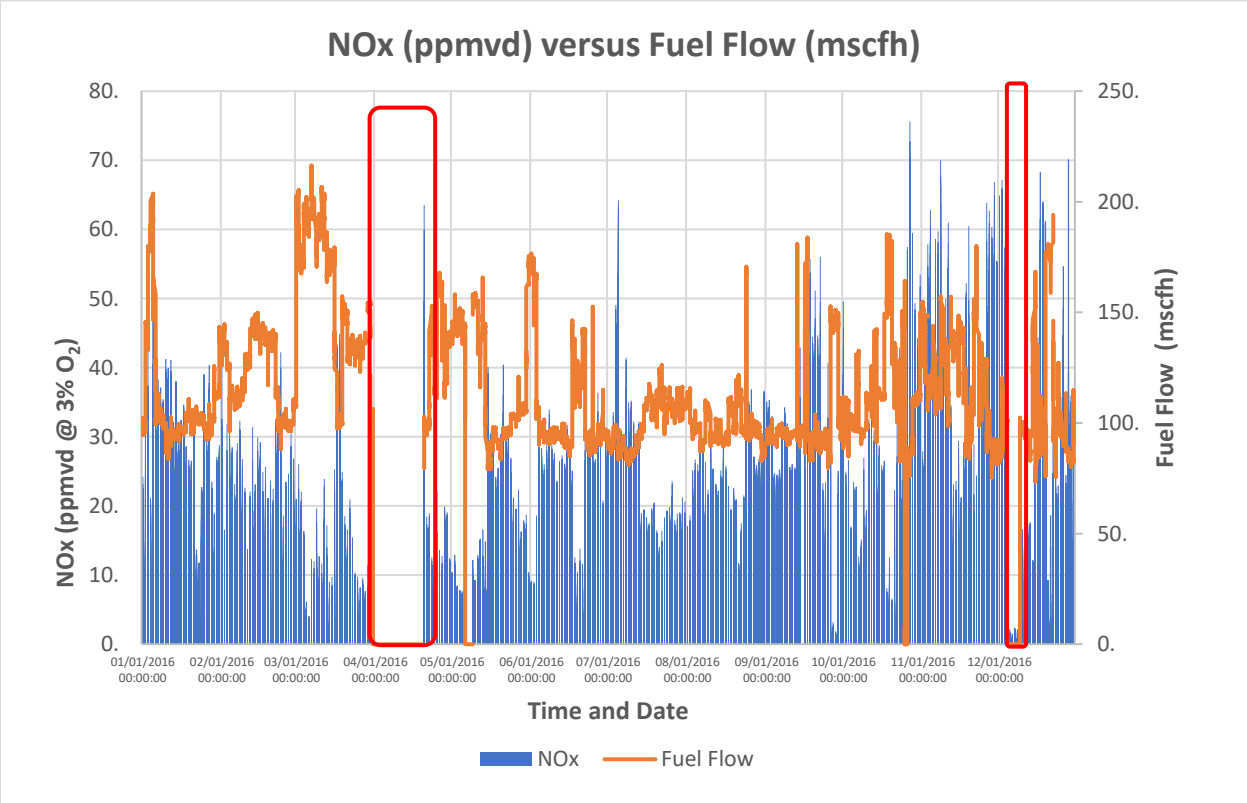
Based on the CEMS data for the example process heater with LNB only, the NOx concentration calculation during a potential startup/shutdown period does not necessarily equate to a higher mass emission of NOx. Other measured variables, such as flow rate also contribute to the overall calculation. In the example above, there was nearly four times more NOx based on concentration in ppmvd during the potential startup/shutdown period but the corresponding mass emission rate did not translate to four times more NOx mass emissions.

Example Two: 304 MMBtu/hr Boiler with LNB and SCR

NOx emissions for units equipped with NOx post-combustion control equipment such as SCR can potentially show a higher deviation in overall NOx mass emissions during startup/shutdown periods. This is primarily due to the SCR not being in optimal operation. Modern SCR designs can achieve up to 95% reduction and achieve very low NOx concentrations, however there is an optimal temperature range where the high NOx reduction can occur. If the unit is not at optimal temperature, the SCR cannot achieve maximum NOx reductions – general temperature window is approximately 550 ºF to 1000 ºF and will vary based on catalyst type and manufacturer. During startup periods the temperature of flue gas leaving the unit may not be high enough for optimal SCR performance and will require time to reach optimal temperature. Furthermore, older SCRs (installed in the early to mid-1990's) do not perform as well as modern SCR design and removal efficiencies can be lower in the 50 to 60% range.

Figure 1-2 is an example of CEMS data for a 304 MMBtu/hr boiler with first generation LNB and an older SCR for NOx control. The boiler currently has a 0.015 lb/MMBtu NOx limit under RECLAIM. Similar to Example One above, the relationship between NOx and fuel is shown. The primary y-axis represents NOx emissions in ppmvd and secondary y-axis represents fuel flow in mscfh. Based on CEMS data, staff identified two periods as potential start-up/shutdown scenarios which are highlighted by the red boxes.

Figure 1-2 – CEMS and fuel data for 304 MMBtu/hr Boiler with LNB and SCR



Based on the CEMS data that staff analyzed for the boiler, NOx concentrations can be up to three times as high during startup; this is expected since the SCR is not at optimal temperature for maximum NOx removal efficiency. However, this high NOx mass emission rate event only occurred for a limited number of hours and is highlighted in yellow in Table 1-3 below. The assumption can be made that once the SCR reached optimal temperature and its proper operation was achieved, the NOx mass emission dropped by approximately 50% and if it was a modern or upgraded SCR, the reduction can be even greater within a short period of time.

TABLE 1-3
STARTUP PERIOD AND STEADY-STATE CEMS DATA FOR BOILER

Date/Time	NOx (ppmvd)	NOx @3% (ppmvd)	O2 (%)	Stack Flow (mscfh)	Fuel Flow (mscfh)	NOx (lbs/hr)	HHV 1 (Btu/scf)
STARTUP							
04/20/2016 12:59:59	9.598	36.712	6.825	1481.349	79.521	1.7	1423.098
04/20/2016 13:59:59	21.129	49.717	5.353	1718.691	101.182	4.4	1435.702
04/20/2016 14:59:59	29.847	63.514	5.128	1768.25	102.788	6.31	1473.157
04/20/2016 15:59:59	25.811	59.907	5.321	1679.679	97.276	5.18	1460.168
04/20/2016 16:59:59	12.956	29.501	5.277	1702.361	100.359	2.63	1438.495
04/20/2016 17:59:59	10.723	24.491	5.284	1698.026	102.195	2.18	1408.337
04/20/2016 18:59:59	10.726	24.23	5.259	1695.41	102.184	2.17	1408.552
04/20/2016 19:59:59	10.095	23.552	5.333	1661.187	101.33	2.01	1385.474
04/20/2016 20:59:59	7.772	20.083	5.584	1610.468	96.606	1.5	1385.709
04/20/2016 21:59:59	7.003	18.369	5.623	1602.834	97.491	1.34	1363.175
04/20/2016 22:59:59	6.758	17.679	5.616	1603.367	97.569	1.29	1363.398
12/09/2016 09:59:59	0.115	-79.615	21.026	0.	0.	0.	1278.705
12/09/2016 10:59:59	4.432	38.116	18.907	0.	0.	0.	1304.594
12/09/2016 11:59:59	20.721	55.371	14.264	0.	0.	0.	1309.392
12/09/2016 12:59:59	16.299	33.094	12.135	0.	0.	0.	1298.104
12/09/2016 13:59:59	47.855	52.797	4.685	1754.493	88.013	10.19	1301.049
12/09/2016 14:59:59	18.715	20.73	4.75	2043.689	101.386	4.58	1308.846
12/09/2016 15:59:59	11.314	12.767	5.048	1950.424	95.915	2.63	1296.179
12/09/2016 16:59:59	9.344	10.322	4.706	2047.318	102.413	2.29	1301.559

For comparison, the Table 1-4 below shows the typical NOx concentrations and NOx mass emissions during a period of normal steady-state operations for the boiler in Example 2.

TABLE 1-4
STEADY-STATE CEMS DATA FOR BOILER

Date/Time	NOx (ppmvd)	NOx @3% (ppmvd)	O2 (%)	Stack Flow (mscfh)	Fuel Flow (mscfh)	NOx (lbs/hr)	HHV 1 (Btu/scf)
STEADY-STATE							
09/18/2016 23:59:59	9.053	12.098	7.531	2280.177	85.121	2.47	1482.556
09/19/2016 00:59:59	9.202	12.271	7.502	2307.62	83.744	2.54	1541.083
09/19/2016 01:59:59	9.385	12.541	7.53	2318.878	83.332	2.6	1556.373
09/19/2016 02:59:59	9.106	12.166	7.527	2301.028	83.773	2.5	1520.396
09/19/2016 03:59:59	9.964	13.071	7.279	2294.182	87.997	2.74	1458.136
09/19/2016 04:59:59	10.639	13.766	7.089	2339.046	89.019	2.98	1511.721
09/19/2016 05:59:59	10.688	13.806	7.065	2311.644	89.495	2.95	1480.086
09/19/2016 06:59:59	10.701	13.815	7.057	2308.005	90.352	2.95	1451.861
09/19/2016 07:59:59	9.951	12.509	6.681	2362.826	95.677	2.81	1413.167
09/19/2016 08:59:59	9.533	12.254	6.997	2311.638	91.588	2.64	1411.058
09/19/2016 09:59:59	9.585	12.153	6.804	2402.644	93.827	2.75	1451.252
09/19/2016 10:59:59	9.451	11.988	6.809	2406.33	93.128	2.72	1463.91
09/19/2016 11:59:59	9.413	11.999	6.879	2400.68	92.648	2.7	1460.66
09/19/2016 12:59:59	10.827	13.748	6.824	2413.017	92.247	3.12	1480.524
09/19/2016 13:59:59	10.176	12.907	6.809	2398.985	93.444	2.92	1454.725
09/19/2016 14:59:59	9.626	12.206	6.805	2375.061	95.558	2.73	1409.008

REGULATORY HISTORY

Rule 429 – Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen

South Coast AQMD Rule 429 was adopted on May 5, 1989 and last amended on December 21, 1990. Rule 429 applies to equipment subject to Rule 1109 – Emissions of Oxides of Nitrogen from Boilers and Process Heaters in Petroleum Refineries, Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines (Rule 1134), Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146), and Rule 1159 – Nitric Acid Units - Oxides of Nitrogen (Rule 1159). Rule 429 established an exemption from NOx emission limits during scheduled startup and shutdown events, as well as limitations to the number and duration of scheduled startup and shutdown events and notification and recordkeeping requirements. However, Rule 429 does not currently apply to several NOx RECLAIM landing rules (Rules 1147, 1147.1, and 1147.2) that require startup and shutdown provisions to facilitate the RECLAIM program to a command-and-control regulatory structure.

RECLAIM Program

The RECLAIM program is a market-based program that was adopted on October 15, 1993 and applies to facilities with annual emissions of four tons per year or more of NOx or SOx. The RECLAIM program was designed to achieve emission reductions in aggregate equivalent to what would occur under a command-and-control regulatory approach. As listed in Rule 2001–

Applicability, subdivision (j), facilities subject to NOx RECLAIM are exempt from meeting the requirements of Rule 429.

Under the RECLAIM program, an owner or operator is required to hold RTCs at the end of each annual compliance cycle that are representative of all actual emissions, except for breakdowns which meet specific criteria under Rule 2004 – Requirements. Emissions that occur under typical operations, as well as emissions that occur from startups and shutdowns, are counted toward the actual emissions that are required to be reconciled with RTCs.

In a command-and-control regulatory structure, as opposed to the RECLAIM program, an owner or operator is required to meet emission limits on each individual piece of equipment on a continuous basis. Staff recognizes that during startup and shutdown activities, where total mass emissions may be low relative to normal operation, the concentration values may exceed the limits set in Rules 1134, 1146, 1147, 1147.1, and 1147.2. Therefore, PAR 429 is needed to establish requirements during startup and shutdown pursuant to U.S. EPA policies to regulate startup, shutdown, and malfunction.

AFFECTED FACILITIES AND EQUIPMENT

PAR 429 applies to equipment utilizing continuous emission monitoring systems (CEMS), alternative continuous emission monitoring systems (ACEMS), and semi-continuous emission monitoring systems (SCEMS) that are subject to Rules 1134, 1146, 1147, 1147.1, and 1147.2. Based on permitting data and South Coast AQMD databases, staff identified 60 units at 25 facilities that would be subject to PAR 429. Table 1-5 contains the equipment affected by PAR 429.

TABLE 1-5
PAR 429 AFFECTED EQUIPMENT

Equipment Type	Number of Units
Boilers and Process Heaters > 40 MM Btu/hour rated heat input	23
Boilers and Process Heaters ≤ 40 MM Btu/hour rated heat input	2
Simple Cycle Gas Turbines	17
Cogeneration, Combined Cycle, Compressor and Recuperative Gas Turbines	11
Kilns	1
Aggregate Dryers	2
Furnaces	4

PUBLIC PROCESS

The development of PAR 429 was conducted through a public process. One Working Group Meeting was held on January 6, 2022. The Working Group Meeting included representatives from affected facilities, environmental and community groups, other agencies, consultants, and interested parties. The purpose of Working Group Meetings is to discuss details of the proposed amended rule and to listen to concerns with the objective to build consensus and resolve key issues.

In addition, one Public Workshop was held on February 18, 2022. The purpose of the Public Workshop is to present the proposed amended rule language to the public and solicit comments.

CHAPTER 2: SUMMARY OF PROPOSAL

INTRODUCTION

PROPOSED AMENDED RULE 429

INTRODUCTION

PAR 429 will establish requirements during periods of startup and shutdown for various Regulation XI – Source Specific Standards rules. The proposed amended rule will be applicable to equipment utilizing continuous emissions monitoring systems (CEMS), alternative continuous emission monitoring systems (ACEMS), or semi-continuous emission monitoring systems (SCEMS) that are subject to PAR 429. The following provides a discussion of provisions under PAR 429.

PROPOSED AMENDED RULE 429

Subdivision (a) – Purpose

The purpose of this rule is to provide an exemption from oxides of nitrogen (NOx) and carbon monoxide (CO) concentration limits during periods of startup and shutdown and establish requirements during startup and shutdown to limit NOx and CO emissions. PAR 429 is needed to establish requirements during startup and shutdown pursuant to U.S. EPA policies to regulate startup, shutdown, and malfunction.

Subdivision (b) – Applicability

PAR 429 applies to an owner or operator of equipment utilizing CEMS, ACEMS, or SCEMS that are subject to Rules 1134, 1146, 1147, 1147.1, and 1147.2. Equipment is used as a general term in PAR 429, whereas unit is a defined rule term in PAR 429 that is used to refer to specific types of equipment. PAR 429 only applies to equipment utilizing CEMS, ACEMS, or SCEMS because units without monitoring systems typically demonstrate compliance with emission limits through source testing. Source tests used for compliance determination are not conducted during startup or shutdown, as specified in the applicable Regulation XI rule and/or source test protocol.

Subdivision (c) – Definitions

PAR 429 incorporates definitions from source-specific rules to define types of facilities, equipment, and other rule terms. New or modified key definitions added to PAR 429 include:

- SCHEDULED STARTUP means a planned startup that is specified by January 1 of each year.

  Scheduled startup events include, but are not limited to, those planned for maintenance, testing, tuning, or construction. A startup is only considered a scheduled startup if it is specified by January 1 each year. Scheduled startups do not include change in status due to demand loads, unplanned maintenance, breakdowns, malfunctions, or other events not scheduled prior to January 1 for the upcoming calendar year.

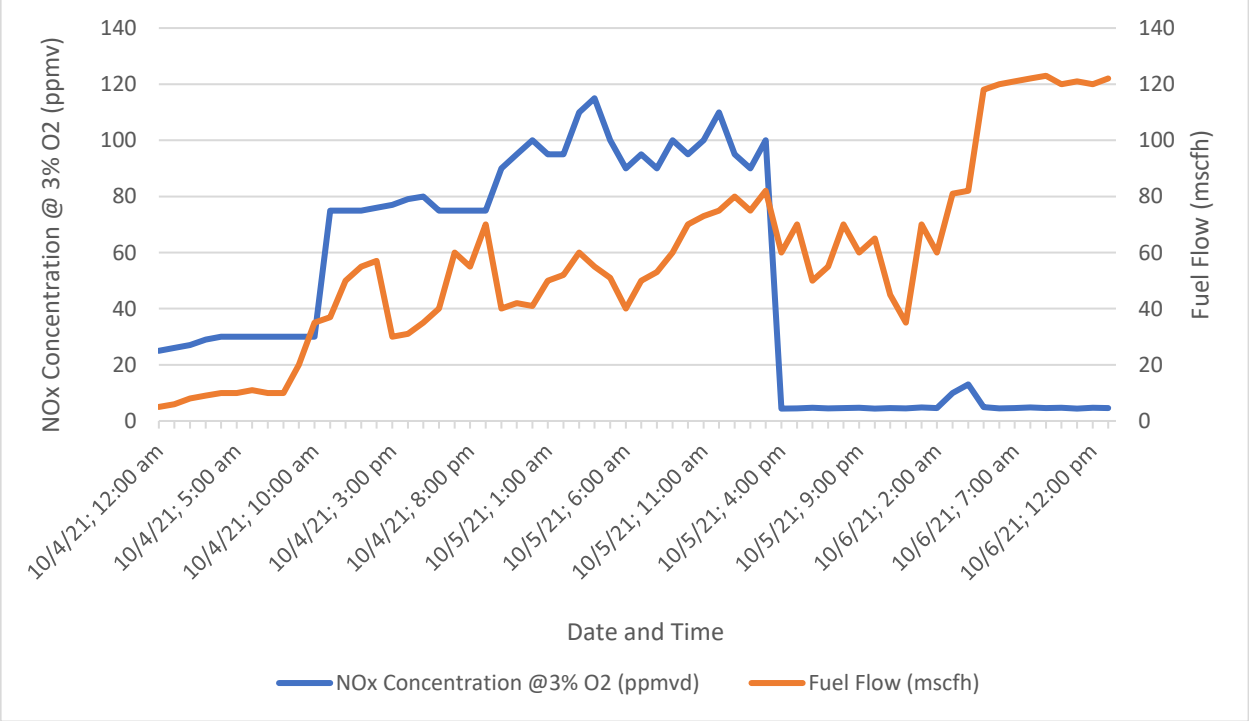
- STABLE CONDITIONS means that the fuel flow and fuel composition to a unit, is consistent and allows for normal operations.

  This proposed definition provides clarification for compliance determination under subparagraph (d)(2)(A), as well as the definition of startup. A unit may stabilize and destabilize multiple times during a complex startup procedure. Stable conditions are only determined after all startup procedures for a unit are complete.

Staff provides an example of when evaluating the time stable conditions are met is essential for determining compliance with the startup and shutdown duration limits specified in paragraph (d)(2) (Figure 2-1). This example was created by staff for clarification purposes and is not based on actual CEMS data. This example is for a process heater equipped with NOx post-combustion control equipment, which has a startup duration limit of 48 hours.

In this example, startup begins on October 4, 2021, at 12:00 am. On October 5, 2021, at 4:00 pm the flue gas temperature reaches the minimum operating temperature of the NOx post-combustion control equipment, the NOx post-combustion equipment begins operating, and the NOx concentration limit of 5 ppmv is met. The process heater took 40 hours to reach the minimum operating temperature of the NOx post-combustion control equipment and meet the concentration limit. The process heater continues to meet the 5 ppmv NOx concentration limit until October 6, 2021 at 3:00 am, where it is exceeds the concentration limit for 2 hours, before meeting 5 ppmv NOx again on October 6, 2021 at 5:00 am when fuel flow stabilizes. In this example, the process heater used 42 hours of the 48-hour startup duration limit specified in paragraph (d)(2) and is in compliance with paragraph (d)(2). The 11 hours that the unit was meeting the concentration limit before reaching stable fuel flow is not counted towards the startup duration limit pursuant to paragraph (d)(2).

Figure 2-1 – Startup Example for Process Heater with NOx Post-combustion Control Equipment



Subdivision (d) – Requirements

Exemption from Concentration Limits During Startup and Shutdown (Paragraph (d)(1))

Paragraph (d)(1) specifies that NOx and CO concentration limits and applicable rolling average provisions in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 do not apply during startup and shutdown. Paragraph (d)(1) applies to facilities in RECLAIM, former RECLAIM facilities, and non-RECLAIM facilities.

Paragraph (d)(1) applies to all equipment types subject to Rules 1134, 1146, 1147, 1147.1, and 1147.2 that are utilizing CEMS, ACEMS, or SCEMS, regardless if the equipment type is specified in the PAR 429 definition of unit. Startup and shutdown provisions in PAR 429 are based on existing Rule 429 requirements and startup and shutdown information from existing units. Other equipment types that install CEMS, ACEMS, or SCEMS in the future will have startup and shutdown requirements through the permitting process until PAR 429 can be amended to reflect appropriate startup and shutdown requirements for that individual equipment type.

If a unit has a permit condition limiting the time of startup or shutdown, the unit is only exempt from the NOx and CO concentration limits and applicable rolling average provisions in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 for the time specified in the permit condition. While in RECLAIM, a PAR 429 facility will continue to be required to reconcile emissions under the RECLAIM program during startup and shutdown.

PAR 429 specifies requirements during startup and shutdown for non-RECLAIM facilities and former RECLAIM facilities. The startup and shutdown allowances specified in Table 1 (Table 2-1 in Staff Report) can be excluded from the applicable rolling average regardless of whether Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 concentration limits were being met during startup or shutdown. If the startup or shutdown exceeds the duration limits allowed pursuant to Table 1, the owner or operator is subject to the concentration limitations and applicable rolling average provisions in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2. Refractory dryout does not count towards the duration limits pursuant to paragraph (g)(2) and is not subject to the NOx and CO concentration limits and applicable rolling average provisions in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2; however the unit is only exempt for the time specified in a permit condition, if applicable. A unit operating only the pilot is not subject to the NOx and CO concentration limits and applicable rolling average provisions in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 pursuant to paragraph (g)(1).

Startup and Shutdown Duration Limits (Paragraph (d)(2))

Paragraph (d)(2) includes Table 1 (Table 2-1 in Staff Report), which contains the startup and shutdown duration limits for units at former RECLAIM facilities and non-RECLAIM facilities. Startup and shutdown duration limits only apply when a unit exceeds the applicable NOx or CO concentration limits in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2. The following examples are provided to clarify certain startup and shutdown situations.

During the startup or shutdown of a unit, exhaust emission concentrations may fluctuate due to the nature of startups and shutdowns. Therefore, the time counted towards the startup and shutdown

duration limits in PAR 429 may be non-continuous. For example, a unit may meet the applicable NOx and CO concentration limits temporarily during a startup or shutdown but then experience operational swings where the applicable concentration limits are not met due to instability. The time counted towards Table 1 duration limits does not start anew if Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 concentration limits are temporarily met during the startup or shutdown, but then fluctuations result in an emission increase which exceeds applicable concentration limits.

However, in a situation where the owner or operator of a unit has initiated a startup of a unit but then had to shutdown the unit and will startup the unit again, then the Table 1 duration limits would apply anew.

A unit with permit conditions which specifies more stringent startup or shutdown duration limits than PAR 429 will continue to be restricted by its existing permit conditions. The duration limits in Table 1 specify the hour limitation for each individual startup or shutdown; it is not the combined time allowance for startup and shutdown. For example, a combined cycle gas turbine has 2 hours to startup and 2 hours to shutdown.

The startup and shutdown duration limits are based on existing Rule 429 limits for Rule 1146 and Rule 1134 units. Startup and shutdown duration limits for units subject to Rules 1147, 1147.1, and 1147.2 are based on facility provided startup and shutdown information, including CEMS data from the affected units. Some furnaces heat up slowly to avoid equipment stress requiring longer startup and shutdown duration limits.

PAR 429 provides limited relief from the concentration limits assigned per Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 for startup and shutdown. If there are periods of time during startup and shutdown where emissions comply with the limits established in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2, then the limited relief is not needed for that amount of time in compliance nor is the compliant time deducted from the amount of time of relief established in PAR 429.

TABLE 2-1
STARTUP AND SHUTDOWN DURATION LIMITS

Unit Type	Not to Exceed per Startup or Shutdown
Boilers and Process Heaters > 40 MM Btu/hour Rated Heat Input	8 hours
Boilers and Process Heaters ≤ 40 MM Btu/hour Rated Heat Input	6 hours
Simple Cycle Gas Turbines	15 minutes
Cogeneration, Combined Cycle, Compressor and Recuperative Gas Turbines	2 hours
Furnaces	24 hours
Aggregate Dryers	60 minutes
Tunnel Kilns	2 hours

Best Management Practices (Subparagraph (d)(2)(A))

Best management practices are contained in subparagraph (d)(2)(A). If a unit reaches stable conditions and reaches the minimum operating temperature of the NOx post-combustion control equipment, if applicable, before reaching the duration limit specified in Table 1, the startup period is considered to be over, and the unit is required to meet applicable NOx and CO concentration limits in Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2. Stable conditions and minimum operating temperature are defined in PAR 429 subdivision (c). Subparagraph (d)(2)(A) will further limit excess emissions from startup events.

Limit to the Number of Scheduled Startups (Paragraph (d)(3))

Paragraph (d)(3) limits each unit to 10 scheduled startups per calendar year, except for furnaces, which are limited to 35 scheduled startups per calendar year. Limiting the frequency of scheduled startups provides further bounds to the startup and shutdown provisions. Unscheduled startups are not limited by PAR 429 because they may be driven by operational demand, emergencies, or maintenance needs. The number of scheduled startups allowed for each unit per calendar year is specified in Table 2 (Table 2-2 in Staff Report).

The limits to the frequency of scheduled startups are based on existing Rule 429 requirements. The frequency of scheduled startups for boilers and process heaters ≤ 40 MM Btu/hour rated heat input was reduced from 10 scheduled startups per month to 10 scheduled startups per year to further bound startup and shutdown provisions. Staff did not hear from any stakeholders that more scheduled startups are necessary for boilers and process heaters ≤ 40 MM Btu/hour rated heat

input. Some furnaces are shutdown when demand is low. The number of scheduled startups allowed in a calendar year is based on furnaces shutting down every ten to 14 calendar days. The scheduled startup frequency for furnaces is based on facility-provided startup and shutdown information.

TABLE 2-2
MAXIMUM NUMBER OF SCHEDULED STARTUPS

Unit Type	Maximum Number of Scheduled Startups per Calendar Year
Furnaces	35
All Other Units	10

General Duty Requirements (Paragraph (d)(4))

Paragraph (d)(4) was modified from an existing Rule 429 provision and requires that an owner or operator of a unit at a former RECLAIM facility or non-RECLAIM facility that exceeds applicable Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2 NOx and CO concentration limits during startup or shutdown take all reasonable and prudent steps to minimize emissions to meet applicable concentration limits. Reasonable and prudent steps to minimize emissions include, but are not limited to, equipment repairs and adjusting the temperatures of post-combustion controls.

Requirements for Units with NOx Post-Combustion Control Equipment (Paragraph (d)(5))

Paragraph (d)(5) requires each unit equipped with NOx post-combustion control equipment to install and maintain in operation a temperature measuring device that is calibrated annually at the inlet of the NOx post-combustion control equipment. Temperature measuring devices include thermocouples and temperature gauges. Most existing units with NOx post-combustion control equipment are already equipped with temperature measuring devices. It is standard practice to include a temperature measuring device requirement for units with NOx post-combustion control equipment in South Coast AQMD permits, and any future units would be expected to install and maintain a temperature measuring device through the permitting process. A temperature measuring device is necessary to determine the temperature of the gas stream entering the NOx post-combustion control equipment and when the catalyst in the NOx post-combustion control equipment will effectively control NOx emissions.

NOx Post-Combustion Control Equipment Operating Temperature (Paragraph (d)(6))

Paragraph (d)(6) requires the operation of NOx post-combustion control equipment during startup and shutdown events, including the injection of any associated chemical reagent into the exhaust stream to control NOx, if the temperature of the gas to the inlet of the emission control system is greater than or equal to the minimum operating temperature of the NOx post-combustion control equipment and the temperature of the exhaust gas is stable. Minimum operating temperature is defined in PAR 429 subdivision (c).

Subdivision (e) – Notification

Subdivision (e) provides notification requirements for scheduled startups. Notifications are required to be made on or before January 1 each year by calling 1-800-CUT-SMOG or by using other approved methods of notification as approved by the Executive Officer. Advanced notification of these events is considered important because it gives the South Coast AQMD time to allocate resources if necessary to monitor the startup and information to respond to inquiries from the community should they arise.

Subdivision (f) – Recordkeeping

Records assist in verifying compliance with Rule 429. Paragraph (f)(1) provides recordkeeping requirements for owners and operators of units at a former RECLAIM facility and non-RECLAIM facilities. Records are required to be maintained on-site for 5 years and made available to the South Coast AQMD upon request. The provision in subparagraph (f)(1)(A) requires the operating log to contain the date, time, duration, and reason for each startup, shutdown, and refractory dryout event. An operating log may also contain but is not limited to operator signed-off procedures and graphical trends showing key variables of the unit such as temperatures and flow rates. Staff notes that it is the responsibility of the operator to demonstrate to the Executive Officer and their representative that compliance with duration limits or with specified exempt activities under PAR 429 is met. For startups, the reason provided in the operating log must specify if the startup was scheduled. Subparagraphs (f)(1)(B) requires a list of scheduled startups.

Paragraph (f)(2) requires an owner or operator of a unit at a former RECLAIM facility or a non-RECLAIM facility equipped with NOx post-combustion control equipment to maintain documentation from the manufacturer of the minimum operating temperature of the NOx post-combustion control equipment, unless the applicable permit issued by the South Coast AQMD specifies the required minimum operating temperature of the NOx post-combustion control equipment. Documentation from the manufacturer may include, but is not limited to, an equipment manual or technical reports. Records are required to be on-site and made available to the South Coast AQMD upon request for compliance verification.

Subdivision (g) – Exemptions

Paragraph (g)(1) exempts units burning fuel exclusively in a pilot light from the startup and shutdown duration limits contained in paragraph (d)(2) and recordkeeping requirements specified in paragraph (f)(1). Fuel burned in a pilot light contributes relatively minimal emissions and is not the primary NOx emission source in combustion equipment.

Paragraph (g)(2) exempts units from the startup and shutdown duration limits contained in paragraph (d)(2) during refractory dryouts. Refractory dryouts are usually required when refractory is installed or when the refractory requires partial replacement or repair. The purpose of refractory dryouts is to cure the material from entrained moisture to avoid undue cracking when the unit is in operation. During typical refractory dryouts, the amount of heat used is low compared to normal operation and exhaust gas temperatures from a furnace are not high enough for NOx post-combustion control equipment to be operated properly. Furthermore, refractory dryouts are infrequent processes during which the expected mass emissions of NOx are low.

CHAPTER 3: IMPACT ASSESSMENTS

INTRODUCTION

COSTS

EMISSION REDUCTIONS

COST-EFFECTIVENESS

INCREMENTAL COST-EFFECTIVENESS

SOCIOECONOMIC ASSESSMENT

CALIFORNIA ENVIRONMENTAL QUALITY ACT ~~ANALYSIS~~

DRAFT FINDINGS UNDER CALIFORNIA HEATH AND SAFETY CODE SECTION 40727

COMPARATIVE ANALYSIS

INTRODUCTION

Impact assessments were conducted during PAR 429 rule development to assess the environmental and socioeconomic implications of PAR 429. California Health & Safety Code (H&SC) requirements for cost-effectiveness analysis and incremental cost-effectiveness analysis were evaluated during rule development of PAR 429. Staff prepared an assessment of emission reductions, a socioeconomic assessment, and a California Environmental Quality Act (CEQA) Notice of Exemption~~analysis~~. Draft findings and comparative analyses were prepared pursuant to California Health and Safety Code Section (H&SC) 40727 and H&SC 40727.2, respectively.

COSTS

The provisions in PAR 429 are not expected to impose any additional costs.

EMISSION REDUCTIONS

There will not be additional emission reductions from combustion equipment subject to PAR 429; any emission reductions for these units are a result of Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and PR 1147.2.

COST-EFFECTIVENESS

The H&SC Section 40920.6 requires a cost-effectiveness analysis when establishing BARCT requirements. PAR 429 does not include new BARCT requirements nor is it expected to impose any additional costs. Therefore, this provision does not apply to the proposed amended rule.

INCREMENTAL COST-EFFECTIVENESS

H&SC Section 40920.6 requires an incremental cost-effectiveness analysis for 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, CO, SOx, NOx, and their precursors. PAR 429 does not include new BARCT requirements nor does it include any requirements for additional control options. So, there is no more stringent control option upon which an incremental cost-effectiveness would be calculated. Therefore, this provision does not apply to PAR 429.

SOCIOECONOMIC ASSESSMENT

PAR 429 does not impose any additional costs to the affected facilities and is~~does~~ not expected to result in any adverse socioeconomic impacts.

CALIFORNIA ENVIRONMENTAL QUALITY ACT ~~ANALYSIS~~

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (PAR 429) is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) and 15308. Further, there is no substantial evidence indicating that any of the exceptions in CEQA Guidelines Section 15300.2 apply to the proposed project. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and if PAR 429 is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor's Office of Planning and Research.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings

H&SC 40727 requires that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report. The draft findings are as follows:

Necessity

PAR 429 is needed to specify technological control requirements and work practice standards during startup and shutdown, limit the duration during startup and shutdown that a unit can exceed the applicable NOx or CO concentration limits in Rules 1134, 1146, 1147, 1147.1 and 1147.2, and limit the number of scheduled startups.

Authority

The South Coast AQMD obtains its authority to adopt, amend, or repeal rules and regulations pursuant to H&SC Sections 39002, 39616, 40000, 40001, 40440, 40702, 40725 through 40728, 40920.6, and 41508, as well as the federal Clean Air Act.

Clarity

PAR 429 is written or displayed so that its meaning can be easily understood by the persons directly affected by them.

Consistency

PAR 429 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

Non-Duplication

PAR 429 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 South Coast AQMD.

Reference

In adopting this rule, the following statutes which the South Coast AQMD hereby implements, interprets or makes specific are referenced: H&SC Sections 39002, 40001, 40702, 40440(a), and 40725 through 40728.5, and the federal Clean Air Act.

COMPARATIVE ANALYSIS

Under H&SC Section 40727.2, the South Coast AQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal air pollution control requirements, existing or proposed South Coast AQMD rules and regulations, and all air pollution control requirements and guidelines which are applicable to the same equipment or source type. A comparative analysis is presented below in Table 3-1.

TABLE 3-1
PAR 429 COMPARATIVE ANALYSIS

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
Applicability	Equipment utilizing CEMS, ACEMS, or SCEMS and subject to Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2.	Stationary gas turbines with ≥0.3 MW except those located electric generating facilities (Rule 1135), landfills, petroleum refineries, and publicly owned treatment works or fueled with landfill gas	Boilers, steam generators, and process heaters of equal to or greater than 5 million Btu per hour rated heat input capacity used in all industrial, institutional, and commercial operations	Gaseous and/or liquid fuel fired combustion equipment with NOx emissions that require a South Coast AQMD permit and when other South Coast AQMD Regulation XI rules are not applicable to the Unit.	Aggregate dryers with maximum rated heat input capacities greater than or equal to 2 MMBtu/hr	Metal Melting Furnace, Metal Heat Treating Furnace, Metal Heating Furnace, or Metal Forging Furnace that requires a South Coast AQMD permit.	Facilities up until January 5, 2018, unless otherwise exempted, if emission fee data for 1990 or any subsequent year filed pursuant to Rule 301, shows 4 or more tons per year of NOx or SOx emissions	Gas turbines with heat input of ≥ 10 MMBtu/hr that commenced construction, modification or re-construction on or before 2/18/2005	Gas turbines with heat input of ≥ 10 MMBtu/hr that commenced construction, modification or re-construction after 2/18/2005	Steam generating units that commenced construction, modification, or re-construction after 6/19/1984 and that has a heat input capacity of >29 MW (100 MMBtu/hr)	Steam generating units that commenced construction, modification, or re-construction after 6/9/1989 and that has a heat input capacity of 29 MW or less, but ≥ 2.9 MW (10 MMBtu/Hr)	New or modified minor source hot asphalt plants in tribal territory.
Requirements	Startup and shutdown duration limits: • Boilers and Process Heaters > 40 MMBtu/hr rated heat input – 8 hours	NOx emission limits @ 15% O2: • Liquid fuel, located on outer continental shelf – 30 ppmv • Natural gas,	NOx limits @ 3% O2 averaged over 15 minutes: • Digester gas: 15 ppmv • Landfill gas: 25 ppmv • Natural gas: 5	NOx ppm limits at 3% O2 (except for turbines which are corrected to 15% O2) for gaseous fuel-fired equipment: • Afterburner, Degassing Unit, Thermal Oxidizer,	NOx limits: 30 ppm CO Limit: 1,000 ppm All parts per million (ppm) emission limits	Interim NOx limits: 60 ppm, corrected to 3% oxygen, dry, for any Unit at a Non-RECLAIM Facility; or 102 ppm, corrected to 3% oxygen, dry, for any	• Comply with all applicable rules and permit conditions as specified in the Facility Permit • Prohibition of emissions in excess of	NOx limit @ 15% O_2, where Y = Manufacture's rated heat input and F = NOx emission allowance for fuel-bound nitrogen:	NOx limit @ 15% O_2: • ≤ 50 MMBtu/hr – 42 ppm new, firing natural gas, electric generating • ≤ 50 MMBtu – 100 ppm new, firing natural	SO_2 limits (30-day rolling average, except as provided in paragraph (f), apply at all times including SSM, except as provided in paragraph (i)* of this section and §60.45b(a)):	SO_2 limits (30-day rolling average, apply at all times including startup, shutdown, and malfunction): 	NOx limits: 36 ppm CO Limit: 400 ppm *All parts per million (ppm) emission

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
	• Boilers and Process Heaters ≤ 40 MMBtu/hour rated heat input– 6 hours • Simple Cycle Gas Turbines– 15 minutes • Cogeneration, Combined Cycle, Compressor and Recuperative Gas Turbines – 2 hours • Tunnel Kilns – 2 hours • Aggregate Dryers – 45 minutes • Furnaces – 24 hours Scheduled startups limited to 35 per calendar year for furnaces and 10 per calendar	combined cycle- 2 ppmv • Natural Gas, simple cycle- 2.5 ppmv • Produced gas- 9 ppmv • Produced gas, located on outer continental shelf – 15 ppmv • Other – 12.5 ppmv Stationary gas turbines installed prior to April 5, 2019 shall comply with the averaging time requirements specified on the SCAQMD	ppmv for ≥75 MMBtu/hr, 7 or 9 ppmv for 20–75 MMBtu/hr, 12 ppm for atmospheric, and 12 ppm for thermal fluid heaters For other types of fuels: 30 ppmv for other gaseous fuels; 40 ppmv for nongaseous fuels CO limit@ 3% O2 averaged over 15 minutes: 400 ppmv	Catalytic Oxidizer or Vapor Incinerator: 60 ppmv or 0.073 lb/MMBtu for in-use units; 20 ppmv or 0.024 lb/MMBtu for new units • Remediation Unit: 60 ppmv or 0.073 lb/MMBtu • Burn-off Furnace, Burnout Oven, Incinerator or Crematory with or without Integrated Afterburner: 60 ppmv or 0.073 lb/MMBtu for in-use units; 30 ppmv or 0.036 lb/MMBtu for new units • Evaporator, Fryer, Heated Process Tank, or Parts Washer: 60 ppmv or 0.073 lb/MMBtu	are referenced at 3 percent volume stack gas oxygen on a dry basis averaged over a period of 15 consecutive minutes	Unit at a Former RECLAIM Facility or RECLAIM Facility that does not have an existing NOx concentration limit on its Permit to Operate. NOx emission limit for existing units corrected to 3% oxygen, dry: • Metal melting furnace < 40 MMBtu/hr: 40 ppm • Metal Heat Treating, Metal Heating, and Metal Forging furnaces < 40 MMBtu/hr and ≤ 1,200 °F: 40 ppm • Metal Heat Treating, Metal Heating, and Metal Forging furnaces < 40 MMBtu/hr	annual allocation • Modeling if actual NOx or SOx emissions exceed its initial allocation by ≥ 40 tons per year • Effective 11/15/1998 each new, modified, and existing electric utility and industrial and commercial boiler which emits > 25 tons per year of NOx shall burn as its primary fuel natural gas, methanol, or ethanol (or a comparably low polluting fuel); or use advanced control technology Emission Limits: • FCCU – 25 ppm SOx,	• 0.0075* (14.4/Y) +F • 0.0150* (14.4/Y) +F SO_2 limit @15% O2: • 0.015% by volume	gas, mechanical drive • > 50 MMBtu/hr and ≤ 850 MMBtu/hr – 25 ppm new, firing natural gas • >850 MMBtu/hr – 15 ppm new, modified, or reconstructed, firing natural gas • ≤ 50 MMBtu/hr – 96 ppm new, firing fuels other than natural gas, electric generating • ≤ 50 MMBtu/hr – 150 ppm new, firing fuels other than natural gas, mechanical drive • > 50 MMBtu/hr and ≤ 850 MMBtu/hr – 74 ppm new, firing fuels other than natural gas	• Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts coal or oil: 87 ng/J or 10% of the potential SO_2 emission rate and $E_s = \frac{(K_a H_a + K_b H_b)}{(H_a + H_b)}$ • Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts coal refuse alone in a fluidized bed combustion steam generating unit: 87 ng/J or 20% of the potential SO_2 emission rate and 520 ng/J heat input • Affected facility that combusts coal or oil, either	• Affected facility that combusts only coal or coal with coal refuse: 87 ng/J (0.20 lb/MMBTU) heat input or 10% of the potential SO_2 emission rate and 520 ng/J (1.2 lb/MMBtu) heat input • Affected facility that combusts coal or coal refuse with other fuels: 87 ng/J (0.20 lb/MMBTU) heat input or 10% of the potential SO_2 emission rate and $E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$ • Affected facility that combusts only coal refuse alone in a fluidized bed combustion steam generating	limits are referenced at 3 percent volume stack gas oxygen on a dry basis averaged over a period of 15 consecutive minutes.

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
	year for all other units Work practice requirements: • Take all reasonable and prudent steps to minimize emissions during startup and shutdown • Operate NOx post-combustion control equipment if the temperature to the gas at the inlet of the NOx post-combustion control equipment is ≥ the minimum operating temperature Install and maintain in operation a calibrated temperature measuring	permit to operate as of April 5, 2019, not to exceed 3 hours. Stationary gas turbines installed after April 5, 2019 shall average the NOx, and ammonia emissions limits in Table I over a 60-minute rolling average. Stationary compressor gas turbines installed after April 5, 2019 shall average the NOx and ammonia emissions limits in		• Oven, Dehydrator, Dryer, Heater, Kiln, Calciner, Cooker, Roaster, Furnace, or Heated Storage Tank: 30 ppm or 0.036 lb/MMBtu for process temperatures <1200°F and 60 ppmv or 0.073 lb/MMBtu for process temperatures ≥1200°F for in-use units; 20 ppmv or 0.024 lb/MMBtu for process temperatures <1200°F and 30 ppm or 0.036 lb/MMBtu for process temperatures ≥1200°F for new units • Make-Up Air Heater or other Air Heater		and > 1,200 °F: 50 ppm • Units with Radiant-Tube Burners < 40 MMBtu/hr: 50 ppm • All units ≥ 40 MMBtu/hr: 15 ppm (averaged over an 8-hour rolling interval) NOx emission limit for new units corrected to 3% oxygen, dry: • Metal melting furnace < 40 MMBtu/hr: 40 ppm • Metal Heat Treating, Metal Heating, and Metal Forging furnaces < 40 MMBtu/hr and ≤ 1,200 °F: 30 ppm • Metal Heat Treating, Metal Heating, and Metal Forging furnaces < 40 MMBtu/hr	dry @ 0% oxygen on a 365- day rolling average Emission Factors NOx: • Refinery boiler >40 MMBtu/hr – 2 ppm • FCCU – 2 ppm • Gas turbines – 2 ppm • Calciner – 10 ppm • SRU/TG unit – 95% reduction, 2 ppm Emission Standards SOx: • Calciner – 10 ppmv • FCCU – 5 ppmv • Refinery boiler/heater – 40 ppmv • SRU/TG unit – 5 ppmv • Sulfuric acid		• >850 MMBtu/hr – 42 ppm new, modified, or reconstructed, firing fuels other than natural gas • ≤ 50 MMBtu/hr – 150 ppm modified or reconstructed • > 50 MMBtu/hr and ≤ 850 MMBtu/hr – 42 ppm modified or reconstructed, firing natural gas • > 50 MMBtu/hr and ≤ 850 MMBtu/hr – 96 ppm modified or reconstructed, firing fuels other than natural gas SO_2 limit: • 110 ng/J • 65 ng/J for turbines burning at least 50% biogas in a	alone or in combination with any other fuel, and that uses an emerging technology to control SO_2: 50% of the potential SO_2 emission rate and $E_s = \frac{(K_c H_c + K_d H_d)}{(H_c + H_d)}$ • Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that: have an annual capacity factor for coal and oil of ≤30% and a federally enforceable permit limiting operation; is located in a noncontinental area; combusts coal and oil, alone or in combination with a duct burner as part of a combined cycle system	unit: 87 ng/J (0.20 lb/MMBTU) heat input or 20% of the potential SO_2 emission rate and 520 ng/J (1.2 lb/MMBtu) heat input • Affected facility that combusts only coal and that uses an emerging technology for the control of SO_2 emissions: 50% of the potential SO_2 emission rate and 260 ng/J (0.60 lb/MMBtu) heat input • Affected facility that combusts coal with other fuels and that uses an emerging technology for the control of SO_2 emissions:	

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
	device on all units with NOx post-combustion control equipment	Table II over a three-hour rolling average.		located outside of building with temperature controlled zone inside building: 30 ppmv or 0.036 lb/MMBtu • Tenter Frame or Fabric or Carpet Dryer: 30 ppmv or 0.036 lb/MMBtu for in-use units; 20 ppmv or 0.024 lb/MMBtu for new units • Autoclave: 30 ppm or 0.036 lb/MMBtu for new units • Tunnel Kiln or Beehive Kiln: 30 ppmv or 0.036 lb/MMBtu for process temperatures <1200°F and 60 ppmv or 0.073 lb/MMBtu for process temperatures ≥1200°F for new units		and > 1,200 °F: 40 ppm • Units with Radiant-Tube Burners < 40 MMBtu/hr: 40 ppm • All units ≥ 40 MMBtu/hr: 15 ppm (averaged over an 8-hour rolling interval) CO emission limit corrected to 3% oxygen, dry: 1000 ppm An owner or operator demonstrating compliance with NOx emissions of less than 1 pound per day shall install and maintain in service a non-resettable totalizing time meter on the Unit and operate the Unit no more than the specified number of hours per	manufacturing – 10 ppmv		calendar month Operate and maintain stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.	where ≤30% of the heat entering the steam generating unit is from combustion of coal and oil in the duct burner and ≥70% of the heat entering the steam generating unit is from the exhaust gases entering the duct burner; or burns coke oven gas alone or in combination with natural gas or very low sulfur distillate oil: 520 ng/J if the facility combusts coal or 215 ng/J if the facility combusts oil other than very low sulfur oil • Affected facility that commenced construction, reconstruction, or modification after February 28, 2005 and	50% of the potential SO_2 emission rate and $E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$ • Affected facility that combusts coal alone or in combination with another fuel that has a heat input capacity of ≤ 22 MW, is subject to a federally enforceable requirement of an annual capacity factor for coal of ≤55%, located in a noncontinental area, or combusts coal in a duct burner as part of a combined cycle system where ≤30% of the heat entering the steam generating unit is from	

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
				• Chiller (Absorption or Adsorption): 20 ppmv or 0.024 lb/MMBtu/hr for new units • Turbine <0.3 MW: 9 ppmv or 0.033 lb/MMBtu for new units • Rotary Dryer: 30 ppmv or 0.036 lb/MMBtu for new units • Other Unit or Process Temperature: 30 ppm or 0.036 lb/MMBtu for process temperatures <1200°F and 60 ppm or 0.073 lb/MMBtu for process temperatures ≥1200°F NOx ppm limits at 3% O2 (except turbines which are corrected to 15% O2) for liquid fuel-		month in Table 5 calculated using Equation 1; or install and maintain in service a non-resettable totalizing fuel meter on the Unit and consume no more than the Therms of fuel per month calculated using Equation 2				that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels: 87 ng/J or 8% of the potential SO2 emissions and 520 ng/J * An affected facility subject to paragraph (a), (b), or (c) of this section may combust very low sulfur oil or natural gas when the SO_2 control system is not being operated because of malfunction or maintenance of the SO_2 control system Facilities burning coke oven gas alone or in combination with any other gaseous fuels or distillate oil are allowed to exceed	combustion of coal in the duct burner and ≥70% of the heat entering the steam generating unit is from exhaust gases entering the duct burner: $E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$ PM and Opacity Limits (apply at all times except during startup, shutdown, and malfunction): • Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, combusts coal or coal with other fuels, a heat	

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
				fired equipment: • Turbine <0.3 MW (in-use distillate fuel <0.3 MW): 77 ppmv or 0.285 lb/MMBtu • All liquid fuel-fired units: 40 ppm or 0.053 lb/MMBtu for process temperatures <1200°F and 60 ppm or 0.073 lb/mmBtu for process temperatures ≥1200°F CO limit at 3% O2 (except turbines which are corrected to 15% O2): 1000 ppmv Perform combustion system maintenance						the limit 30 operating days per calendar year for SO_2 control system maintenance. PM and Opacity Limits (apply at all times except startup, shutdown, or malfunction, 24 hour average): • Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 and that combusts coal or combusts mixtures of coal with other fuels: 22 ng/J (only coal or if the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels of ≤10%), 43 ng/J (affected facility	input capacity ≥ 8.7 MW: 22 ng/J PM (annual capacity factor for the other fuels of 10% or less) or 43 ng/J PM (annual capacity factor for the other fuels >10%, and subject to a federally enforceable requirement) • Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, combusts wood or wood with other fuels (except coal), a heat input capacity ≥ 8.7 MW: 43 ng/J PM (annual capacity	

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
										combusts coal and other fuels and has an annual capacity factor for the other fuels > 10 percent% and is subject to a federally enforceable requirement), 86 ng/J (combusts coal or other fuels and has an annual capacity factor for coal or coal and other fuels of ≤30%, has a maximum heat input of ≤73 MW, has a federally enforceable limit ,construction of the affected facility commenced after June 19, 1984, and before November 25, 1986) • Affected facility that commenced construction, reconstruction, or modification	factor for wood >30%) or 130 ng/J PM (annual capacity factor for wood ≤ 30% and federally enforceable limit) • Affected facility that combusts coal, wood or oil, a heat input capacity ≥ 8.7 MW: 20% opacity (6 minute average) • Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, combusts wood, oil, coal, or a mixture of these fuels, wood with other fuels with any other fuels, a heat input	

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
										on or before February 28, 2005 that combusts oil (or mixture of oil with other fuels) and uses a SO2 control technology: 43 ng/J • Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts wood, or wood with other fuels, except coal: 43 ng/J (annual capacity factor >30% for wood) or 86 ng/J (annual capacity factor ≤30% for wood and subject to a federally enforceable annual capacity limit and a heat input capacity of ≤73 MW) • Affected facility that combusts municipal-type	capacity ≥ 8.7 MW: 13 ng/J PM	

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
										solid waste or mixtures of municipal-type solid waste with other fuels: 43 ng/J (only municipal-type solid waste or combusts municipal type solid waste and other fuels and has an annual capacity factor for the other fuels of ≤10%), 86 ng/J (has an annual capacity factor for municipal-type solid waste and other fuels of ≤ 30%, a maximum heat input of ≤ 73 MW, a federally enforceable annual capacity limit, and construction of the affected facility commenced after June 19, 1984, but on or before November 25, 1986) • Affected facility that		

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
										combusts coal, oil, wood, or mixture of these fuels with other fuels: 20% opacity (6 minute average) • Affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels except as provided in paragraphs (h)(2), (h)(3), (h)(4), (h)(5), and (h)(6): 13 ng/J NOx limits (apply at all times including startup, shutdown, and malfunction, 30-day rolling average, except as provided in paragraph (j)):		

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
										• Natural gas and distillate oil, except duct burners in combined cycle systems: 43 ng/J (low heat release), 86 ng/J (high heat release) • Residual Oil: 130 ng/J (low heat release), 170 ng/J (high heat release) • Coal: 210 ng/J (mass-feed stoker), 260 ng/J (spreader stoker and fluidized bed combustion), 300 ng/J (pulverized coal), 260 ng/J (Lignite), 340 ng/J (Lignite mined in North Dakota, South Dakota or Montana and combusted in a slag tap furnace), 210 ng/J (coal-derived synthetic fuels) • Duct burner in a combined cycle system: 86 ng/J (natural		

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
										gas and distillate oil), 170 ng/J (residual oil) • Simultaneous combustion of mixtures of only coal, oil, or natural gas $E_s = \frac{(EL_p H_p) + (EL_o H_o) + (EL_n H_n)}{(H_p + H_o + H_n)}$ • Affected facility that simultaneously combusts coal or oil, natural gas (or any combination of the three), and wood, or any other fuel: Emission limit pursuant to paragraph (a) or (b) • Affected facility that simultaneously combusts natural gas and/or distillate oil with a potential SO2 emissions rate of ≤26 ng/J with wood, municipal-type solid waste, or other solid fuel, except coal: 130 ng/J		

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
										• Affected facility that commenced construction after July 9, 1997: 86 ng/J (combusts coal, oil, or natural gas, or any combination of the three)		
Monitoring	None	A continuous in-stack NOx monitor for turbines with a capacity of 2.9 MW or greater. Source testing every 1-3 years.	A continuous in-stack NOx monitor for units with a rated heat input capacity ≥ 40 MMBtu/hr and an annual heat input > 200 x 109 Btu per year. Source testing every 3-5 years. Diagnostic emissions checks.	Source testing to demonstrate compliance with emission limits by the applicable schedules in subdivision (e). Test methods: South Coast AQMD Source Test Method 100.1, South Coast AQMD Source Test Method 10.1, or Any alternative test method determined approved before the test in writing by the Executive Officers of the South Coast	• A continuous in-stack NOx monitor for existing systems • Source testing once every 5 calendar years for units < 10 MMBtu/hr • Source testing once every 3 calendar years for units ≥10 MMBtu/hr and <40 MMBtu/hr • Source testing once every calendar year for units ≥40 MMBtu/hr	Source testing requirements for units subject to the concentration limit and implementation schedule requirements in paragraph (d)(1), (d)(2), (d)(3), or (d)(4): • No later than 60 calendar months from the previous source test for units <10 MMBtu/hr • 60 calendar months from the previous source test for Units rated ≥ 10 MMBtu/hr with an annual heat input of less than or	• Continuous monitoring device for each as specified in Rule 2012, Appendix A and Rule 2011, Appendix A for each major NOx or SOx source • Source testing every 6 months for major NOx sources at a Super Compliant NOx facility which is reclassified as a large NOx source • Source testing every 12 months (units with	• Performance test using either: EPA Method 20; ASTM D6522-00; EPA Method 7E and either EPA Method 3 or 3A; sampling traverse points following Method 20 or Method 1, and sampled for equal time intervals • A continuous monitoring system to monitor and record the fuel consumption and the ratio of water or	• Initial performance test • Test methods: EPA Methods 7E and 3A, EPA Method 20, EPA Method 19 • A continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel or CEMS for stationary gas turbines using water or steam injection (hourly average) • Annual performance	• Performance tests • Test Methods: Method 19, Method 3A or 3B, Method 5, 5B, or 17, Method 5, Method 17, Method 1, Method 9, Method 7E, Method 7,7A, 7E, Method 320 • Quarterly accuracy determinations and daily calibration drift tests for CEMS • SO_2 CEMS except as provided in paragraphs (b) and (f) • Continuous opacity monitoring	• Initial performance test • Test Methods for PM: Method 1, Method 3A or 3B, Method 5, 5B, or 17, Method 9 • CEMS for measuring SO_2 and either O_2 or CO2 at the outlet of the SO_2 control device (or unit if there is no control device); 1 hour average • Quarterly accuracy determinations and daily calibration drift tests	Permit specific

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
				AQMD, the California Air Resources Board and the United States Environmental Protection Agency. For any operator who chooses to comply using pound per million Btu, NOx emissions in pounds per million Btu of heat input shall be calculated using procedures in 40 CFR Part 60, Appendix A, Method 19, Sections 2 and 3.		equal to 23 billion Btu per year • 36 calendar months from the previous source test for Units rated ≥ 10 MMBtu/hr with an annual heat input of greater than 23 billion Btu per year in any year Test methods: South Coast AQMD Source Test Method 100.1, South Coast AQMD Source Test Method 7.1, EPA Test Method 19, or any alternative test method submitted in writing to, and pre-approved by, the Executive Officer of the South Coast AQMD, the California Air Resources Board, and the	emission rates) and every 6 months (units with concentration limits) for major SOx sources at a Super Compliant SOx facility which is reclassified as a SOx process unit • Source testing shall comply with District Source Test Methods 1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 4.1, 6.1, 7.1, 307-91, and 100.1; ASTM Methods D3588-91, D4891-89, D1945-81, D4294-90, and D2622-92; and EPA Method 19 • Source testing once every 3 years for large NOx sources	steam to fuel (averaged over one hour) or CEMS consisting of NOx and O2 monitors for stationary gas turbines that commenced construction, reconstruction, or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NOx emissions (averaged over one hour) • Monitor the total sulfur content of the fuel being fired	tests or continuous monitoring for turbines without water or steam injection. • Monitor the total sulfur content of the fuel being fired.	systems (COMS)	• COMS	

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
						United States Environmental Protection Agency. CEMS and RATA testing required for units ≥ 40 MMBtu/hr Quarterly source tests with any ammonia limits in permits using South Coast AQMD Source Test Method 207.1	• Source testing once every 5 years for NOx process units					
Reporting	Notification of scheduled startups	Source testing. CEMS data every six months (Rule 218).	CEMS data every six months (Rule 218).	• Emission test reports • Signed emission certifications • Source test protocols and reports • CEMS data every six months (Rule 218).	Every 6 months for units with existing continuous emissions monitoring system (CEMS) or equivalent prior to date of rule adoption (Rules 218.2 and 218.3).	• Source test protocols and reports • CEMS data every six months (Rule 218).	• Daily electronic reporting for major sources • Monthly emissions report for major sources • Quarterly reporting for large sources and process units • Quarterly Certification of Emissions Report and Annual	Semi- annual reports of excess emissions and monitor downtime	Semi- annual reports of excess emissions and monitor downtime. Annual performance test results.	Performance test results, notification of the initial startup, design heat input capacity, fuels to be combusted, a copy of any federally enforceable requirement that limits the annual capacity factor, annual capacity factor, emerging technology used for SO2	Performance test results, performance evaluation of the CEMS and/or COMS, excess emission reports, notification of the date of construction, reconstruction, and startup, design heat input capacity, fuels to be	Permit Specific

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
							Permit Emissions Program report for all units • Breakdowns which result in an applicable rule or permit violation			emissions; reports of excess emissions	combusted, annual capacity factor, emerging technology used for SO_2 emissions	
Recordkeeping	Operating log and list of scheduled startups shall be maintained onsite for 5 years. Documentation from the manufacturer of the minimum operating temperature of NOx post-combustion control equipment.	Operating log, emission control system records of operation and maintenance for 2 years.	CEMS maintenance and emission records for 2 years. Records of all source tests. Diagnostic emission check records for 2 years (5 years for Title V facilities).	• Source test reports, maintenance records, and if applicable, monthly records demonstrating NOx emissions of less than one pound per day for at least 5 years • Rated heat input • Modified units require records of the name of the company and person modifying the Unit, a description of all modifications, the date(s) the Unit was	Source test records for 5 years	• Source test reports and, if applicable, monthly records demonstrating compliance with the 1 pound NOx per day demonstration requirements for 5 years • Maintain sufficient operating records to demonstrate that a Unit complies with the requirements for extension of the source test deadline • Maintain records on-site identifying the Rated Heat	• Maintenance & emission records, source test reports, RATA reports, audit reports and fuel meter calibration records for Annual Permit Emissions Program • Records shall be maintained for 3 years (5 years if Title V) except data gathered or computed for intervals < 15 minutes shall be maintained for a	Performance testing; emission rates; monitoring data; CEMS audits and checks; occurrence and duration of any startup, shutdown, or malfunction	Performance testing; emission rates; monitoring data; CEMS audits and checks; occurrence and duration of any startup, shutdown, or malfunction	Performance testing; emission rates; daily records of the amounts of each fuel combusted; calculations of the annual capacity factor for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste; nitrogen content; opacity; hours of operation. Records are required to be maintained for 2 years.	Performance testing; emission rates; monitoring data; CEMS audits and checks; fuel supplier certification; daily fuel combustion. Records are required to be maintained for 2 years.	Permit Specific

Rule Element	PAR 429	Rule 1134	Rule 1146	Rule 1147	Rule 1147.1	Rule 1147.2	RECLAIM	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart GG	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart KKKK	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Db	CFR, Title 40, Chapter 1, Subchapter C, Part 60, Subpart Dc	U.S. EPA General Permit
				modified, and a calculation of the Rated Heat Input • Copy of the manufacturer's, distributor's, installer's, or maintenance company's written maintenance schedule and instructions for at least 5 years		Input for any Unit • An owner or operator of a Unit that is Altered and subject to this rule shall maintain records on-site to include the name of the company and person Altering the Unit, a description of all Alterations, the date(s) the Unit was Altered, and a calculation of the Rated Heat Input • Maintain records on-site in compliance with any applicable South Coast AQMD Rule for CEMS certification, operation, monitoring, reporting, and notification or any applicable permit condition.	minimum of 48 hours					

APPENDIX A: LIST OF AFFECTED FACILITIES

Table A-1: Facilities Affected by PAR 429

Facility ID	Facility Name
3704	ALL AMERICAN ASPHALT
16642	ANHEUSER-BUSCH LLC., (LA BREWERY)
117290	B BRAUN MEDICAL, INC
185801	BERRY PETROLEUM COMPANY, LLC
185600	BRIDGE ENERGY, LLC
800387	CAL INST OF TECH
15507	CALIFORNIA STATE UNIVERSITY, FULLERTON
46268	CALIFORNIA STEEL INDUSTRIES
164204	CITY OF RIVERSIDE, PUBLIC UTILITIES DEPT
182561	COLTON POWER
63180	DARLING INGREDIENTS INC.
12428	GOLD BOND BUILDING PRODUCTS, LLC
193561	IBY, LLC
62862	IMPERIAL IRRIGATION DISTRICT/ COACHELLA
21887	KIMBERLY-CLARK WORLDWIDE INC.-FULT. MILL
800234	LOMA LINDA UNIV
172005	NEW- INDY ONTARIO, LLC
47781	OLS ENERGY-CHINO
11218	ORANGE CO, CENTRAL UTILITY FACILITY
19167	RJ NOBLE COMPANY
101977	SIGNAL HILL PETROLEUM INC
129497	THUMS LONG BEACH CO
800288	UNIV CAL IRVINE (NSR USE ONLY)
49387	UNIV CAL, RIVERSIDE
18452	UNIVERSITY OF CALIFORNIA, LOS ANGELES

APPENDIX B – RESPONSES TO PUBLIC COMMENTS

Public Workshop Comments

Public Workshop Commenter #1: David Pettit – Natural Resource Defense Council

The commenter asked if staff had discussed PAR 429 with U.S. EPA considering their changing position under the Biden administration regarding startup, shutdown, and malfunction rules.

Staff Response to Public Commenter #1:

Staff is actively working with U.S. EPA to ensure PAR 429 meets the 2015 SSM guidance.

Public Workshop Commenter #2: Joseph Steirer – Yorke Engineering

The commenter asked for clarification regarding how facilities would comply with startup and shutdown requirements under PAR 429 when the requirements differ from permit conditions.

Staff Response to Public Commenter #2:

Facilities are required to comply with both rule requirements and permit conditions. If there is a discrepancy between the rule and permit conditions, the more stringent requirement shall apply.

Email Comment

Email Comment #1: Ramine Cromartie – WSPA

Greetings SCAQMD Team,

We appreciate the opportunity to participate in this rulemaking process. With this email, WSPA is providing comment on Preliminary Draft Rule Language for PAR 429, released on February 15, 2022.

Applicability
Rule 429.1 was adopted in November 2021. It addresses the exemption provisions from NOx emissions limits during not only start up and shut down operations, but also commissioning and specific maintenance events, at petroleum refineries and facilities with related operations to petroleum refineries. The intent of PAR 429 is to provide exemption provisions for CEMS, ACEMS, and SCEMS equipment that is subject to the following rules: Rule 1134, Rule 1146, Rule 1147, Rule 1147.1, and Rule 1147.2. Both PAR 429 and Rule 429.1 have comparable provisions, though SCAQMD Staff took great concern to ensure Rule 429.1 accounts for the unique considerations with operating petroleum refineries/facilities and related operations as well as provides additional provisions for other modes of operations (e.g., maintenance and commissioning). In an effort to mitigate the opportunity for facilities being subject to conflicting regulations, WSPA suggests an exemption from PAR 429 be provided, for facilities subject to Rule 429.1. 1-1

Notification
Regarding the notification requirements in 429(e), current draft rule language states that notifications of scheduled startups for the upcoming year should be made to SCAQMD "by calling 1-800-CUT-SMOG, or by using other approved methods of notification as approved by the Executive Officer." It should be noted that 1-800-CUT-SMOG is not set up to receive the amount of notification calls that would be anticipated by this rulemaking; it is suggested that SCAQMD set up a different notification approach, one that is better equipped to manage the required notification calls. We would be open to a discussion regarding this issue. 1-2

Thank you for your consideration of our feedback. We appreciate your time on this rulemaking effort. Please let me know if there are any questions.

Regards,

Ramine Cromartie
Senior Manager, Regulatory Affairs
Southern California Region

WSPA
970 W. 190th Street, Suite 304, Torrance, CA 90502
C 510.672.1526 wspa.org

Staff Response to Email Comment #1:

Response to Comment 1-1:
Units subject to Rule 1109.1 are not included in PAR 429 applicability. Therefore, an exemption from PAR 429 is unnecessary for units subject to Rule 1109.1. Rule 429.1 applies to units subject to Rule 1109.1.

Response to Comment 1-2:
Staff is having internal discussions about other potential notification methods. PAR 429 contains rule language to allow notifications to be submitted "by using other approved methods of notification as approved by the Executive Officer" in the case new notification methods are developed and approved in the future. The proposed notification requirements in PAR 429 requires one annual notification of all scheduled startups planned for the year.

ATTACHMENT H

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

SUBJECT: **NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

PROJECT TITLE: **PROPOSED AMENDED RULE 429 – STARTUP AND SHUTDOWN PROVISIONS FOR OXIDES OF NITROGEN**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

If the proposed project is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino Counties. The Notice of Exemption will also be electronically filed with the State Clearinghouse of the Governor's Office of Planning and Research for posting on their CEQAnet Web Portal which may be accessed via the following weblink: https://ceqanet.opr.ca.gov/search/recent. In addition, the Notice of Exemption will be electronically posted on the South Coast AQMD's webpage which can be accessed via the following weblink: http://www.aqmd.gov/nav/about/public-notices/ceqa-notices/notices-of-exemption/noe---year-2022.

NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

To:	County Clerks for the Counties of Los Angeles, Orange, Riverside and San Bernardino; and Governor's Office of Planning and Research – State Clearinghouse	**From:**	South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

Project Title: Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen

Project Location: The proposed project is located within the South Coast Air Quality Management District's (South Coast AQMD) jurisdiction, which includes the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties), and the Riverside County portion of the Salton Sea Air Basin and the non-Palo Verde, Riverside County portion of the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project: Proposed Amended Rule (PAR) 429 has been developed to provide an exemption from oxides of nitrogen (NOx) and carbon monoxide (CO) concentration limits during startup and shutdown events and establish requirements during startup and shutdown events to limit NOx and CO emissions. PAR 429 is applicable to combustion equipment utilizing continuous emissions monitoring systems (CEMS), alternative continuous emission monitoring systems (ACEMS), or semi-continuous emission monitoring systems (SCEMS) and which are subject to the following South Coast AQMD rules: Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines; 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 1147.1 – NOx Reductions from Aggregate Dryers; and Rule 1147.2 – NOx Reductions from Metal Melting and Heating Furnaces. PAR 429 will: 1) provide an exemption from NOx and CO concentration limits in various Regulation XI rules during startup and shutdown for specified durations; 2) limit the frequency of scheduled startup events; 3) establish best management practices; and 4) enhance existing notification and recordkeeping requirements. No emission reductions are anticipated.

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) – Common Sense Exemption
CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

Reasons why project is exempt: South Coast AQMD, as Lead Agency, has reviewed the proposed project (PAR 429) 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. It can be seen with certainty that implementing the proposed project would not cause a significant adverse effect on the environment because PAR 429 will not require physical modifications. Therefore, the proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. The proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment, because PAR 429 is designed to further protect or enhance the environment by limiting the duration and frequency of startup and shutdown events which will, in turn limit NOx and CO emissions. Further, there is no substantial evidence indicating that any of the exceptions set forth in CEQA Guidelines Section 15300.2 – Exceptions apply to the proposed project.

Date When Project Will Be Considered for Approval (subject to change):
South Coast AQMD Governing Board Public Hearing: September 2, 2022

CEQA Contact Person:	**Phone Number:**	**Email:**	**Fax:**
Kevin Ni	(909) 396-2462	kni@aqmd.gov	(909) 396-3982
Rule Contact Person:	**Phone Number:**	**Email:**	**Fax:**
Isabelle Shine	(909) 396-3064	ishine@aqmd.gov	(909) 396-3982

Date Received for Filing: _____ **Signature:** *(Signed and Dated Upon Board Approval)*

Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development, and Implementation

ATTACHMENT I

Proposed Amended Rule 429 – Startup and Shutdown Provisions for Oxides of Nitrogen

BOARD MEETING
SEPTEMBER 2, 2022

Background

- Rule 429 was adopted in 1989 and amended in 1990
- Currently provides an exemption from NOx emission limits during scheduled startups and shutdowns for:

Rule 429		
Rule 1134 Stationary Gas Turbines	**Rule 1146** Boilers and Process Heaters ≥ 5 MMBtu/hr	**Rule 1159** Nitric Acid Production Units

- During startup and shutdown, units cannot consistently meet concentration limits in landing rules
  - Equipment is not at steady-state conditions
  - Temperature is not optimal for pollution control equipment such as SCR

Need for PAR 429

- Proposed Amended Rule 429 (PAR 429) is a companion rule to the following rules:

PAR 429				
Rule 1134 Stationary Gas Turbines	**Rule 1146** Boilers and Process Heaters ≥ 5 MMBtu/hr	**Rule 1147** Miscellaneous Sources	**Rule 1147.1** Aggregate Dryers	**Rule 1147.2** Metal Melting and Heating Furnaces

- PAR 429 designed to exempt facilities from NOx and CO concentration limits during startup and shutdown
- U.S. EPA commented that startup and shutdown provisions must be addressed in a rule pursuant to their policy

Startup and Shutdown Duration Limits

- Duration limits apply when a unit exceeds NOx or CO concentration limits in applicable landing rule
  - Some furnaces heat up slowly to avoid equipment stress
- Startup is further limited and shall not last longer than the time to reach:
  - Stable conditions; and
  - The minimum operating temperature of NOx post-combustion control equipment

Unit Type	Time Allowed When Emissions Exceed Concentration Limits
Boilers and Process Heaters > 40 MMBtu/hour Rated Heat Input	8 hours
Boilers and Process Heaters ≤ 40 MMBtu/hour Rated Heat Input	6 hours
Simple Cycle Gas Turbines	15 minutes
Cogeneration, Combined Cycle, Compressor and Recuperative Gas Turbines	2 hours
Furnaces	24 hours
Aggregate Dryers	60 minutes
Tunnel Kilns	2 hours

Other Proposed Provisions

Limit Number of Scheduled Startups

- Maximum of 35 annual scheduled startups for furnaces
  - Furnaces are not operational when demand is low
- Maximum of 10 annual scheduled startups for all other unit types

Best Management Practices

- Take all reasonable and prudent steps to minimize emissions during startup and shutdown
- Includes equipment repairs and adjusting temperatures of post-combustion controls

Requirements for Units with NOx Post-Combustion Control Equipment

- Install temperature measuring device
- Operate NOx post-combustion control equipment if the temperature of the exhaust gas is ≥ the minimum operating temperature

Notification and Recordkeeping

Impacts and Key Issues

Costs	• The provisions in PAR 429 are not expected to impose any additional costs
Environmental Impacts	• A Notice of Exemption from CEQA has been prepared – no adverse environmental impacts
Key Issues	• Staff is not aware of any remaining key issues

Staff Recommendation

- Adopt Resolution:
  - Determining that Proposed Amended Rule 429 is exempt from the requirements of the California Environmental Quality Act
  - Amending Rule 429