



# South Coast Air Quality Management District

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

## A G E N D A

### HYBRID GOVERNING BOARD MEETING NOVEMBER 3, 2023

A meeting of the South Coast Air Quality Management District Board will be held at 9:00 a.m. on Friday, November 3, 2023 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.

Please refer to South Coast AQMD's website for information regarding the format of the meeting, updates, and details on how to participate at: <http://www.aqmd.gov/home/news-events/meeting-agendas-minutes>.

<p><b>Electronic Participation Information</b> (Instructions provided at the bottom of the agenda)</p>	<p><b>Join Zoom Meeting - from PC, Laptop or Phone</b> <a href="https://scaqmd.zoom.us/j/93128605044">https://scaqmd.zoom.us/j/93128605044</a> Meeting ID: <b>931 2860 5044</b> (applies to all) Teleconference Dial In +1 669 900 6833 or +1 253 215 8782 One tap mobile +16699006833,,93128605044# or +12532158782,,93128605044#</p> <p><b>Spanish Language Only Audience (telephone)</b> Número Telefónico para la Audiencia que Habla Español Teleconference Dial In/Numero para llamar: +1 669 900 6833 Meeting ID/Identificación de la reunión: <b>932 0955 9643</b> One tap mobile: +16699006833,,93209559643#</p>
<p><b>Public Comment Will Still Be Taken</b></p>	<p><b>Audience will be allowed to provide public comment in person and through Zoom connection or telephone.</b> Phone controls for participants: The following commands can be used on your phone's dial pad while in meeting: *6 (Toggle mute/unmute); *9 - Raise hand</p>
<p><b>Questions About an Agenda Item</b></p>	<ul style="list-style-type: none"><li>▪ 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.</li><li>▪ 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.</li></ul>
<p><b>Meeting Procedures</b></p>	<ul style="list-style-type: none"><li>▪ 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, <u>any item</u> may be considered in <u>any order</u>.</li><li>▪ 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.</li></ul>

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](http://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](mailto: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: Vanessa Delgado, Chair  
Other Board Members  
Wayne Nastri, Executive Officer

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Staff/Phone (909) 396-

**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.**

**CONSENT AND BOARD CALENDAR (Items 1 through 20)**

Note: Consent and Board Calendar items held for discussion will be moved to Item No. 21

**Items 1 and 2 – Action Items/No Fiscal Impact**

- |  |                    |
|--|--------------------|
| 1. Approve Minutes of October 6, 2023                      | <b>Thomas/3268</b> |
| 2. Establish Board Meeting Schedule for Calendar Year 2024 | <b>Nastri/3131</b> |

The proposed Board Meeting Schedule for Calendar Year 2024 is submitted for Board consideration. The meeting schedule for the Administrative Committee meeting, (second Friday of the month), as well as the other standing committees is included for information only. (Reviewed: Administrative Committee, October 13, 2023; Recommended for Approval)

**Items 3 through 6 – Budget/Fiscal Impact**

- |   |                 |
|---|-----------------|
| 3. Amend Agreement with Phillips 66 Company for Continued Fenceline Air Measurements at Phillips 66 Wilmington Refinery Using Optical Tent, Recognize Revenue, Appropriate Funds and Amend Contract | <b>Low/2269</b> |
|---|-----------------|

As part of MATES V, an optical tent air measurement system was deployed at the Phillips 66 Wilmington Refinery by the Regents of University of California, Los Angeles (UCLA) to demonstrate its ability to monitor fugitive VOC emissions. After the MATES V study concluded, the optical tent was adopted by the refinery as part of their fenceline air monitoring system for Rule 1180 implementation, with continued oversight provided by UCLA for quality

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\* Please note, at the September 1, 2023 Board Meeting, a public hearing was set for the December 1, 2023 Board Meeting to Determine That Proposed Amended Rule 1405 – Control of Ethylene Oxide Emissions from Sterilization and Related Operations, Is Exempt from CEQA; and Amend Rule 1405.

assurance/quality control, and reporting for this advanced technology. These actions are to amend an existing agreement with Phillips 66 Company to extend fence-line air measurements at the Phillips 66 Wilmington Refinery using an optical tent, recognize revenue, appropriate funds and amend a contract with UCLA. (Reviewed: Administrative Committee, October 13, 2023; Recommended for Approval)

4. Execute Contract for Regional Medium and Heavy-Duty Zero Emission Vehicle Infrastructure Analysis

**Katzenstein/2219**

The University of California, Riverside (UCR) was awarded 400,000 from CEC to conduct a technical planning study for Southern California's and the California-Mexico Border ZEV infrastructure deployment. The CEC Medium-Duty and Heavy-Duty (MD/HD) blueprint project focuses on ZEV infrastructure deployment planning. Consistent with CEC's blueprint and to expand the scope of the study, UCR proposes to expand the scope of the existing planning efforts to include a Medium-Duty and Heavy-Duty ZEV infrastructure deployment criteria and benefits analysis for Southern California. This action is to execute a contract with UCR in an amount not to exceed \$150,000 from the Clean Fuels Program Fund (31). (Reviewed: Technology Committee, October 20, 2023; Recommended for Approval)

5. Amend Contracts for Legislative Representation in Washington, D.C.

**Alatorre/3122**

The current contracts for legislative and regulatory representation in Washington D.C. with Kadash & Associates, LLC, Cassidy & Associates and Carmen Group, Inc., expire on January 14, 2024. Each of these contracts includes an option for two one-year extensions. This action is to consider approval of the second one-year extension of the existing contracts for Calendar Year 2024 with Kadash & Associates, LLC for \$226,392; Cassidy & Associates for \$216,000; and Carmen Group, Inc. for \$222,090 as South Coast AQMD's legislative and regulatory representatives in Washington D.C., to further the agency's policy positions at the federal level. Sufficient funding is available in the Legislative, Public Affairs & Media FY 2023-24 Budget. (Reviewed: Legislative Committee, October 13, 2023; Recommended for Approval)

6. Approve Contract Modification and Allocation of Funds as Approved by MSRC

**McCallon**

The MSRC approved a funding allocation to partner with South Coast AQMD and other partners in proposals seeking funding under the CARB solicitation for Advanced Technology Demonstration and Pilot Projects, as part of the MSRC's FYs 2021-24 Work Program. As part of their FYs 2021-24 and subsequent Work Program(s), the

MSRC approved exercising the contract option to continue technical advisor services with Raymond Gorski for two additional years from January 2024 through December 2025. The MSRC is seeking Board approval of the contract modification and funding allocation as part of the FYs 2021-24 and subsequent Work Programs. (Reviewed: Mobile Source Air Pollution Reduction Review Committee, October 19, 2023, Recommended for Approval)

**Items 7 through 13 – Information Only/Receive and File**

7. Legislative, Public Affairs and Media Report

**Alatorre/3122**

This report highlights the September 2023 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)

8. Hearing Board Report

**Verdugo-Peralta**

This reports the actions taken by the Hearing Board during the period of September 1 through September 30, 2023. (No Committee Review)

9. Civil Filings and Civil Penalties Report

**Gilchrist/3459**

This report summarizes monthly penalties and legal actions filed by the General Counsel's Office from September 1, 2023 through September 30, 2023. An Index of South Coast AQMD Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, October 20, 2023)

10. Intergovernmental Review of Environmental Documents and CEQA Lead Agency Projects

**Krause /2706**

This report provides a listing of CEQA documents received by South Coast AQMD between September 1, 2023 and September 30, 2023, and those projects for which South Coast AQMD is acting as lead agency pursuant to CEQA. (Reviewed: Mobile Source Committee, October 20, 2023)

11. Rule and Control Measure Forecast

**Rees/2856**

This report highlights South Coast AQMD rulemaking activities and public hearings scheduled for 2023 and tentative calendar for portions of 2024. (No Committee Review)

- 12. Report of RFQs/RFPs Scheduled for Release in November **Jain/2804**

This report summarizes the RFQs/RFPs for budgeted services over \$100,000 scheduled to be released for advertisement for the month of November. (Reviewed: Administrative Committee, October 13, 2023)

- 13. 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, October 13, 2023)

**Items 14 through 20 -- Reports for Committees and CARB**

- 14. Administrative Committee (Receive & File) Chair: Delgado **Nastri/3131**

- 15. Legislative Committee Chair: Cacciotti **Alatorre/3122**

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

<b>Agenda Item</b>	<b>Recommendation</b>
S. 1920 (Whitehouse, Padilla, Welch) - International Maritime Pollution Accountability Act of 2023	Support
S. 1917 / H.R 4024 (Padilla, Welch, Whitehouse, Booker, Feinstein / Garcia, Barragán, Huffman, Bonamici, Cleaver, Tlaib, Norton, Lee, Schiff, Sherrill, Lieu, Grijalva, Espaillat) - Clean Shipping Act of 2023	Support

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

- 17. Stationary Source Committee (Receive & File) Chair: McCallon **Aspell/2491**

- 18. Technology Committee (Receive & File) Chair: Rodriguez **Katzenstein/2219**

- 19. Mobile Source Air Pollution Reduction Review Committee (Receive & File) Board Rep: Hagman **Katzenstein/2219**

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

- 21. Items Deferred from Consent and Board Calendar

## **PUBLIC HEARINGS**

22. Determine That Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines, Are Exempt from CEQA; and Adopt Rule 1110.3 and Amend Rule 1110.2

**Krause/2706**

Proposed Rule 1110.3 will establish NO<sub>x</sub>, CO, and VOC emission limits for linear generators, as well as provisions for source testing, monitoring, reporting and recordkeeping. Proposed Amended Rule 1110.2 will be amended to exclude linear generators from the applicability and requirements. This action is to adopt the Resolution: 1) Determining that Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines, are exempt from the requirements of the California Environmental Quality Act; 2) Adopting Rule 1110.3 – Emissions from Linear Generators and Amending Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines. (Reviewed: Stationary Source Committee, February 17, September 15, and October 20, 2023)

23. Determine That Proposed Amended Rule 2011 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions and Proposed Amended Rule 2012 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions, Are Exempt from CEQA; and Amend Rules 2011 and 2012

**Krause/2706**

Rules 2011 and 2012 establish requirements for CEMS for facilities in the SO<sub>x</sub> and NO<sub>x</sub> RECLAIM program, respectively. Proposed Amended Rules 2011 and 2012 will allow an operator to temporarily shutdown a CEMS, when the combustion unit is scheduled to be not operating and generating emissions for an extended period of time, provided specific conditions are met. This action is to adopt the Resolution: 1) Determining that Proposed Amended Rule 2011 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions and Proposed Amended Rule 2012 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions, are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rules 2011 and 2012. (Reviewed: Stationary Source Committee, September 15, 2023)

**BOARD MEMBER TRAVEL – (No Written Material)**

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

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

Gilchrist/3459

**CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION**

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

- In the Matter of South Coast Air Quality Management District v. Southern California Gas Company, Aliso Canyon Storage Facility, South Coast AQMD Hearing Board Case No. 137-76 (Order for Abatement); People of the State of California, ex rel South Coast Air Quality Management District v. Southern California Gas Company, Los Angeles Superior Court Case No. BC608322; Judicial Council Coordinated Proceeding No.4861;
- South Coast Air Quality Management District, 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);
- South Coast Air Quality Management District, 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); Fourth District Court of Appeal, Division One, No. D080902;
- California Trucking Association v. South Coast Air Quality Management District; the Governing Board of the South Coast Air Quality Management District; and Does 1 through 25, inclusive, U.S. District Court for the Central District of California, Case No. 2:21-cv-06341;
- In the Matter of South Coast Air Quality Management District v. Baker Commodities, South Coast AQMD Hearing Board Case No. 6223-1 (Order for Abatement); Baker Commodities, Inc. v. South Coast Air Quality Management District Hearing Board; South Coast Air Quality Management District; South Coast Air Quality Management District Hearing Board Members: Cynthia Verdugo-Peralta, Robert Pearman, Micah Ali, and Allan Bernstein, DPM MBA, in their official capacities only; and 100 Does and Roes, Los Angeles County Superior Court, Case No. 22STCP03597;
- South Coast Air Quality Management District v. EPA, U.S. District Court for the Central District of California, Case No. 2:23-cv-02646;
- East Yard Communities for Environmental Justice, et al. v. South Coast Air Quality Management District, the Governing Board of the South Coast Air Quality Management District, the California Air Resources Board, and Does 1 through 25, Inclusive, U.S. District Court for the Central District of California, Case No. 2:23-cv-06682.

**CONFERENCE WITH LEGAL COUNSEL – INITIATING LITIGATION**

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

- Center for Biological Diversity and Center for Environmental Health v. Michael S. Regan, in his official capacity as Administrator, United States Environmental Protection Agency, U.S. District Court for the Northern District of California, Case No. 4:23-cv-00148 (PM 2.5);
- Western States Trucking Association, Inc. v. EPA, et al., United States Court of Appeals, D.C. Circuit, Case No. 23-1143.



**CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION**

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

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

## **INSTRUCTIONS FOR ELECTRONIC PARTICIPATION**

### **Instructions for Participating in a Virtual Meeting as an Attendee**

As an attendee, you will have the opportunity to virtually raise your hand and provide public comment.

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

#### **For language interpretation:**

Click the interpretation Globe icon at the bottom of the screen

Select the language you want to hear (either English or Spanish)

Click "Mute Original Audio" if you hear both languages at the same time.

#### **Para interpretación de idiomas:**

Haga clic en el icono de interpretación el globo terráqueo en la parte inferior de la pantalla

Seleccione el idioma que desea escuchar (inglés o español)

Haga clic en "Silenciar audio original" si escucha ambos idiomas al mismo tiempo.

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

After each agenda item, the 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.

#### **Directions to provide public comment on ZOOM from a DESKTOP/LAPTOP or SMARTPHONE:**

Click on the "Raise Hand" feature at 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 to provide public comment via TELEPHONE:**

Dial \*9 on your keypad to signal that you would like to comment.

#### **Directions for Spanish Language TELEPHONE line only:**

- The call in number is the same (+1 669 900 6833)
- The meeting ID number is 932-0955-9643
- If you would like to make public comment, please dial \*9 on your keypad to signal that you would like to comment.

#### **Instrucciones para la línea de TELÉFONO en español únicamente:**

- El número de llamada es el mismo (+1 669900 6833 o +1 93209559643)
- El número de identificación de la reunión es 932-0955-9643
- Si desea hacer un comentario público, marque \*9 en su teclado para indicar que desea comentar.

[↑ Back to Agenda](#)

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 1

MINUTES: Governing Board Monthly Meeting

SYNOPSIS: Attached are the Minutes of the October 6, 2023  
Board Meeting.

RECOMMENDED ACTION:

Approve the October 6, 2023 Board Meeting Minutes.

Faye Thomas  
Clerk of the Boards

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**FRIDAY, OCTOBER 6, 2023**

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:

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

Councilmember Michael A. Cacciotti, Vice Chair  
Cities of Los Angeles County – Eastern Region

Supervisor Andrew Do  
County of Orange

Gideon Kracov  
Governor's Appointee

Mayor Larry McCallon  
Cities of San Bernardino County

Supervisor Holly J. Mitchell  
County of Los Angeles

Veronica Padilla-Campos  
Speaker of the Assembly Appointee

Councilmember Nithya Raman (Left the meeting at 11:50 a.m.)  
City of Los Angeles

Councilmember José Luis Solache  
Cities of Los Angeles County – Western Region

Absent: Mayor Lock Dawson  
Cities of Riverside County

Supervisor Curt Hagman  
County of San Bernardino

Supervisor V. Manuel Perez  
County of Riverside

Councilmember Carlos Rodriguez  
Cities of Orange County

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

**CALL TO ORDER**: Chair Delgado called the meeting to order at 9:07 a.m.

- Pledge of Allegiance: Led by Councilmember Solache
- Roll Call  
Supervisor Do and Board Member Padilla-Campos arrived at 9:15 a.m.
- Opening Comments

Chair Delgado welcomed everyone to the Los Angeles Valley College (LAVC) and commented on the campus's status as a nationally recognized Tree Campus. She noted the passing of U.S. Senator Dianne Feinstein (CA) and acknowledged the Senator's work as a champion of air quality issues for creating the Targeted Airshed Grant Program. A moment of silence was observed in honor of Senator Feinstein.

Vice Chair Cacciotti commented that upon arriving to LAVC's campus he observed a gas-powered edger being used for landscaping. He recommended that staff provide information to LAVC about South Coast AQMD's Commercial Electric Lawn and Garden Incentive & Exchange Program. He shared photos of his visit to the Edison Informational Educational Facility in Irwindale and Tesla vehicles that will be part of South Pasadena's all-electric police fleet, which received funding from the MSRC. Vice Chair Cacciotti also shared photos of the youth soccer team he coaches and commented on one of the players with asthma which highlights the need to fight for clean air for our kids.

Executive Officer Wayne Nastri, reported on South Coast AQMD's annual Health and Benefits Fair that was held on Thursday, October 5, 2023 to kick off this year's open enrollment for employees. He thanked the Administrative and Human Resources staff for organizing a successful event.

Chair Delgado announced that the Board would be recessing to closed session for approximately 15 minutes.

### **CLOSED SESSION**

The Board recessed to closed session at 9:17 a.m., pursuant to Government Code sections:

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

Western States Trucking Association, Inc. v. EPA, et al., United States Court of Appeals, D.C. Circuit, Case No. 23-1143

- 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 Boards. The Board reconvened in open session at 9:37 a.m.

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

The Public Comment Period on Non-Agenda Items was opened. The following individuals addressed the Board.

Daniel Heydari, Pacific Environment and Long Beach resident, commented on adverse health impacts and premature mortality affecting port workers and port-adjacent communities and emphasized the need to move forward with a strong Ports ISR that includes infrastructure for shore power for all ships; offshore power for ships that are awaiting entry into the ports; accelerated transition to zero-emission trucking, as well as cargo handling equipment; and interim benchmarks to help the Ports meet their Clean Air Action Plan. For additional details, please refer to the [Webcast](#) at 40:11.

Thomas Jelenic, Pacific Merchant Shipping Association, noted concerns with the rule concept brought forward at the June 1, 2023 at the Proposed Rule 2304 – Indirect Source Rule for Commercial Marine Ports Working Group Meeting and thanked the Board for the additional time to work on the development of the Ports ISR. He commented that significant emission reductions have been achieved by the Clean Air Action Plan and noted that recently reported emissions inventories show port-related emissions at their lowest levels ever, which he attributes to the collaborative approach taken to reduce emissions at the Ports. He requested that the South Coast AQMD resume the Port Technical Working Group that used to be part of the ISR process. The meetings were suspended at the onset of the pandemic. For additional details, please refer to the [Webcast](#) at 43:26.

Harvey Eder, Public Solar Power Coalition, questioned information provided in the November 2022 CEQA report about the cost-effectiveness of solar energy. He commented on the lawsuit related to climate change filed in September 2023 by the state of California against oil and gas companies. For additional details, please refer to the [Webcast](#) at 45:41.

Monty Rowan, Marina Del Rey resident, thanked South Coast AQMD staff for their efforts in monitoring the construction renovations at Dolphin Marina Apartments. There was an agreement between the County and the property management company, and residents were promised at the outset that only a limited number of units at one time would be worked on to ensure some degree of safety for the residents. Mr. Rowan expressed his concern for residents living and workers located in the construction area that may be exposed to asbestos, dust, and toxic vapors. For additional details, please refer to the [Webcast](#) at 49:03.

Theral Golden, West Long Beach Association, expressed concern that the Ports are relying on technology, which takes time, and the community needs relief quickly. He emphasized the importance for everyone to come together to make changes to improve health impacts because the community is paying for the progress of goods movement with their lives. For additional details, please refer to the [Webcast](#) at 52:12.

There being no further requests to speak, the Public Comment Period on non-agenda items was closed.

### **Written Comments Submitted Regarding Mandatory Indirect Source Rules**

One letter signed by the following organizations: Earthjustice, Center for Biological Diversity, Center for Community Action and Environmental Justice, East Yard Communities for Environmental Justice, Long Beach Alliance for Children with Asthma, and Move L.A.



### **CONSENT AND BOARD CALENDAR**

#### **Items 1 and 2 – Action Items/No Fiscal Impact**

1. Approve Minutes of September 1, 2023 Board Meeting
2. Set Public Hearing November 3, 2023 to Consider Adoption of and/or Amendments to South Coast AQMD Rules and Regulations:
  - 2A. Set Public Hearing November 3, 2023 to Determine That Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines, Are Exempt from CEQA; and Adopt Rule 1110.3 and Amend Rule 1110.2
  - 2B. Determine That Proposed Amended Rule 2011 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions and Proposed Amended Rule 2012 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

#### **Items 3 through 16 – Budget/Fiscal Impact**

3. Recognize Revenue, Appropriate Funds, Execute and/or Amend Contracts, and Issue Solicitations and Purchase Orders for U.S. EPA Grants
4. Issue RFP for Technical Assistance to Support South Coast AQMD's Technology Advancement Office Activities and Implementation Efforts
5. Amend Contract with Coachella Valley Association of Governments
6. Execute Contract for Development and Demonstration of Electric-Powered Trailer for Heavy-Duty Vehicles



7. Execute Contract to Develop and Demonstrate a Portable Liquid Hydrogen Fueling System for Medium- and Heavy-Duty Equipment Applications
8. Adopt Resolution, Recognize Revenue, Appropriate Funds, Execute and/or Amend Contracts, and Issue Solicitations and Purchase Orders for Continued AB 617 Implementation
9. Approve Amendments to MOU with Teamsters Local 911 and Administrative Code Provisions for Non-Represented Employees Regarding Employer Contributions for Health Insurance Premiums

**Items 10 through 16 – Information Only/Receive and File**

10. Legislative, Public Affairs and Media Report
11. Hearing Board Report
12. Civil Filings and Civil Penalties Report
13. Intergovernmental Review of Environmental Documents and CEQA Lead Agency Projects
14. Rule and Control Measure Forecast
15. Report of RFQs/RFPs Scheduled for Release in October
16. Status Report on Major Ongoing and Upcoming Projects for Information Management

**Items 17 through 23 – Reports for Committees and CARB**

17. Administrative Committee
18. Investment Oversight
19. Legislative Committee
20. Mobile Source Committee
21. Stationary Source Committee
22. Technology Committee
23. California Air Resources Board Monthly Report
24. Items Deferred from Consent and Board Calendar  
Agenda Item No. 3 was pulled for comment or discussion.

**Disclosures**

Councilmember Raman reported that she had no financial interest in Agenda Item No. 3 but is required to identify for the record that she is a Councilmember for the City of Los Angeles, which is involved in this item.

Board Member Kracov recused himself from Agenda Item No. 8, because of a financial interest in Microsoft which is involved in this item. Mr. Gilchrist recommended a separate vote be taken on this item.



## **24. Item Pulled for Comments or Discussion**

Agenda Item No. 3 – Recognize Revenue, Appropriate Funds, Execute and/or Amend Contracts, and Issue Solicitations and Purchase Orders for U.S. EPA Grants

Vice Chair Cacciotti commented on whether cities he represents that are part of the goods movement areas impacted by pollution, such as Pomona, El Monte, and South El Monte, will be considered to receive funds being allocated to expand the Sensor Library Program to include other communities in the Basin. For additional details, please refer to the [Webcast](#) at 57:16.

Dr. Jason Low, Deputy Executive Officer/Monitoring and Analysis, noted that the additional funds for this U.S. EPA grant will allow for up to four communities for this additional program in the Sensor Library Program. He commented that staff is already working with the City of Pomona's community-based organization Clean & Green Pomona. This opportunity will allow community members in other communities to work with schools. For additional details, please refer to the Webcast at 57:52.

The public comment period was opened for Agenda Item Nos. 1-23; and there being no requests to speak, the public comment period was closed.

Supervisor Do noted for the record that he is opposed to the recommendation to support ACA 13 (Ward), a proposed constitutional amendment that would require that a ballot measure to increase the vote threshold for a future initiative must pass by that same margin. He would register a "No Vote" on the recommendation to support ACA 13 in Agenda Item No. 19. For additional details, please refer to the [Webcast](#) at 59:04.

Mr. Gilchrist noted for the record that Agenda Item No. 9 is to approve an amendment to the South Coast AQMD Administrative Code for an increase of \$75 per month to the employer contribution towards health insurance premiums to cover 2024 insurance rates. If approved, the increase would be applied to employees in the Teamsters bargaining units and to non-represented employees, which includes confidential, management and executive staff employees. For additional details, please refer to the [Webcast](#) at 59:48.

### **Written Comments Submitted Regarding Agenda Item No. 14:**

Letter from Dillon Clark on behalf of the Central San Pedro Neighborhood Council

### **Board Action (Items 1-7, and 9-23)**

MOVED BY SOLACHE, SECONDED BY CACCIOTTI TO APPROVE AGENDA ITEMS 1 THROUGH 7 AND 9 THROUGH 23 AS RECOMMENDED, RECEIVE AND FILE THE COMMITTEE, MSRC, AND CARB REPORTS, AND APPROVE THE RECOMMENDATIONS ON LEGISLATION AS SET FORTH BELOW.

THE MOTION PASSED BY THE FOLLOWING VOTE:

AYES: Cacciotti, Delgado, Do (excluding ACA 13 in Agenda Item No. 19), Kracov, McCallon, Mitchell, Padilla-Campos, Raman, and Solache

NOES: Do (only for ACA 13 in Agenda Item No. 19)

ABSTAIN: None

ABSENT: Lock Dawson, Hagman, Perez, and Rodriguez

<b>Legislation/Agenda Item</b>	<b>Recommendation</b>
Air District/Public Agency Board Member Compensation Limit Increase Bill Proposal	Approve
Moyer Policy Adjustments Bill Proposal	Approve
ACA 13 (Ward) Voting Thresholds	Support

Mr. Gilchrist announced that in addition to recusing from Agenda Item No. 8, Board Member Kracov would like to identify for the record that he is a Board Member of CARB, which is involved in that item but it is not considered a financial interest. For additional details, please refer to the [Webcast](#) at 1:01:47.

MOVED BY SOLACHE, SECONDED BY CACCIOTTI TO APPROVE AGENDA ITEM 8 AS RECOMMENDED TO:

1. ADOPT RESOLUTION NO. 23-20 TO ACCEPT THE TERMS AND CONDITIONS FOR THE AB 617 IMPLEMENTATION COMMUNITY AIR PROTECTION PROGRAM GRANT AWARD;
2. RECOGNIZE REVENUE, UPON RECEIPT, UP TO \$3,326,667 FROM CARB INTO THE GENERAL FUND FOR CONTINUED AB 617 IMPLEMENTATION;
3. APPROPRIATE UP TO \$3,400,000 FROM THE GENERAL FUND UNDESIGNATED (UNASSIGNED) FUND BALANCE (AB 617 FUNDS) INTO THE FY 2023-24 AND/OR FY 2024-25 BUDGET FOR AB 617 IMPLEMENTATION; AND

4. AUTHORIZE THE EXECUTIVE OFFICER TO EXECUTE AND/OR AMEND CONTRACTS, AND ISSUE SOLICITATIONS AND PURCHASE ORDERS FOR AB 617 IMPLEMENTATION FOR: FY 2023-24 AND/OR FY 2024-25 PROPOSED CAPITAL OUTLAY/INTANGIBLE ASSET EXPENDITURES FOR AB 617 (CAPITAL OUTLAYS MAJOR OBJECT); FY 2023-24 AND/OR FY 2024-25 PROPOSED CONTRACTS/CONTRACT AMENDMENTS FOR AB 617 (SERVICES & SUPPLIES MAJOR OBJECT); AND FY 2023-24 AND/OR FY 2024-25 PROPOSED OTHER SERVICES AND SUPPLIES EXPENDITURES FOR AB 617 (SERVICES & SUPPLIES MAJOR OBJECT)

THE MOTION PASSED BY THE FOLLOWING VOTE:

AYES: Cacciotti, Delgado, Do McCallon, Mitchell, Padilla-Campos, Raman, and Solache

NOES: None

ABSTAIN: None

RECUSED: Kracov

ABSENT: Lock Dawson, Hagman, Perez, and Rodriguez



### **STAFF PRESENTATION/BOARD DISCUSSION/RECEIVE AND FILE**

25. Overview of Proposed MATES VI (Presentation in Lieu of Board Letter)

Dr. Scott Epstein, Program Supervisor/Planning, Rule Development and Implementation, gave the staff presentation.

Vice Chair Cacciotti asked how locations are selected for measurements at near-road sites. Dr. Epstein explained that there are four existing near-road sites located in places with the highest emissions. Staff plans to conduct MATES monitoring at two existing near-road sites, tentatively the 60 freeway in Ontario, and 710 freeway in Long Beach. For additional details, please refer to the [Webcast](#) at 1:20:23.

Mayor McCallon asked when the workplan would be available for public comments and noted the importance of public input. Dr. Epstein responded that the workplan will be vetted through the Technical Advisory Group and those meetings will be open to the public. For additional details, please refer to the [Webcast](#) at 1:21:19.

Supervisor Mitchell asked how the Technical Advisory Group informs what will be monitored. Dr. Epstein explained that the Technical Advisory Group provides input and guidance throughout the MATES process. He added that the advisory group is comprised of a highly qualified group of experts from throughout the country on air toxics. For additional details, please refer to the [Webcast](#) at 1:22:03.

Board Member Padilla-Campos asked about the locations of the 10 fixed air monitoring locations. Dr. Epstein commented that monitoring locations are generally consistent with previous MATES studies to allow for observation of trends over time. For MATES VI, three sites will be shifted so that one is relocated to the Coachella Valley and the two near-road sites. For additional details, please refer to the [Webcast](#) at 1:23:18.

Board Member Padilla-Campos asked if staff has considered selecting an air monitoring site in the northeast valley of Los Angeles County. Dr. Epstein noted that the Burbank Area station in MATES V is located in Pacoima. For additional details, please refer to the Webcast at 1:25:14.

Councilmember Solache asked how many near-road sites will be located along the 710 freeway. Dr. Low responded that one near-road site will be located along the 710 freeway in Long Beach. For additional details, please refer to the [Webcast](#) at 1:26:43.

Mayor McCallon requested information about the first Technical Advisory Group meeting and the Administrative Committee. Dr. Epstein responded that the first Technical Advisory Committee meeting is scheduled for 1:00 p.m. on October 26, 2023 and the public is invited to attend. The meeting will be held through a hybrid format with in-person attendance in Conference Room GB at the South Coast AQMD headquarters and virtual attendance. Staff will be providing details on the required resources for MATES VI to the Administrative Committee at their November meeting. For additional details, please refer to the [Webcast](#) at 1:27:58.

Vice Chair Cacciotti inquired about the contribution of brake and tire wear PM emissions. Dr. Epstein explained that the goal is to better characterize and understand the emissions from brake and tire wear, especially with more electric vehicles. For additional details, please refer to the [Webcast](#) at 1:28:45.

The public comment period was opened for Agenda Item No. 25 and the following individual addressed the Board.

Harvey Eder, Public Solar Power Coalition, commented on the need to quantify PM emissions and noted PM's adverse effects on health, climate, and the environment. For additional details, please refer to the [Webcast](#) at 1:31:57.

There being no further requests to speak, the public comment period was closed for Agenda Item No. 25.

## 26. Update on Rail Yard Facility Based Mobile Source Measures

Ian MacMillan, Assistant Deputy Executive Officer/Planning, Rule Development and Implementation, gave the staff presentation.

Chair Delgado asked for clarification on emission reductions under the MOU relative to CARB's In-Use Locomotive Regulation. Mr. MacMillan responded that the emission reductions are consistent with CARB's regulation. The emission reductions vary under CARB's regulation depending on the compliance option selected by the Railroads. Mr. Nastri added that the MOU would accelerate reductions, and provides greater certainty, particularly ensuring specific emission reductions will occur for our region. For additional details, please refer to the [Webcast](#) at 1:55:01.

Mayor McCallon inquired about the status of the CARB In-Use Locomotive Regulation and lawsuit challenging the regulation. Mr. MacMillan reported that the rule was approved by the CARB Board but it has not yet gone through the Office of Administrative Law. Mr. MacMillan stated that he believes the lawsuit has been filed. For additional details, please refer to the [Webcast](#) at 1:56:48.

Chair Delgado asked if there is a drop-dead date for staff to decide whether to pivot to rulemaking. Mr. Nastri explained that there is no immediate drop-dead date. He wants to make sure staff is working on both the technical substance as well as the legal enforceability. Mr. Nastri suggested that within the next 30 days if it looks like the enforceability provisions cannot be resolved he would suggest not moving forward. For additional details, please refer to the [Webcast](#) at 2:00:14.

Chair Delgado asked whether the MOUs that South Coast AQMD has with the airports includes enforceability provisions. Mr. MacMillan noted that the MOU for the railroads would probably look different than the MOUs for the airports. Staff will be looking at the 1998 and 2005 CARB MOUs as examples. For additional details, please refer to the [Webcast](#) at 2:02:12.

The public comment period was opened for Agenda Item No. 26 and the following individuals addressed the Board.

For additional details regarding the following comments, please refer to the [Webcast](#) beginning at 2:03:10.

Fernando Gaytan, Earthjustice  
Chris Chavez, Coalition for Clean Air\*  
Yasmin Angelidis, Earthjustice  
Jan Victor Andasan, East Yard Communities for Environmental Justice  
\*(Written Comments Submitted)

These commenters addressed the following issues:

- Concern over the sudden shift to considering an MOU.
- Would like to continue the ongoing ISR process.
- Oppose efforts to negotiate a voluntary agreement.

- Support development of a strong Railyard and Ports ISR.
- Demonstrate the MOU or rulemaking maximizes emission reductions.
- Unclear how the MOU would have additional emissions compared to CARB's locomotive rule.
- Concern with the public process and transparency
- Need to ensure MOU is enforceable and offers third-party enforceability.
- Need to identify what locomotives will be covered under the MOU.
- MOU must be consistent with commitments to AB 617 communities.
- South Coast AQMD should protect the public.
- Health of frontline communities being impacted by emissions from railroads.
- Support prioritizing zero emissions.

Theral Golden, West Long Beach Association, requested that staff provide clarification on the 2.4 tons per day NOx reductions that is estimated the MOU will achieve. For additional details, please refer to the [Webcast](#) at 2:12:20.

Harvey Eder commented on the history surrounding railroad land ownership and the need to ensure the railroads will not litigate. For additional details, please refer to the [Webcast](#) at 2:13:41.

There being no further requests to speak, the public comment period was closed for Agenda Item No. 26.

Vice Chair Cacciotti inquired about previous litigation from the railroad industry regarding several rules adopted by the South Coast AQMD. Mr. Gilchrist provided a brief overview of the case with Association of American Railroads vs. South Coast Air Quality Management District, that was heard in the U.S. Court of Appeals, Ninth Circuit in 2010. The case analyzed several South Coast AQMD rules that limited emissions from idling trains. The court determined that federal law, the Interstate Commerce Commission Termination Act (ICCTA), preempted those rules. For additional details, please refer to the [Webcast](#) at 2:19:32.

Vice Chair Cacciotti inquired about the number of locomotives for each Railroad company and the parties to the MOU. Mr. MacMillan responded that there is an estimated 150 to 200 locomotives covered by the MOU but would have to report back on the percentage. Mr. MacMillan added that the parties to the MOU will be BNSF Railway, Union Pacific Railroad, and South Coast AQMD. The utilities will be working directly with the railroads. For additional details, please refer to the [Webcast](#) at 2:21:19.

Vice Chair Cacciotti commented on the importance of addressing concerns regarding the proposed MOU that the Coalition for Clean Air highlighted in their letter. He emphasized the need for the MOU to include enforceability provisions, dispute resolution, and a robust public participation process. He inquired about how the community meetings would be structured. For additional details, please refer to the [Webcast](#) at 2:23:45.

Mr. MacMillan noted that the AB 617 communities and public will be invited to the community meetings. In addition to the community meetings, there will be separate briefings at the AB 617 Community Steering Committee meetings. For additional details, please refer to the [Webcast](#) at 2:25:34.

Vice Chair Cacciotti inquired about the status of the locomotive demonstration projects with the railroads. Dr. Aaron Katzenstein, Deputy Executive Officer/Technology Advancement Office, responded that the battery electric locomotive that will go from Los Angeles to Bakersfield is still being built and is expected to be ready in two years. There is another project for a fuel cell locomotive that is part of a California State Transportation (CalSTA) grant. For additional details, please refer to the [Webcast](#) at 2:26:24.

Vice Chair Cacciotti emphasized that it is important to get the MOU right and not rush. If things are moving forward, extending the discussions to February or March is acceptable. The Vice Chair added that there are also opportunities for community benefits programs. For additional details, please refer to the [Webcast](#) at 2:28:00.

Supervisor Mitchell expressed concern that community benefits are never large enough to address the decades of generations that have been harmed. Supervisor Mitchell asked when the Board would see draft language for the MOU. Mr. Nastri replied that staff anticipates a draft MOU after the community meetings which would likely be mid-November. For additional details, please refer to the [Webcast](#) at 2:30:54.

Supervisor Mitchell commented that enforceability is critical and is concerned about the ability to have an MOU that the railroad industry will adhere to. Supervisor Mitchell commented that she has heard that the airline industry has not fulfilled reporting requirements and expressed concern about implementation of the airport MOU. For additional details, please refer to the [Webcast](#) at 2:32:12.

Mr. MacMillan responded that staff will be providing an update to the Mobile Source Committee on implementation of the airport MOU. Mr. MacMillan explained that the railroad MOU will be structured differently than the airport MOU, and will look more like a rule with enforceable provisions. For additional details, please refer to the [Webcast](#) at 2:34:34.

Supervisor Mitchell asked when staff would shift back to an ISR for railroads. She expressed concerns about process, delays, and enforceability. Mr. Nastri responded that in the next 30 days he will inform the Board if staff does not have agreement on concepts for enforceable provisions and that he is sensitive to the timing and impacts to the community and wants an MOU that will deliver benefits. For additional details, please refer to the [Webcast](#) at 2:35:31.

Councilmember Raman concurred with Supervisor Mitchell about adhering to the original timeline set for the MOU. She asked about what was outstanding in the discussions with the railroads around enforceability and offered her support for what staff needs to ensure goals are met to achieve emission reductions. Mr. Nastri responded that staff is doing their own due diligence to develop enforceability provisions for the MOU and at this point there is not certainty what the outstanding issues are in regards to



enforceability. For additional details, please refer to the [Webcast](#) at 2:40:24.

Councilmember Raman asked when staff was working with the Ports on an MOU, what were the enforceability issues. Mr. Nastri responded that the bottom line is that the Ports did not want to accept enforceable provisions and explained that the conversations between the Railroads is very different and enforcement was one of the first things discussed. For additional details, please refer to the [Webcast](#) at 2:43:00.

Councilmember Raman commented that it is her understanding that one of the reasons that the agency is pursuing the MOU path is because the MOU will address all railyards – new and existing railyards. Councilmember Raman asked about legal limitations. Mr. Gilchrist commented that the case held that the South Coast AQMD's rules regulating idling locomotives and emissions reporting were preempted. Barbara Baird, Chief Deputy Counsel commented on the litigation and how the timing of the lawsuit did not allow staff an opportunity to submit the rules into the State Implementation Plan. For additional details, please refer to the [Webcast](#) at 2:44:44.

Supervisor Do asked for clarification on the enforceability of the MOU such as who will enforce the terms and how we ensure that the community will receive the benefits promised. Mr. Gilchrist responded that enforceability would be based on performance and the ability to enforce the requirements of the contract. Mr. Gilchrist discussed provisions for liquidated damages and dispute resolution and enforceability under the citizen lawsuit provision of the Clean Air Act, if the MOU is incorporated into the SIP. For additional details, please refer to the [Webcast](#) at 2:48:20.

Supervisor Do commented that it is his understanding that third party enforceability begins as soon as the rights are finalized and he urged staff to look into this as he believes the MOU already provides third party protections. Mr. Gilchrist responded that staff will look into this. For additional details, please refer to the [Webcast](#) at 2:51:10.

Board Member Padilla Campos commented that although a Community Benefit Agreements can be positive, some community members are offended because they feel that they are negotiating their health. She also underscored the importance of enforceability with an MOU and asked what happens after 2033. Mr. MacMillan explained that staff is considering interim milestones in the MOU to ensure actions are occurring along the path towards 2033 and staff is considering a technology assessment, a regulatory review, and possibly other items post 2033. For additional details, please refer to the [Webcast](#) at 2:52:23.

Mayor McCallon commented on the benefits of an enforceable MOU, including commitments from the railroads such as needed infrastructure, and achieving substantial emissions reductions quickly. The community can be involved and define what community benefits they would like from the railroads. For additional details, please refer to the [Webcast](#) at 2:57:10.

Board Member Kracov commented that it is important to have an open mind about the process and for everyone to talk about substance. For railroads, some people don't want to talk about substance unless it's an Indirect Source Rule. For ports, some people

don't want to talk about substance unless it's an MOU. Board Member Kracov commented that the fundamental goal is to clean the air. For additional details, please refer to the [Webcast](#) at 2:59:17.

Councilmember Solache was appreciative of all of the comments and underscored the importance of enforcement. Councilmember Solache commented that he looks forward to seeing more engagement with the community and the importance to protect the community. For additional details, please refer to the [Webcast](#) at 3:00:56.

Board Member Padilla-Campos asked for clarification on the timeframe for negotiating an MOU before pivoting to an ISR if the parties cannot come to an agreement. Mr. Nastri echoed the Vice Chair's comment that it is important to do it right and to make progress. He wants to move without haste and emphasized the importance of protection of the public. For additional details, please refer to the [Webcast](#) at 3:06:08.

**ADJOURNMENT**

There being no further business, the meeting was adjourned by General Counsel Bayron Gilchrist at 12:10 p.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on October 6, 2023.

Respectfully Submitted,

Faye Thomas  
Clerk of the Boards

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

\_\_\_\_\_  
Vanessa Delgado, Chair

**ACRONYMS**

- AQMP = Air Quality Management Plan
- CARB = California Air Resources Board
- CEQA = California Environmental Quality Act
- FY = Fiscal Year
- ISR = Indirect Source Rule
- MOU = Memorandum of Understanding
- PAR = Proposed Amended Rule



[↑ Back to Agenda](#)

BOARD MEETING DATE: November 3, 2023

AGENDA NO: 2

REPORT: Establish Board Meeting Schedule for Calendar Year 2024

SYNOPSIS: The proposed Board Meeting Schedule for Calendar Year 2024 is submitted for Board consideration. The meeting schedule for the Administrative Committee meeting, (second Friday of the month), as well as the other standing committees is included for information only.

COMMITTEE: Administrative, October 13, 2023; Recommended for Approval

RECOMMENDED ACTION:

Adopt the attached Resolution establishing the 2024 Board Meeting Schedule.

Vanessa Delgado, Chair  
Administrative Committee

cb

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### Calendar Year 2024 Board Meeting Schedule

<u>MONTH</u>	<u>DATE</u>	<u>START TIME</u>
January:.....	January 5.....	9:00 a.m.
February:.....	February 2.....	9:00 a.m.
March:.....	March 1.....	9:00 a.m.
April:.....	April 5.....	9:00 a.m.
May:.....	May 3.....	9:00 a.m.
June:.....	June 7.....	9:00 a.m.
July: .....	No Meeting .....	
August:.....	August 2.....	9:00 a.m.
September: .....	September 6 .....	9:00 a.m.
October: .....	October 4 .....	9:00 a.m.
November: .....	November 1 .....	9:00 a.m.
December: .....	December 6.....	9:00 a.m.

#### Attachments

1. Resolution
2. Proposed 2024 Meeting Schedule for Governing Board and Standing Committees

**RESOLUTION NO. 23-\_\_\_\_\_**

A Resolution of the South Coast Air Quality Management District Governing (South Coast AQMD) Board setting the time and place of regular meetings.

WHEREAS, the regular meetings of the South Coast Air Quality Management District Governing Board have been established by Resolution in the past, and

WHEREAS, the Governing Board is establishing the regularly scheduled meetings for Calendar Year 2024.

NOW, THEREFORE, BE IT RESOLVED that, effective January 2024, the regular meetings of the Governing Board shall be held at 9:00 a.m. on the first Friday of each month, except for July when there is no meeting scheduled, in the Dr. William A. Burke Auditorium at South Coast AQMD Headquarters, 21865 Copley Dr., Diamond Bar, California.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Faye Thomas, Clerk of the Boards

## South Coast AQMD Governing Board & Standing Committees

### Proposed 2024 Meeting Schedule

GOVERNING BOARD	STANDING COMMITTEES				
Time – 9:00 a.m.	Legislative Time – 9:00 a.m.	Administrative Time – 10:00 a.m.	Mobile Source Time – 9:00 a.m.	Stationary Source Time – 10:30 a.m.	Technology Time – 12:00 p.m.
January 5	January 12	January 12	January 19	January 19	January 19
February 2	February 9	February 9	February 16	February 16	February 16
March 1	March 8	March 8	March 15	March 15	March 15
April 5	April 12	April 12	April 19	April 19	April 19
May 3	May 10	May 10	May 17	May 17	May 17
June 7	June 14	June 14	June 21	June 21	June 21
	<b>DARK</b>				
August 2	August 9	August 9	August 16	August 16	August 16
September 6	September 13	September 13	September 20	September 20	September 20
October 4	October 11	October 11	October 18	October 18	October 18
November 1	November 8	November 8	November 15	November 15	November 15
December 6	December 13	December 13	No Meeting	No Meeting	No Meeting

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 3

**PROPOSAL:** Amend Agreement with Phillips 66 Company for Continued Fenceline Air Measurements at Phillips 66 Wilmington Refinery Using Optical Tent, Recognize Revenue, Appropriate Funds and Amend Contract

**SYNOPSIS:** As part of MATES V, an optical tent air measurement system was deployed at the Phillips 66 Wilmington Refinery by the Regents of University of California, Los Angeles (UCLA) to demonstrate its ability to monitor fugitive VOC emissions. After the MATES V study concluded, the optical tent was adopted by the refinery as part of their fenceline air monitoring system for Rule 1180 implementation, with continued oversight provided by UCLA for quality assurance/quality control, and reporting for this advanced technology. These actions are to amend an existing agreement with Phillips 66 Company to extend fenceline air measurements at the Phillips 66 Wilmington Refinery using an optical tent, recognize revenue, appropriate funds and amend a contract with UCLA.

**COMMITTEE:** Administrative, October 13, 2023; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Authorize the Executive Officer to amend the current agreement with the Phillips 66 Company to continue operation of the optical tent at their Wilmington refinery;
2. Recognize revenue up to \$250,000 upon receipt from the Phillips 66 Company into the General Fund; and
3. Appropriate up to \$250,000 from the General Fund Undesignated (Unassigned) Fund Balance for the Monitoring and Analysis' (MAD) FY 's 2023-24 and 2024-25 Budgets (Org 46), Services & Supplies Major Object and authorize the Executive Officer to use these funds to amend the current contract with the Regents of University of California, Los Angeles (UCLA) to continue to provide quality assurance/quality control and reporting on the operation of the optical tent air monitoring system at the Phillips 66 Wilmington Refinery for two additional years.

Wayne Nastri  
Executive Officer

## **Background**

In 2018-2019, South Coast AQMD conducted MATES V to collect information on air toxics and their associated health risks based on long-term monitoring at ten fixed locations throughout the South Coast Air Basin. In October 2017, to complement the fixed site monitoring, the Board authorized several Advanced Monitoring projects using state-of-the-art technologies to conduct enhanced air toxics monitoring in communities near refineries. As part of this advanced monitoring, the Board authorized staff to execute a contract with UCLA to design, build, and deploy an optical tent air monitoring system. The optical tent system was developed and then installed at the Phillips 66 Wilmington Refinery to demonstrate its ability to detect fugitive emissions of VOCs and other gaseous species from storage tanks. After the MATES V study ended, the optical tent system was adopted by the refinery as part of their fenceline air monitoring system used to satisfy Rule 1180 fenceline monitoring requirements. In October 2021, the Phillips 66 Company agreed to fund operations of the optical tent for two years. South Coast AQMD continued to obtain information on the use of this technology with operational assistance from UCLA. In August 2023, the Phillips 66 Company agreed to fund operations of the optical tent for two additional years and use this system as part of their fenceline monitoring to satisfy Rule 1180 requirements. The continued operation of the optical tent is mutually beneficial to South Coast AQMD and the Phillips 66 Company.

## **Proposal**

This action is to amend the current agreement with the Phillips 66 Company for operation of the optical tent at their refinery in Wilmington for two additional years. Additionally, this action is to recognize revenue up to \$250,000 from the Phillips 66 Company into the General Fund. This action is also to appropriate up to \$250,000 from the General Fund Undesignated (Unassigned) Fund Balance to MAD's FY 2023-24 and 2024-25 Budgets (Org 46), Services & Supplies Major Object. Finally, this action is to use these funds to amend the current contract with the Regents of University of California, on behalf of UCLA to continue to provide quality assurance/quality control and reporting on the operation of the optical tent air monitoring system.

## **Benefits to South Coast AQMD**

Funding for the optical tent system will allow South Coast AQMD to continue to evaluate the effectiveness of the optical tent system and to fulfill the requirements of Rule 1180, and the legislative directives of AB 1647, which will result in benefits to environmental justice communities and others working and residing near refineries.

## **Resource Impacts**

The Phillips 66 Company will fully support the continued operation of the optical tent system at the Phillips 66 Wilmington Refinery for an additional two years.

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 4

PROPOSAL: Execute Contract for Regional Medium- and Heavy-Duty Zero Emission Vehicle Infrastructure Analysis

SYNOPSIS: The University of California, Riverside (UCR) was awarded \$400,000 from CEC to conduct a technical planning study for Southern California's and the California-Mexico Border ZEV infrastructure deployment. The CEC Medium-Duty and Heavy-Duty (MD/HD) blueprint project focuses on ZEV infrastructure deployment planning. Consistent with CEC's blueprint and to expand the scope of the study, UCR proposes to expand the scope of the existing planning efforts to include a Medium-Duty and Heavy-Duty ZEV infrastructure deployment criteria and benefits analysis for Southern California. This action is to execute a contract with UCR in an amount not to exceed \$150,000 from the Clean Fuels Program Fund (31).

COMMITTEE: Technology, October 20, 2023; Recommended for Approval

**RECOMMENDED ACTION:**

Authorize the Executive Officer to execute a contract with the University of California, Riverside (UCR), to conduct a regional Medium-Duty and Heavy-Duty Zero Emission Vehicle Infrastructure Analysis in an amount not to exceed \$150,000 from the Clean Fuels Program Fund (31).

Wayne Natri  
Executive Officer



## **Background**

The medium-duty/heavy-duty (MD/HD) transportation sector continues to be a significant source of harmful air pollutant emissions, presenting an opportunity for improving local air quality and addressing climate change. Transitioning this sector to ZEV powered by low or zero-emission electricity and hydrogen is crucial to achieve California's climate and air quality goals, including meeting the National Ambient Air Quality Standards (NAAQS) for the South Coast Air Basin. This transition is pursued through initiatives including Advanced Clean Trucks and Advanced Clean Fleets regulations. However, a significant challenge lies in planning, building, and deploying the necessary charging and fueling infrastructure. Challenges include limitations in electrical grid capacity, integration costs, and land use constraints. Addressing these issues is essential for successfully implementing ZEV in the MD/HD transportation sector and meeting California's environmental and air quality objectives. As such, it is critical to perform studies that provide essential information to promote MD/HD ZEV infrastructure planning for commercial and industrial operations, and identify key barriers associated with transitioning trucking to ZEV platforms.

## **Proposal**

UCR was awarded \$200,000 through CEC ARV-21-027 to develop a comprehensive blueprint that discusses a viable strategy to identify the most cost-effective technology solutions, financial incentives, infrastructure upgrades, and equipment mixes for identifying actions and milestones needed for the implementation of MD/HD ZEV and related electric charging and hydrogen refueling infrastructure in the South Coast Air Basin. This funding will expand the scope of the study to include a cost analysis of ZEV infrastructure deployment and fuel/power supply, evaluation of the technical specifications for charging and fueling stations, resource requirements, and standardization of protocols. The study will also quantify criteria pollutant, air toxics, and greenhouse gas benefits from and review potential impacts on Environmental Justice communities within the South Coast Air Basin from the installation of MD/HD charger. In addition, University of California Alianza Mexico awarded UCR \$200,000 to lead an infrastructure analysis for the California-Mexico Border MD/HD ZEV that involves activities to update, improve, and optimize the models that will be used in the proposed study.

## **Sole Source Justification**

Section VIII.B.2. of the Procurement Policy and Procedure identifies provisions under which a sole source award may be justified. The request for sole source award is made under provision B.2.d.(8): Research and development efforts with educational institutions or nonprofit organizations. UCR is an educational institution and the College of Engineering - Center for Environmental Research and Technology (CE-CERT) is its research center with multidisciplinary resources to engage in diverse environmental and transportation research programs including advanced vehicle

technologies and systems; emission measurements, analyses and control technologies; atmospheric measurements and modeling; and renewable energy.

**Benefits to South Coast AQMD**

Projects to support the development and demonstration of MD/HD ZEV technologies and supporting infrastructure are included in the Technology Advancement Office Clean Fuels Program 2023 Plan Update under the category “Zero Emission Infrastructure including Hydrogen and Electric Charging Infrastructure.” This study further evaluates the cost and technical specifications, quantifies the air quality benefits anticipated from MD/HD ZEV deployments, and promotes a smoother transition to providing strategic ZEV infrastructure development. Having strategic ZEV planning will help with adoption of MD/HD ZEV technologies. The implementation of this project is consistent with the 2022 AQMP, which relies on MD/HD ZEV technologies to achieve NAAQS for ozone and PM2.5 in the South Coast Air Basin.

**Resource Impacts**

South Coast AQMD’s support of the Regional MD/HD ZEV Infrastructure Analysis, provided through an agreement with UCR CE-CERT, shall not exceed \$150,000 from the Clean Fuels Program Fund (31). CEC’s contribution to this project is \$15,000 from the initial award of \$200,000 to develop the regional blueprint and University of California Alianza in Mexico (UC Alianza MX) will contribute \$135,000 towards this project for the California-Mexico Border ZEV Infrastructure Analysis for MD/HD Vehicles. Project partners and proposed funding are as follows:

<b>Project Partners</b>	<b>Funding*</b>	<b>Percentage</b>
CEC	\$15,000	5%
UC Alianza MX	<del>5,000</del>	45%
South Coast AQMD ( <i>requested</i> )	\$150,000	50%
<b>Total (not to exceed)</b>	<b>\$300,000</b>	100%

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

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 5

**PROPOSAL:** Amend Contracts for Legislative Representation in Washington, D.C.

**SYNOPSIS:** The current contracts for legislative and regulatory representation in Washington, D.C. with Kadesh & Associates, LLC, Cassidy & Associates and Carmen Group, Inc. expire on January 14, 2024. Each of these contracts includes an option for two one-year extensions. This action is to consider approval of the second one-year extension of the existing contracts for Calendar Year 2024 with Kadesh & Associates, LLC for \$226,392; Cassidy & Associates for \$216,000; and Carmen Group, Inc. for \$222,090 as South Coast AQMD's legislative and regulatory representatives in Washington, D.C., to further the agency's policy positions at the federal level. Sufficient funding is available in the Legislative, Public Affairs and Media FY 2023-24 Budget.

**COMMITTEE:** Legislative, October 13, 2023; Recommended for Approval

**RECOMMENDED ACTION:**

Authorize the Chair to execute contract extensions with Kadesh & Associates for \$226,392, Cassidy & Associates, Inc. for \$216,000 and Carmen Group, Inc. for \$222,090, for legislative consulting services in Washington, D.C. for one year beginning on January 15, 2024.

Wayne Nastri  
Executive Officer

DJA:LTO:PFC

**Background**

In 2021, the Board selected Kadesh & Associates (Kadesh), Cassidy & Associates (Cassidy) and the Carmen Group (Carmen) for legislative and regulatory representation in Washington, D.C. for one year beginning on January 15, 2022, with an option for up

to two one-year renewals upon satisfactory performance, at the Board's discretion. The three one-year contracts were extended for an additional year and they will all expire on January 14, 2024. Each agreement includes an option for one additional one-year extension.

In 2023, the firms of Kadesh, Cassidy and Carmen represented South Coast AQMD in Washington, D.C. and performed at a high professional level. The firms have been effective in working with the Board and staff to sustain active engagement in federal legislative, policy and regulatory issues with the Administration, Congressional Members and staff, industry, environmental and health organizations, and other stakeholders in a manner that facilitates South Coast AQMD's policy priorities.

Kadesh is a bipartisan federal advocacy firm specializing in California interests. Kadesh's team has considerable experience working as senior Congressional staffers in the House and the Senate. Mark Kadesh, President, is the primary contact with Ben Miller, Principal Consultant, for South Coast AQMD. Mr. Kadesh has extensive legislative and political experience and insights gained from his seventeen years working on Capitol Hill. Mr. Miller worked for more than seventeen years as an advisor for Members of the California Congressional Delegation.

Cassidy is a bipartisan federal government relations firm with more than 45 years of demonstrated experience. Amelia Morales, Executive Vice President, Jed Dearborn and Lio Barrera, Senior Vice Presidents, and Samantha Swing, Vice President, serve as South Coast AQMD's primary representatives. Ms. Morales joined Cassidy after serving as Deputy Staff Director and Senior Policy Advisor to the U.S. House Committee on Natural Resources. Mr. Dearborn served as Senior Counsel to the U.S. Senate Committee on Energy and Natural Resources. Mr. Barrera worked in private industry and for two Senators. Ms. Swing staffed a Member of the Senate and a former Senate Majority Leader.

Carmen is a bipartisan government affairs firm with decades of experience in legislative representation and government relations, including building industry coalitions. Gary Hoitsma, Executive Managing Associate, and Dal Harper, Executive Managing Director, are the primary representatives for South Coast AQMD. Mr. Hoitsma served eight years as a top aide for Chairman of the Senate Armed Services Committee and Chairman of the Environment & Public Works Committee. Mr. Harper brings two decades of government relations and legislative experience including with several agencies.

While the 118<sup>th</sup> Congress is still in progress, below are some of the accomplishments and issues worked on by these three firms in 2023:

- **Appropriations and Legislation**
  - Targeted Airshed Grants increased from \$62 million in Fiscal Year (FY) 2022 to \$69.9 million in FY 2023;
  - Diesel Emissions Reduction Act (DERA) increased from \$92 million in FY 2022 to \$100 million in FY 2023;
  - Section 103/105 increased from \$231.5 million in FY 2022 to \$249 million in FY 2023;
  - Secured \$500,000 Congressionally Directed Spending Request for Fuel Cell Line Haul Locomotive project; and
  - Worked with Congressional staff on the introduction of legislation related to ocean-going vessels and reauthorization of the Diesel Emissions Reduction Act.
  
- **California Air Pollution Control Officers Association (CAPCOA) D.C. Advocacy Trip, February 6 – 8, 2023**
  - Assisted with coordination and scheduling of advocacy meetings for eight (8) California air agencies and CAPCOA.
  - Participated in twenty-seven meetings with federal agencies and Members of Congress of which 19 were secured by Kadesh, Cassidy and Carmen.
  
- **Support for Federal Actions & Funding**
  - Worked with Office of Senator Alex Padilla to send letter to U.S. EPA Administrator Michael Regan and Principal Deputy Assistant Administrator Joseph Goffman regarding South Coast region and impacts of goods movement on air quality requesting policy and funding to meet Clean Air Act standards.
  - Facilitated California Congressional Delegation Letter with 24 Members signatures to the Administration supporting a “Whole of Government” approach to address supply chain, air pollution, climate, and environmental justice issues. The letter included guidance including South Coast AQMD recommendations to prioritize funding from the Bipartisan Infrastructure Law and the Inflation Reduction Act and other programs.
  - Secured letters of support for South Coast AQMD Congressional Delegation for Port Infrastructure Development Program and Charging and Fueling Infrastructure grant programs.
  - Supported two-day visit by Policy Advisors from Office of Senator Alex Padilla focused on goods movement and air quality issues.

The consultants have represented South Coast AQMD well through their advocacy efforts. Continued representation in Washington, D.C. is necessary to further the agency’s legislative, regulatory and policy objectives. The South Coast and Coachella Valley Air Basins nonattainment status and the threat of Clean Air Act sanctions require substantial, consistent engagement with Congress and the Administration.

In 2024, South Coast AQMD advocacy will continue to focus on funding, regulations, and policies to address emissions from heavy-duty trucks, ocean-going vessels, locomotives, aircraft, and off-road equipment. Additional areas of interest are energy, infrastructure, residential and commercial building efficiencies, environmental justice, air monitoring and related programs. The consulting firms will also assist South Coast AQMD to advocate for favorable program guidance and/or funding from the American Rescue Plan, Bipartisan Infrastructure Law, Inflation Reduction Act, appropriations process and other legislation.

**Proposal**

Staff recommends retaining Kadesh, Cassidy and Carmen for Calendar Year 2024, given their successful efforts in 2023 and their ability to build upon these efforts in the coming year. Continuity of representation is critical to strategically advocate with pending nonattainment and Clean Air Act issues.

Pursuant to the original contract, the Board has discretion to exercise options for two one-year extensions. This proposal is to approve the second one-year extension for all three consulting contracts.

**Resource Impacts**

The Legislative, Public Affairs and Media Budget for FY 2023-24 has sufficient funds for legislative advocacy in Washington, D.C.

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 6

**PROPOSAL:** Approve Contract Modification and Allocation of Funds as Approved by MSRC

**SYNOPSIS:** The MSRC approved a funding allocation to partner with South Coast AQMD and other partners in proposals seeking funding under the CARB solicitation for Advanced Technology Demonstration and Pilot Projects, as part of the MSRC's FYs 2021-24 Work Program. As part of their FYs 2021-24 and subsequent Work Program(s), the MSRC approved exercising the contract option to continue technical advisor services with Raymond Gorski for two additional years from January 2024 through December 2025. The MSRC is seeking Board approval of the contract modification and funding allocation as part of the FYs 2021-24 and subsequent Work Programs.

**COMMITTEE:** Mobile Source Air Pollution Reduction Review Committee, October 19, 2023; Recommended for Approval

**RECOMMENDED ACTION S:**

1. Exercise option clause to extend contract with Raymond Gorski for technical advisor services an additional two years until December 31, 2025, increasing the contract value in an amount not to exceed \$385,700, as described in this letter and with the funding allocated as follows:
  - a. \$24,106 of the contract value increase to be allocated to the MSRC 's FY 2023-24 Administrative Budget; and
  - b. The remainder of the contract value increase (\$361,594) to be divided between the FYs 2021-24 (\$90,398) and subsequent Work Program(s) (\$271,196);
2. Approve MSRC allocation in an amount not to exceed \$3,000,000 for partnership with South Coast AQMD and other partners in proposals seeking funding under the CARB "Advanced Technology Demonstration and Pilot Projects" solicitation, as part of approval of the FYs 2021-24 Work Program;
3. Authorize MSRC to adjust the above contract awards up to five percent, as necessary to accomplish program goals and previously granted in prior Work Programs; and

4. Authorize the Chair of the Board (or by the Board Chair 's designation, the Executive Officer) to execute the contracts under the FYs 2021-24 and subsequent Work Program(s), as described above and in this letter.

Larry McCallon  
Chair, MSRC

AK:CR

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### **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 subvented to 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 October 19, 2023 meeting, the MSRC considered recommendations from its MSRC Technical Advisory Committee (MSRC-TAC) and approved the following:

#### **Exercise Option Clause of Technical Advisor's Contract**

Following an open RFP process in 2021 to solicit Technical Advisor services to assist in the planning and implementation of the MSRC's Work Program, the MSRC selected Raymond Gorski. The contract was for \$385,700 for an initial two-year period and included an option clause for a two-year term extension. The option clause provided for a not-to-exceed contract amount of \$385,700. The MSRC evaluated Mr. Gorski 's performance and approved exercising the option, extending the contract term to December 31, 2025 and increasing the contract value by \$385,700. Funding specifics for the option period are to be as follows:

- a. \$24,106 of the contract value increase to be allocated to the MSRC 's FY 2023-24 Administrative Budget; and
- b. The remainder of the contract value increase (\$361,594) to be divided between the FYs 2021-24 (\$90,398) and subsequent Work Program(s) (\$271,196).

#### **Advanced Technology Demonstration and Pilot Projects**

CARB has released a solicitation seeking qualified bidders to implement and administer advanced technology projects in a variety of categories South Coast AQMD and its project partners, which include San Joaquin Valley Air Pollution Control District, Sacramento Metropolitan Air Quality Management District, San Diego County Air Pollution Control District, the Cities of Riverside, Los Angeles, Sacramento and Clovis ,



as well as participating drayage fleets, are preparing proposals to deploy battery electric trucks, shuttle buses, fire trucks, construction equipment and supporting infrastructure in response to the Port/Drayage Vehicles and Municipal Green Zone categories of this solicitation. The project will demonstrate large-scale deployment, workforce training and development, engage communities through substantial outreach, and include data collection and analysis. The MSRC considered this partnership opportunity and approved an allocation of up to \$3,000,000 to augment the partners' contributions as an element of the FYs 2021-24 Work Program. If CARB does not select these proposals, the allocation would revert to the unallocated AB 2766 Discretionary Fund balance.

The MSRC is requesting that the Board approve the contract modification and funding allocation as part of approval of the FYs 2021-24 and subsequent AB 2766 Discretionary Fund Work Programs as outlined above. Consistent with all past Work Programs, 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 if needed to accomplish program goals.

### **Resource Impacts**

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.

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 7

REPORT: Legislative, Public Affairs and Media Report

SYNOPSIS: This report highlights the September 2023 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

LTO:DS:cb:ar

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## **BACKGROUND**

This report summarizes the activities of the Legislative, Public Affairs and Media Office for September. The report includes Major Events, Community Events/Public Meetings, Environmental Justice (EJ) Update, 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 hosting 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.

On September 13, the 9th Annual Environmental Justice Conference entitled, "Building a Clean Air Future Together," was held in-person, with free admission, at the Riverside

Convention Center with a virtual option. Speakers included Dr. Jalonne L. White-Newsome, Senior Director for Environmental Justice at the White House Council on Environmental Quality and Assemblymember Eduardo Garcia, 36th District. The conference included simultaneous breakout sessions entitled “Empowering Overburdened Communities: Bridging the Gap for Environmental Justice” and “Unlocking Green Opportunities: Job Training and Education for Environmental Policy”. The conference concluded with a plenary session entitled “Building a Collaborative Path to Environmental Justice: Community, Technology, and Partnerships.” There were approximately 210 in-person attendees and 445 virtual participants via Whova, YouTube and Facebook.

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

Staff engaged 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 information regarding the following:

- Tips on reducing their exposure to smog and its negative health effects;
- How to file a complaint;
- Clean air technologies and their deployment;
- Invitations to or notices of conferences, seminars, workshops, and other public events;
- South Coast AQMD incentive programs;
- Funding/grant 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 September events and meetings:

#### South Bay Association of Chambers of Commerce

On September 5, staff attended the South Bay Association of Chambers of Commerce Board of Directors meeting and shared information regarding the 9<sup>th</sup> Annual EJ Conference, Rules 1180 and 1180.1 Working Group meetings, and CARB’s Planning and Clean Transportation Funding grants.

#### San Bernardino County Transportation Authority

On September 6, staff participated in the San Bernardino County Transportation Authority City Manager Technical Advisory Committee and shared information on the upcoming 9<sup>th</sup> Annual EJ Conference.

San Gabriel Valley Council of Governments

On September 6, staff participated in the San Gabriel Valley Council of Governments Energy, Environment & Natural Resources Committee meeting and shared an invitation to the 9<sup>th</sup> Annual EJ Conference.

Gateway Cities Council of Governments

On September 6, staff shared information on the 9<sup>th</sup> Annual EJ Conference with the Board of Directors of Gateway Cities Council of Governments.

Greater Riverside Chambers of Commerce

On September 8, staff participated in the Greater Riverside Chambers of Commerce Government Affairs Council to share information on the upcoming 9<sup>th</sup> Annual EJ Conference.

Long Beach Fire Department Community Emergency Response Team

On September 9, staff participated in the READY Long Beach Community Preparedness Expo. Staff shared information on how to file an air quality complaint and the 9<sup>th</sup> Annual EJ Conference.

29<sup>th</sup> Annual Rialto Pollution Prevention Fair

On September 16, staff participated in the 29<sup>th</sup> Annual Rialto Pollution Prevention Fair. Staff demonstrated an alternative fuel vehicle, shared air quality information, and explained how to file a complaint.

Murrieta/Wildomar Chamber of Commerce

On September 20, staff participated in the Murrieta/Wildomar Chamber of Commerce meeting and provided information on programs such as Small Business Assistance and Replace Your Ride and how to file air quality complaints.

Harbor Association of Industry and Commerce

On September 20, staff participated in the Harbor Association of Industry and Commerce Government Affairs Committee meeting to provide updates on the Voucher Incentive Program and the enforcement initiative for noncompliant warehouses.

28<sup>th</sup> Annual Central Avenue Jazz Festival

On September 23, staff participated in the 28<sup>th</sup> Annual Central Avenue Jazz Festival in Los Angeles. Staff informed residents on how to file air quality complaints and how to use the South Coast AQMD app, and shared information on the Check Before You Burn program.

Orange County Cities Council of Governments

On September 28, staff participated in the Orange County Cities Council of Governments Board of Directors meeting to provide updates on incentive programs and on how to file an air quality complaint.

Riverside College and Career Fair

On September 28, staff participated in the Greater Riverside Chamber of Commerce’s College and Career Fair to share information on career opportunities and the Why Healthy Air Matters education program.

**ENVIRONMENTAL JUSTICE UPDATE**

The following are key EJ-related activities in which staff participated during September. These events and meetings involve communities affected disproportionately from adverse air quality impacts.

White House Environmental Justice Advisory Council

On September 26, staff participated virtually in the White House Environmental Justice Advisory Council public meeting to learn about the Council’s Environmental Quality initiatives.

**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 presentations in September.

**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 month of September are summarized below:

Calls to South Coast AQMD’s Main Line and 1-800-CUT-SMOG®	2,373
Calls to South Coast AQMD’s Spanish Line	16
Total Calls	2,389

## **PUBLIC INFORMATION CENTER STATISTICS**

The Public Information Center (PIC) handles phone calls and assists individuals who walk in for general information. Email advisories provide information on upcoming meetings and events, program announcements and alerts on time-sensitive issues. Information for the month of September is summarized below:

Calls Received by PIC	4
Calls to Automated System	171
Total Calls	175
Visitor Transactions	118
Email Advisories Sent	36,198

## **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 provided personalized assistance to small businesses over the telephone, at South Coast AQMD headquarters and via virtual on-site consultation, as summarized below for September.

- Provided permit application assistance to 152 companies, and
- Processed 76 Air Quality Permit Checklists.

Types of businesses assisted:

Architecture Firms	Gas Stations	Schools
Auto Body Shops	Manufacturing Facilities	Warehouses
Construction Firms	Other Businesses	
Dry Cleaners	Restaurants	
Engineering Firms	Retail Facilities	

## **MEDIA RELATIONS**

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

Major Media Interactions	170
Press Releases	18
News Carousel	3

## Major Media Topics:

- **EJ Conference:** Staff participated in an interview with 94.7 The Wave about the EJ conference, for a segment that aired on their public affairs talk show “Open Line.”
- **Smoke and Air Quality:** Staff participated in an interview with KTLA Digital to discuss smoke and its impact on air quality.
- **Ports Indirect Source Rule (ISR) and Marine Terminal Operators (MTOs):** Journal of Commerce requested information on the ISR for ports and MTOs. Response was provided.
- **Air Quality in Coachella Valley:** KESQ requested information on air quality in the Coachella Valley, the post-Tropical Storm Hilary impacts on local air quality, and what determines when advisories are issued. Response was provided.
- **Chiquita Canyon Landfill Hearing :** ABC 7, LAist, and The Signal inquired if a hearing will take place. A link to the livestream webcast was provided. Telemundo and KTLA requested information about the hearing. The press release was shared.
- **Ethylene Oxide (EtO) and Permanent Total Enclosures (PTEs):** Inside EPA requested information on upcoming EtO rule. Grist conducted an interview on issues related to EtO and submitted follow-up questions. Responses were provided.
- **Torrance Refinery Flaring:** Southern California News Group asked about unplanned flaring at Torrance Refinery. Response was provided.
- **Disney Forward Environmental Impact Report (EIR):** The Los Angeles Times was looking for information on the impending Disney Forward EIR. Response was provided.
- **Chiquita Canyon Landfill:** The Signal requested confirmation of a violation issued to Chiquita Canyon Landfill following complaints at Live Oak Elementary School. Response was provided.
- **Reduced Ports Emissions:** Journal of Commerce inquired about ports and emission reductions. Response was provided.
- **Railroad MOU/ ISR:** The Los Angeles Times requested information on the potential MOU with Railroads and how this compares to the Warehouse ISR and the proposed Port ISR. Information was provided.
- **Warehouse ISR:** KCVR requested information on the warehouse enforcement initiative. LAist inquired about the rule. Fontana Herald News inquired if any warehouses in Fontana are noncompliant. UCI EcoGoLab requested a list of warehouses in Santa Ana subjected to the Warehouse ISR. San Bernardino County Sentinel inquired about noncompliant warehouses in San Bernardino County. Responses were provided.

- **Port ISR:** International Trade Today asked if South Coast AQMD delayed the Port ISR after the letter written by The Pacific Merchant Shipping Association and asked whether South Coast AQMD had any comments on the matter. Response was provided.
- **Paso Robles Tank:** Press Enterprise requested information on the Paso Robles Tank company, inquiring whether South Coast AQMD issued a NOV, if there was a shutdown, and if there were any complaints. Response was provided.
- **Rule 415 and Coast Packing:** Southern California Public Radio requested clarification on an ongoing inquiry regarding Rule 415 and Coast Packing. Response was provided.
- **Electric Tractors:** Loyola Marymount University students inquired about South Coast AQMD's possible involvement in assisting the city of Santa Monica with electric tractor equipment. Response was provided.
- **Warehouse Enforcement Initiative:** Pitched enforcement initiative on noncompliant warehouses to media outlets resulting in media coverage. Interviews were conducted with the Los Angeles Times and KNX radio. Southern California News Group had questions. Responses were provided. Press release was also covered by several other local radio, television and print outlets.
- **Windblown Dust Advisory (9/4, 9/9, 9/13, 9/21, 9/25, 9/29):** Pitched advisory to media outlets resulting in media coverage.
- **Smoke Advisory:** Pitched advisory to media outlets resulting in media coverage.
- **Windblown Dust Advisories:** Pitched all advisories to local media outlets resulting in coverage. Staff participated in an interview with KESQ about the advisory issued on 9/13 due to local air quality conditions in the Coachella Valley area.

#### News Releases:

- **South Coast AQMD Issues Windblown Dust Advisory for the Coachella Valley – September 4, 9, 13, 21 and 29, 2023 (English and Spanish):** Informed the public of a PM10 Dust Advisory caused by high winds in the Coachella Valley.
- **Chiquita Canyon Landfill is Ordered to Resolve Odors Impacting Community, Find Cause of Increased Sulfur Emissions – September 7, 2023 (English and Spanish):** Informed the public of an Order for Abatement requiring Chiquita Canyon Landfill to reduce odors from the landfill.
- **Senator (Ret.) Vanessa Delgado and Governor Appointee Gideon Kracov Reappointed to South Coast AQMD Governing Board – September 8, 2023 (English and Spanish):** Informed the public of Chair Vanessa Delgado and Board member Gideon Kracov's reappointments.



- **South Coast AQMD Launches Enforcement Initiative to Address Noncompliant Warehouses – September 20, 2023 (English and Spanish) :** Informed the public of new action to bring warehouses into compliance.
- **South Coast AQMD Issues Smoke Advisory Due to Northern California Wildfires – September 23, 2023 (English and Spanish):** Informed residents of smoke advisory due to fire.

**News Carousel:**

- **“This year’s Intl. Day of Clean Air for Blue Skies focuses on partnership, investments & responsibility to overcome air pollution.”** – Linked to Clean Air for Blue Skies webpage.
- **“Celebrate the United Nations’ Intl. Day for the Preservation of the Ozone Layer on Sept. 16”** – Linked to United Nations webpage.
- **“Celebrate National Drive Electric Week from Sept. 22 - Oct. 1”** – Linked to the Drive Electric Week website about the event.

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

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

- |  |                                    |
|--|------------------------------------|
| • U.S. Senator Alex Padilla            | • Assemblymember Lisa Calderon     |
| • U.S. Representative Nanette Barragán | • Assemblymember Sabrina Cervantes |
| • U.S Representative Judy Chu          | • Assemblymember Bill Deaver       |
| • U.S. Representative Mark Takano      | • Assemblymember Mike Fong         |
| • Senator Lena Gonzalez                | • Assemblymember Chris Holden      |
| • Senator Josh Newman                  | • Assemblymember Josh Lowenthal    |
| • Senator Anthony Portantino           | • Assemblymember Al Muratsuchi     |
| • Senator Richard Roth                 | • Assemblymember Blanca Rubio      |
| • Senator Susan Rubio                  | • Assemblymember Miguel Santiago   |
| • Senator Kelly Serato                 |                                    |

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

Alhambra	Glendora	Pasadena
Anaheim	Grand Terrace	Perris
Arcadia	Hawaiian Gardens	Pico Rivera
Artesia	Hemet	Pomona
Azusa	Highland	Rancho Cucamonga
Baldwin Park	Huntington Park	Redlands
Banning	Irvine	Rialto
Beaumont	Irwindale	Riverside
Bell	Jurupa Valley	Rosemead
Bell Gardens	La Cañada Flintridge	San Bernardino
Bellflower	La Habra Heights	San Dimas
Big Bear Lake	La Mirada	San Fernando
Bradbury	La Palma	San Gabriel
Brea	La Puente	San Jacinto
Buena Park	La Verne	San Marino
Burbank	Lake Elsinore	Santa Ana
Calimesa	Lake Forest	Santa Clarita
Canyon Lake	Lakewood	Santa Fe Springs
Cerritos	Loma Linda	Seal Beach
Chino	Long Beach	Sierra Madre
Chino Hills	Los Angeles	Signal Hill
Claremont	Lynwood	South El Monte
Colton	Maywood	South Gate
Commerce	Menifee	South Pasadena
Compton	Mission Viejo	Stanton
Corona	Monrovia	Temecula
Covina	Montclair	Temple City
Cudahy	Montebello	Upland
Dana Point	Monterey Park	Vernon
Diamond Bar	Moreno Valley	Walnut
Downey	Murrieta	West Covina
Duarte	Newport Beach	Whittier
Eastvale	Norco	Wildomar
El Monte	Norwalk	Yorba Linda
El Segundo	Ontario	Yucaipa
Fontana	Orange	
Glendale	Paramount	

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

Alhambra Chamber of Commerce  
Arcadia Chamber of Commerce  
Azusa Chamber of Commerce  
Baldwin Park Chamber of Commerce  
Big Bear Lake Valley Chamber of Commerce  
Burbank Chamber of Commerce  
Caltrans  
CARB  
Claremont Chamber of Commerce  
Covina Chamber of Commerce  
Duarte Chamber of Commerce  
City of Hope  
Covina Chamber of Commerce  
Duarte Chamber of Commerce  
El Monte / South El Monte Chamber of Commerce  
Foothill Transit  
Gateway Council of Governments  
Glendale Chamber of Commerce  
Glendora Chamber of Commerce  
Gold Line Foothill Extension Construction Authority  
Greater Monterey Park Chamber of Commerce  
Greater Riverside Chamber of Commerce  
Harbor Association of Industry and Commerce  
Industry Business Council  
Irwindale Chamber of Commerce  
La Canada Flintridge Chamber of Commerce and Community Association  
Lake Arrowhead Chamber of Commerce  
La Verne Chamber of Commerce  
League of California Cities, d Empire, Los Angeles, and Orange County Divisions  
Los Angeles Area Chamber of Commerce  
Los Angeles County Economic Development Corporation  
Los Angeles County Metropolitan Transportation Authority  
Metropolitan Water District  
Monrovia Chamber of Commerce  
Mountain Transit  
Murrieta/Wildomar Chamber of Commerce  
National Park Service  
Omnitrans  
Ontario International Airport Authority  
Orange County Cities Council of Governments

Orange County Transportation Authority  
Pasadena Chamber of Commerce  
Pomona Chamber of Commerce  
Port of Long Beach  
Regional Chamber of Commerce San Gabriel Valley  
Rosemead Chamber of Commerce  
San Bernardino Area Chamber of Commerce  
San Bernardino County Transportation Authority  
San Dimas Chamber of Commerce  
San Fernando Chamber of Commerce  
San Fernando Valley Council of Governments  
San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy  
San Gabriel Chamber of Commerce  
San Gabriel Valley Council of Governments  
San Gabriel Valley Economic Partnership  
San Gabriel Valley Mosquito & Vector Control District  
San Marino Chamber of Commerce  
Sanitation District of Los Angeles County  
Santa Clarita Valley Chamber of Commerce  
Sierra Madre Chamber of Commerce  
South Bay Association of Chambers of Commerce  
South Pasadena Chamber of Commerce  
Southern California Association of Governments  
Temple City Chamber of Commerce  
Upland Chamber of Commerce  
U.S. Chamber of Commerce

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

Clean Power Alliance  
Inland Empire Biking Alliance  
Mt. San Antonio College  
Oak Knoll Montessori School  
Pasadena City College  
San Bernadino Valley College  
San Gabriel Mountains Community Collaborative  
Trust for Public Land

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 8

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the period of September 1 through September 30, 2023.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Cynthia Verdugo-Peralta  
Hearing Board Chair

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Attached are the following two summaries: **September 2023 Hearing Board Cases**, and **Rules From Which Variances and Orders for Abatement Were Requested in 2023**. An index of South Coast AQMD Rules is also attached.

There were no appeals filed during the period of September 1 to September 30, 2023.

## Report of September 2023 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. LARICS CCT LMR Case No. 6234-2 (S. Hanizavareh)	203(b)	Malfunctioning Auto Trans Switch triggered the Emergency ICE, due to low voltage, caused by dead leg of the 3-phase service.	Not Opposed/Granted	IV granted commencing 9/19/23, for 90 days or until the RV hearing scheduled for 10/19/23, whichever comes first.	NOx + NMHC:27.10 lbs./day CO: 2.7 lbs./day PM: 0.09 lb./day
2. LARICS MDI LMR Case No. 6234-3 (J. Lee)	203(b)	Due to severe weather, multiple (5) SCE power outages, caused the emergency ICE to operate for 196 hours of their 200 annual allotted hours.	Not Opposed/Granted	Ex Pate EV granted commencing 9/8/23, for 30 days or until the IV hearing scheduled for 9/19/23, whichever comes first	NOx+NMHC: 30.7 lbs./day CO: 7.26 lbs./day PM: 1.1 lbs./day
3. LARICS MDI LMR Case No. 6234-3 (S. Hanizavareh)	203(b)	Due to severe weather, multiple (5) SCE power outages, caused the emergency ICE to operate for 196 hours of their 200 annual allotted hours.	Not Opposed/Granted	IV granted commencing 9/19/23, for 90 days or until the RV hearing scheduled for 10/19/23, whichever comes first	NOx +NMHC: 30.7 lbs./day CO: 7.26 lbs./day PM: 1.1 lbs./day
4. South Coast AQMD re: Chiquita Canyon Landfill, LLC Case No. 6177-3 (K. Roberts)		Respondent filed a Motion to Dismiss the RV granted on 5/3/23; Petitioner voluntarily withdrew the variance.	No Action	Motion to Dismiss moot, due to Petitioner's voluntary withdrawal of the variance following issuance of OA in Case No. 6177-4.	N/A
5. South Coast AQMD vs. Chiquita Canyon Landfill Case No. 6177-4	402 H&S 41700	Due to Respondent inadequately containing unidentified landfill gas causing odor emissions from the landfill and numerous residential complaints.	Stipulated/Issued	O/A issued commencing 9/6/23; the Hearing Board shall retain jurisdiction over this matter until 9/6/24.	N/A

<b>Case Name and Case No. (South Coast AQMD Attorney)</b>	<b>Rules</b>	<b>Reason for Petition/Hearing</b>	<b>South Coast AQMD Position/Hearing Board Action</b>	<b>Type and Length of Variance or Order</b>	<b>Excess Emissions</b>
6. South Coast AQMD vs. Ralphs Grocery Company Case No. 6166-4 (K. Manwaring)	203(b) 1100 1110.2 1146 2004 2012	Boilers D23 & D24 inoperable due to failure to demonstrate compliance for minimum of 75% of cumulative total rated heat input capacity of the Rule	Stipulated/Issued	Mod. O/A issued commencing 9/28/23; the Hearing Board shall retain jurisdiction over this matter until 11/30/23.	N/A
7. South Coast AQMD vs. Western Municipal Water District Case No. 6240-1 (K. Roberts)	1196(d) 1196(e)	Respondent purchased Heavy-Duty vehicles which do not meet Fleet Rule 1196 requirements and did not seek or receive Technical Infeasibility Certificates.	Stipulated/Issued	O/A issued commencing 9/12/23; the Hearing Board shall retain jurisdiction over this matter until 3/31/2030.	N/A
8. The Termo Company Case No. 3014-2 (K. Roberts)	203(b) 204 463(c) 1148.1(d)(8) 1173(d)(1)(B) 1303 (a)(1) 1303(b)(2) 2004(f)(1) 3002(c)(1)	Due to SoCalGas' regular maintenance, Petitioner had to suspend crude oil and natural gas production, as well as a lack of vapor recovery gas take-away.	Not Opposed/Granted	Ex Parte EV granted commencing 9/29/23, and continuing through 10/13/23, a period of 14 days.	VOC: TBD by 10/31/23
9. Torrance Refining Company Case No. 6060-18	203(b) 2004(f)(1) 3002(c)(1)	Petitioner sought relief for various equipment and processes to conduct periodic and routine maintenance.	Not Opposed/Granted	SV & AOC granted commencing 9/28/23 and continuing through 12/1/23.	None
10. Verizon Wireless – Calimesa Case No. 6139-7 (K. Manwaring)	203(b)	Petitioner was unaware that their emergency ICE had been running at an unmanned facility. Runtime exceeded their 200-hour annual allotment.	Opposed/Granted	IV granted commencing 9/20/23 and continuing for 90 days, or until the RV hearing scheduled for 11/2/23, whichever comes first	NOx: 16.75 lbs./day CO: 4.06 lbs./day VOC: 0.51 lb./day PM: 0.77 lb./day

**Acronyms**

AOC: Alternative Operating Conditions

CO: Carbon Monoxide

EV: Emergency Variance

FCD: Final Compliance Date

H&S: Health & Safety

ICE: Internal Combustion Engine

IV: Interim Variance

Mod: Modification

N/A: Not Applicable

NMHC: Non-Methane Hydrocarbon

NOx: Oxides of Nitrogen

O/A: Order for Abatement

PM: Particulate Matter

RV: Regular Variance

SV: Short Variance

TBD: To Be Determined

VOC: Volatile Organic Compounds



**Rules from which Variances and Orders for Abatement were Requested in 2023**

Rules	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Actions
202(a)								1					1
202(c)								1					1
203(b)	2	7	16	4	7	9	4	9	6				64
204									1				1
218(b)(2)			1			2							3
218.1(b)(4)(C)			1			2							3
401(b)(1)								2					2
402	1					1	1		1				4
407(a)								1					1
415(f)				1									1
415(g)				1									1
431.1(c)(2)					3								3
431.1(f)(1)(A)					2								2
461(e)(2)(A)(i)				1									1
463(c)									1				1
463(c)(2)(B)		1											1
464(b)(1)(A)					1								1
464(b)(2)					1								1
464(b)(3)					1								1
1100									1				1
1100(e)(2)(A)	1	2											3
1100(e)(2)(B)			2										2
1100(e)(3)(A)			1										1
1110.2		1							1				2
1128							1						1
1146									1				1
1146(c)(1)			1				1						2
1146(c)(1)(I)			1										1
1146(c)(1)(J)	1	2											3
1146(e)(1)			2				1						3
1147							1						1
1148.1(d)(8)									1				1
1150.1						1		1					2
1173(d)(1)(B)									1				1
1176(e)(1)					1								1

**Rules from which Variances and Orders for Abatement were Requested in 2023**

Rules	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Actions
1176(e)(2)					1								1
1178(d)(3)(D)		1											1
1196					1								1
1196(d)									1				1
1196(d)(1)						1	1	1					3
1196(e)									1				1
1196(f)(8)(a)								1					1
1196(f)(10)								1					1
1303(a)(1)									1				1
1303(b)(1)						1		1					2
1302(b)(2)						1		1	1				3
1430(h)(14)								2					2
1470(c)(2)(C)(i)								1					1
1470(c)(4)A	1						1						2
2004									1				1
2004(b)								1					1
2004(f)(1)		4	3	1	1	2	1	6	2				20
2005								1					1
2006								1					1
2012									1				1
2012(d)(1)(a)(ii)								1					1
2012(d)(2)		1											1
3002(c)(1)		5	3	1	4	5	1	6	2				27
CA H&S Code 41700							1		1				2
CA H&S Code 41701								2					2

**SOUTH COAST AQMD RULES AND REGULATIONS INDEX  
FOR 2023 HEARING BOARD CASES AS OF SEPTEMBER 30, 2023**

**REGULATION II – PERMITS**

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

**REGULATION IV – PROHIBITIONS**

Rule 401	Visible Emissions
Rule 402	Nuisance
Rule 407	Liquid and Gaseous Air Contaminants
Rule 415	Odors from Rendering Facilities
43.1	Sulfur Content of Gaseous Fuels
Rule 461	Gasoline Transfer and Dispensing
Rule 463	Organic Liquid Storage
Rule 464	Wastewater Separators

**REGULATION XI - TOXICS AND OTHER NON-CRITERIA POLLUTANTS**

Rule 1100	Implementation Schedule for NOx Facilities
Rule 1110.2	Emissions from Gaseous- and Liquid-Fueled Engines
Rule 1128	Paper, Fabric, and Film Coating Operations
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 1150.1	Control of Gaseous Emissions from Municipal Solid Waste Landfills
Rule 1176	VOC Emissions from Wastewater Systems
Rule 1178	Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities
Rule 1196	Clean On-Road Heavy-Duty Public Fleet Vehicles

**REGULATION XIII – NEW SOURCE REVIEW**

Rule 1303 Requirements

**REGULATION XIV - TOXICS AND OTHER NON-CRITERIA POLLUTANTS**

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 2005 New Source Review for RECLAIM

Rule 2006 Permits

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

**REGULATION XXX – TITLE V PERMITS**

3002 – Requirements

**CALIFORNIA HEALTH AND SAFETY CODE**

§41700 Prohibited Discharges

§41701 Restricted Discharges

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 9

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This report summarizes monthly penalties and legal actions filed by the General Counsel's Office from September 1 through September 30, 2023. An Index of South Coast AQMD Rules is attached with the penalty report.

COMMITTEE: Stationary Source, October 20, 2023, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Bayron T. Gilchrist  
General Counsel

BTG:cr

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	<u>Civil Filings</u>	<u>Violations</u>
1. TRS Kang Family Trust County of Los Angeles Superior Court – Small Claims Case No.: 23IWSC01436; Filed 9.29.23 (CL) NOV Nos.: P70299 R.1403 - Asbestos Emissions from Demolition/Renovation Activities R.1466 - Control of Particulate Emissions from Soils with Toxic Air Contaminants California Health and Safety Code §§ 42402 and 42411		2
		2 Violations

**Attachments**

September 2023 Penalty Report  
Index of South Coast AQMD Rules and Regulations

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

**Settlement Penalty Report (09/01/2023 - 09/30/2023)**

**Total Penalties**

Civil Settlement:     \$248,575.50  
MSPAP Settlement:   \$54,009.00

**Total Cash Settlements: \$302,584.50**

**Fiscal Year through 09/30/2023 Cash Total: \$1,116,314.50**

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
<b>Civil</b>						
191080	ASBESTOS ABATEMENT, INC.	1403	09/07/2023	JL	P74596, P76201	\$7,026.00
70343	BREA MALL MGMT OFFICE	201, 1415	09/13/2023	SH	P65773, P65796	\$6,500.00
153992	CANYON POWER PLANT	2004, 3002	09/06/2023	KER	P66140	\$4,392.00
143741	DCOR, LLC	463, 1148.1, 1173, 2004, 2012	09/15/2023	JL	P69300, P72860, P74512, P74518	\$31,664.00
136539	DEL ROSA FUEL	461	09/06/2023	MR	P64975, P76171	\$1,000.00
171049	E&B NATURAL RESOURCES MGMT. CORP.	203, 1148.2	09/01/2023	RM	P69274, P73353	\$29,309.00
117560	EQUILON ENTER, LLC-SHELL OIL PROD. US	221, 3002	09/05/2023	EC	P73260, P74083, P75504	\$7,450.00
196900	EXPRESS DISPOSAL, INC.	403	09/20/2023	RM	P74769, P74770, P74771	\$3,975.00
62862	IMPERIAL IRRIGATION DISTRICT/ COACHELLA	3002	09/20/2023	ND	P64795	\$5,269.50
175733	JAUREGUI & CULVER, INC.	1166	09/22/2023	ND	P66022	\$4,684.00
186629	KB HOME SOUTHERN CALIFORNIA	403	09/07/2023	SH	P74134, P74135, P74139, P74148, P75217	\$7,500.00
197755	KB HOMES/COUNTRY VIEW	403	09/06/2023	JL	P76463	\$11,710.00
800170	LA CITY, DWP HARBOR GENERATING STATION	218.1, 2004	09/14/2023	DH	P63823, P63833, P66226	\$7,728.00
800193	LA CITY, DWP VALLEY GENERATING STATION	2004, 3002	09/14/2023	DH	P66146, P76058	\$7,377.00
61962	LA CITY, HARBOR DEPT	461, 2004	09/15/2023	EC	P70010, P70017, P70019	\$5,900.00
141295	LEKOS DYE AND FINISHING, INC.	1146, 2004, 2005, 2012, 2012 Appendix A	09/14/2023	KCM	P57883, P66074, P66081, P66084, P66086, P66087, P66093, P66095, P66100, P68318, P68329	\$15,000.00
130156	LEYMASTER ENVIRONMENTAL CONSULTING, LLC	221, 1166	09/08/2023	EC	P73404	\$10,850.00
131425	MATRIX OIL CORPORATION-RIDEOUT HEIGHTS	203, 1173	09/06/2023	JL	P73324	\$10,831.00
173747	NORTHGATE JEFFERSON ARCO AM/PM	461, 41960.2	09/13/2023	ND	P70167	\$15,000.00
145553	PETER'S FAMILY CLEANER, PALACE CLEANER	203, 1102, 1402, 1421	09/12/2023	BT	P62763, P62765, P62770, P62771	\$1,000.00
126498	STEELSCAPE, INC.	2004, 2012 Appendix A, 3002	09/06/2023	EC	P67382, P67394, P74608, P74621	\$11,400.00
182752	TORRANCE LOGISTICS COMPANY, LLC	203, 462, 3002	09/21/2023	DH	P66839, P74362	\$37,741.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
166440	WEST COAST ARBORIST	203, 13 CCR 2460	09/08/2023	EC	P73901, P75220, P75225	\$5,269.00

**Total Civil Settlements: \$248,575.50**

**MSPAP**

114854	AUTO SPA CONNECTION, INC.	203, 461	09/15/2023	CL	P75703	\$1,942.00
183567	GS II, INC.	3002	09/08/2023	CL	P73699	\$2,142.00
126222	JENAL ENGINEERING CORP	1166	09/15/2023	CL	P70199	\$937.00
190612	LA GLORY 661 INC	461	09/01/2023	CL	P77651	\$1,456.00
197779	LENNAR AT THE FARM	403	09/01/2023	CL	P76406	\$4,605.00
183723	LOS ANGELES ENGINEERING, INC	403	09/01/2023	CL	P63478	\$5,747.00
95067	MESA WATER DISTRICT	203	09/08/2023	CL	P73822	\$971.00
174480	PHENOMENEX, INC.	203	09/08/2023	VA	P78309	\$11,928.00
156312	ROSECRANS ENERGY	1118	09/01/2023	CL	P73266	\$3,845.00
178674	SOIL MIXING SERVICES, INC.	403, 1466	09/01/2023	CL	P73507	\$4,144.00
145795	SOUTHLAND DISPOSAL COMPANY	403	09/08/2023	VA	P74781	\$3,747.00
169250	UNIVERSAL SERVICE STATION INC	461	09/01/2023	CL	P72984	\$6,440.00
128898	VONS CO INC NO 2155	201, 203	09/15/2023	CL	P73162	\$1,842.00
101196	WARREN DUNCAN CONTRACTING	1166	09/06/2023	GV	P69159, P69162	\$1,961.00
23506	WEST LOS ANGELES COLLEGE	203, 461	09/01/2023	CL	P77801	\$2,302.00

**Total MSPAP Settlements: \$54,009.00**

**SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX**  
**SEPTEMBER 2023 PENALTY REPORT**

**REGULATION II - PERMITS**

- Rule 201 Permit to Construct
- Rule 203 Permit to Operate
- Rule 218.1 Continuous Emission Monitoring Performance Specifications
- Rule 221 Plans

**REGULATION IV - PROHIBITIONS**

- Rule 403 Fugitive Dust - Pertains to solid particulate matter emitted from man-made activities
- Rule 461 Gasoline Transfer and Dispensing
- Rule 462 Organic Liquid Loading
- Rule 463 Storage of Organic Liquids

**REGULATION XI - SOURCE SPECIFIC STANDARDS**

- Rule 1102 Petroleum Solvent Dry Cleaners
- Rule 1118 Emissions from Refinery Flares
- Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters
- Rule 1148.1 Oil and Gas Production Wells
- Rule 1148.2 Hydraulic Fracturing of Oil and Gas Wells
- Rule 1166 Volatile Organic Compound Emissions from Decontamination of Soil
- Rule 1173 Fugitive Emissions of Volatile Organic Compounds

**REGULATION XIV - TOXICS**

- Rule 1402 Control of Toxic Air Contaminants from Existing Sources
- 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 1466 Control of Particulate Emissions from Soils with Toxic Air Contaminants

**REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)**

- Rule 2004 Requirements
- Rule 2005 New Source Review for RECLAIM
- Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions
- Rule 2012 Appendix A  
Protocol for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions



**SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX  
SEPTEMBER 2023 PENALTY REPORT**

**REGULATION XXX- TITLE V PERMITS**

Rule 3002          Requirements

**CALIFORNIA HEALTH AND SAFETY CODE**

41960.2          Gasoline Vapor Recovery  
42402          Violation of Emission Limitations – Civil Penalty  
42411          Annual increase in maximum penalties

**CALIFORNIA CODE OF REGULATIONS**

13 CCR 2460      Portable Equipment Testing Requirements

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 10

REPORT: Intergovernmental Review of Environmental Documents and CEQA Lead Agency Projects

SYNOPSIS: This report provides a listing of environmental documents prepared by other public agencies seeking review by South Coast AQMD between September 1, 2023 and September 30, 2023, and proposed projects for which South Coast AQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, October 20, 2023, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Wayne Natri  
Executive Officer

SR:MK:MM:BR:SW:ET

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### **Background**

The California Environmental Quality Act (CEQA) Statute and Guidelines require public agencies, when acting in their lead agency role, to provide an opportunity for other public agencies and members of the public to review and comment on the analysis in environmental documents prepared for proposed projects. A lead agency is when a public agency has the greatest responsibility for supervising or approving a proposed project and is responsible for the preparation of the appropriate CEQA document.

Each month, South Coast AQMD receives environmental documents, which include CEQA documents, for proposed projects that could adversely affect air quality. South Coast AQMD fulfills its intergovernmental review responsibilities, in a manner that is consistent with the Board's 1997 Environmental Justice Guiding Principles and Environmental Justice Initiative #4, by reviewing and commenting on the adequacy of the air quality analysis in the environmental documents prepared by other lead agencies.

The status of these intergovernmental review activities is provided in this report in two sections: 1) Attachment A lists all of the environmental documents prepared by other public agencies seeking review by South Coast AQMD that were received during the reporting period; and 2) Attachment B lists the active projects for which South Coast AQMD has reviewed or is continuing to conduct a review of the environmental documents prepared by other public agencies. Further, as required by the Board's October 2002 Environmental Justice Program Enhancements for fiscal year (FY) 2002-03, each attachment includes notes for proposed projects which indicate when South Coast AQMD has been contacted regarding potential air quality-related environmental justice concerns. The attachments also identify for each proposed project, as applicable: 1) the dates of the public comment period and the public hearing date; 2) whether staff provided written comments to a lead agency and the location where the comment letter may be accessed on South Coast AQMD's website; and 3) whether staff testified at a hearing.

In addition, South Coast AQMD will act as lead agency for a proposed project and prepare a CEQA document when: 1) air permits are needed; 2) potentially significant adverse impacts have been identified; and 3) the South Coast AQMD has primary discretionary authority over the approvals. Attachment C lists the proposed air permit projects for which South Coast AQMD is lead agency under CEQA.

**Attachment A – Log of Environmental Documents Prepared by Other Public Agencies and Status of Review, and Attachment B – Log of Active Projects with Continued Review of Environmental Documents Prepared by Other Public Agencies**

Attachment A contains a list of all environmental documents prepared by other public agencies seeking review by South Coast AQMD that were received pursuant to CEQA or other regulatory requirements. Attachment B provides a list of active projects, which were identified in previous months' reports, and which South Coast AQMD staff is continuing to evaluate or prepare comments relative to the environmental documents prepared by other public agencies. The following table provides statistics on the status of review<sup>1</sup> of environmental documents for the current reporting period for Attachments A and B combined<sup>2</sup>:

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<sup>1</sup> The status of review reflects the date when this Board Letter was prepared. Therefore, Attachments A and B may not reflect the most recent updates.

<sup>2</sup> Copies of all comment letters sent to the lead agencies are available on South Coast AQMD's website at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>.

<b>Statistics for Reporting Period from September 1, 2023 to September 30, 2023</b>	
<b>Attachment A:</b> Environmental Documents Prepared by Other Public Agencies and Status of Review	74
<b>Attachment B:</b> Active Projects with Continued Review of Environmental Documents Prepared by Other Public Agencies (which were previously identified in the July 2023, and August 2023 reports)	9
<b>Total Environmental Documents Listed in Attachments A &amp; B</b>	<b>83</b>
<i>Comment letters sent</i>	<i>21</i>
<i>Environmental documents reviewed, but no comments were made</i>	<i>54</i>
<i>Environmental documents currently under going review</i>	<i>8</i>

Staff focuses on reviewing and preparing comments on environmental documents prepared by other public agencies for proposed projects: 1) where South Coast AQMD is a responsible agency under CEQA (e.g., when air permits are required but another public agency is lead agency); 2) that may have significant adverse regional air quality impacts (e.g., special event centers, landfills, goods movement); 3) that may have localized or toxic air quality impacts (e.g., warehouse and distribution centers); 4) where environmental justice concerns have been raised; and 5) which a lead or responsible agency has specifically requested South Coast AQMD review.

If staff provided written comments to a lead agency, a hyperlink to the “South Coast AQMD Letter” is included in the “Project Description” column which corresponds to a notation in the “Comment Status” column. In addition, if staff testified at a hearing for a proposed project, a notation is also included in the “Comment Status” column. Copies of all comment letters sent to lead agencies are available on South Coast AQMD’s website at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>. Interested parties seeking information regarding the comment periods and scheduled public hearings for projects listed in Attachments A and B should contact the lead agencies for further details as these dates are occasionally modified.

In January 2006, the Board approved the Clean Port Initiative Workplan (Workplan). One action item of the Workplan 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 accordance with this action item, Attachments A and B organize the environmental documents received according to the following categories: 1) goods movement projects; 2) schools; 3) landfills and wastewater projects; 4) airports; and 5) general land use projects. In response to the action item relative to mitigation, staff maintains a compilation of mitigation measures presented as a series of tables relative to off-road engines; on-road engines; harbor craft; ocean-going vessels; locomotives; fugitive dust; and greenhouse gases which are available on 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 such as ground support equipment.

### **Attachment C – Proposed Air Permit Projects for Which South Coast AQMD is CEQA Lead Agency**

The CEQA lead agency is responsible for determining the type of environmental document to be prepared if a proposal requiring discretionary action is considered to be a “project” as defined by CEQA. South Coast AQMD periodically acts as lead agency for its air permit projects and the type of environmental document prepared may vary depending on the potential impacts. For example, an Environmental Impact Report (EIR) is prepared when there is 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 a proposed project will not generate significant adverse environmental impacts, or the impacts can be mitigated to less than significance. The ND and MND are types of CEQA documents which analyze the potential environmental impacts and describe the reasons why a significant adverse effect on the environment will not occur such that the preparation of an EIR is not required.

Attachment C of this report summarizes the proposed air permit projects for which South Coast AQMD is lead agency and is currently preparing or has prepared environmental documentation pursuant to CEQA. As noted in Attachment C, South Coast AQMD is lead agency for three air permit projects during September 2023.

### **Attachments**

- A. Environmental Documents Prepared by Other Public Agencies and Status of Review
- B. Active Projects with Continued Review of Environmental Documents Prepared by Other Public Agencies
- C. Proposed Air Permit Projects for Which South Coast AQMD is CEQA Lead Agency

**ATTACHMENT A  
ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW  
September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Warehouse &amp; Distribution Centers</i> <b>ORC230906-07</b> Use Permit 06-21-5437-26200 Enterprise Way New Industrial Building	The project consists of demolishing a 144,906 square foot office building and constructing a 165,803 square foot warehouse. The project is located at 26200 Enterprise Way near the southeast corner of Enterprise Way and Dimension Drive.  Comment Period: 9/5/2023- 10/5/2023 Public Hearing: 11/9/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Lake Forest	Document reviewed - No comments sent for this document received
<i>Warehouse &amp; Distribution Centers</i> <b>ORC230927-07</b> 1500 S. Raymond Avenue Industrial Project	The project consists of removing existing structures and constructing a 138,419 square foot warehouse. The project is located at 1500 S. Raymond Avenue near the northeast corner of South Raymond Avenue and State Route 91.  Comment Period: 9/20/2023- 10/19/2023 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Fullerton	Under review, may submit written comments
<i>Warehouse &amp; Distribution Centers</i> <b>RVC230901-01</b> Rubidoux Commerce Park	The project consists of constructing five industrial buildings totaling 1,184,102 square feet on 80.8 acres. The project is located on the southeast corner of Montana Avenue and 25th Street. Reference RVC211021-01, RVC201201-05, and RVC190903-14  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/october-2023/RVC230901-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/october-2023/RVC230901-01.pdf</a>  Comment Period: 8/22/2023- 10/9/2023 Public Hearing: N/A	Recirculated Draft Environmental Impact Report	City of Jurupa Valley	South Coast AQMD staff commented on 10/9/2023
<i>Warehouse &amp; Distribution Centers</i> <b>RVC230901-09</b> Coachella Airport Business Park#	The project consists of constructing a 329,100 square foot warehouse, 81,000 square feet for business uses, 76,800 square feet for vehicle storage, 128,600 square feet for self-storage, 135,000 square feet for an IID substation, and 8,650 square feet for fast food and a gas station on 45.46 acres. The project is located on the northwest corner of State Route 86 and Airport Boulevard within the designated AB 617 Eastern Coachella Valley community. Reference RVC230412-06  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/rvc230901-09-nop-coa">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/rvc230901-09-nop-coa</a>  Comment Period: 8/28/2023- 9/28/2023 Public Hearing: N/A	Notice of Preparation	City of Coachella	South Coast AQMD staff commented on 9/28/2023

**Key:**

LAC = Los Angeles County, ORC = Orange County, RVC = Riverside County, and SBC = San Bernardino County

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

**Notes:**

1. Disposition may change prior to Governing Board Meeting

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







**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Warehouse &amp; Distribution Centers</b> <b>RVC230927-12</b> Pre-Application Review No. 230068 (PAR230068)	The project consists of constructing a 176,200 square foot warehouse on 9.46 acres. The project is located on the southeast of Placentia Avenue and Tobacco Road in Perris.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/october-2023/RVC230927-12.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/october-2023/RVC230927-12.pdf</a>  Comment Period: 9/27/2023 - 10/4/2023 Public Hearing: 10/5/2023	Preliminary Review	Riverside County	South Coast AQMD staff commented on 10/4/2023
<b>Warehouse &amp; Distribution Centers</b> <b>SBC230901-06</b> 5355 East Airport Drive (PDEV22-017)	The project consists of construction of a 270,337 square foot warehouse on 13.08 acres. The project is located near the northwest corner of East Airport Drive and South Etiwanda Avenue. Reference SBC220906-09  Staff previously provided comments on the Notice of Preparation for the Draft Environmental Impact Report of this project, which can be accessed at: <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/september/SBC220906-09%20.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/september/SBC220906-09%20.pdf</a> .  Comment Period: 8/22/2023 - 10/5/2023 Public Hearing: N/A	Draft Environmental Impact Report	City of Ontario	Document reviewed - No comments sent for this document received
<b>Warehouse &amp; Distribution Centers</b> <b>SBC230913-05</b> Duke Warehouse at Slover and Alder Project	The project consists of constructing 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 SBC220701-02 and SBC211223-05  Comment Period: N/A Public Hearing: 9/21/2023	Other	County of San Bernardino	Document reviewed - No comments sent for this document received
<b>Industrial and Commercial</b> <b>LAC230913-04</b> 11973 San Vicente Boulevard Project	The project consists of demolishing a 13,956 square foot commercial building and removing 4,174 cubic yards of debris on 0.61 acre. The project is located near the northeast corner of South Saltair Avenue and San Vicente Boulevard in the community of Brentwood-Pacific Palisades. Reference LAC230221-08  Comment Period: N/A Public Hearing: N/A	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent for this document received

Key:

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**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Industrial and Commercial</i> <b>ORC230901-07</b> Walker Street Digital Billboard Project	The project consists of constructing a double-sided digital billboard. The project is located near the northwest corner of Walker Street and State Route 91.  Comment Period: 8/25/2023 - 9/26/2023 Public Hearing: 10/3/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	City of La Palma	Document reviewed - No comments sent for this document received
<i>Industrial and Commercial</i> <b>ORC230914-01</b> The DisneylandForward Project	The project consists of modifying the limits of the existing Theme Park and Hotel District boundaries within the existing Disneyland Resort Specific Plan (DRSP) perimeter, renaming Districts within the DRSP, and establishing Overlays for Disney's Anaheim Resort Specific Plan No. 92-2 (ARSP) Properties. The project is bordered generally by East Ball Road to the north, State Route 57 to the east, State Route 22 to the south, and South West Street to the west.  Comment Period: 9/14/2023 - 10/30/2023 Public Hearing: 10/9/2023	Draft Subsequent Environmental Impact Report	City of Anaheim	Under review, may submit written comments
<i>Industrial and Commercial</i> <b>ORC230920-06</b> Walker Street Digital Billboard Project	The project consists of constructing a double-sided digital billboard. The project is located near the northwest corner of Walker Street and State Route 91. Reference ORC230901-07  Comment Period: 9/14/2023 - 10/13/2023 Public Hearing: 11/7/2023	Recirculated Notice of Intent to Adopt a Mitigated Negative Declaration	City of La Palma	Document reviewed - No comments sent for this document received
<i>Industrial and Commercial</i> <b>SBC230920-09</b> El Camino Project (Primary Case File No. DRC2023-00067)	The project consists of the following two options on a 30.11 acre-site: 1) demolishing 175,685 square feet of existing structures and constructing 992,331 square feet of buildings; or 2) demolishing 237,895 square feet of existing structures, redeveloping 32,890 square feet of remaining structures, and constructing a 40,085 square foot beverage distribution facility. The project is located near the northeast corner of Haven Avenue and 6th Street. Reference SBC230823-07  <a href="https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/october-2023/SBC230920-09.pdf">https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/october-2023/SBC230920-09.pdf</a>  Comment Period: 9/14/2023 - 10/14/2023 Public Hearing: 9/28/2023	Revised Notice of Preparation	City of Rancho Cucamonga	South Coast AQMD staff commented on 10/14/2023

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**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<p><i>Waste and Water-related</i>  <b>LAC230920-12</b>                      F.E. Weymouth Water Treatment Plant and La Verne Site Improvements Program</p>	<p>The project consists of improving four existing facilities, constructing a 60,000 square foot warehouse, and constructing a 35,000 square foot engineering building on 135 acres. The project is located near the northwest corner of Wheeler Avenue and 5th Street in La Verne. Reference LAC221213-09</p> <p>Staff previously provided comments on the Notice of Preparation for the project, which can be accessed at: <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/january-2023/LAC221213-09.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/january-2023/LAC221213-09.pdf</a>.</p> <p style="text-align: center;">Comment Period: 9/18/2023- 11/2/2023 <span style="float: right;">Public Hearing: 10/4/2023</span></p>	Draft Program Environmental Impact Report	Metropolitan Water District of Southern California	Document reviewed - No comments sent for this document received
<p><i>Waste and Water-related</i>  <b>ODP230905-04</b>                      Otay Ranch Village 3</p>	<p>The project consists of installing a Sub-Slab Ventilation (SSV) with a Vapor Barrier to address soil contaminated with methane and volatile organic compounds (VOC) on 9.73 acres. The project is located near the northeast corner of Heritage Road and Paseo Cultura in Chula Vista. Reference ODP230621-09</p> <p>Staff previously provided comments on the Draft Removal Action Workplan for the project, which can be accessed at: <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/july-2023/ODP230621-09.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/july-2023/ODP230621-09.pdf</a>.</p> <p style="text-align: center;">Comment Period: N/A <span style="float: right;">Public Hearing: N/A</span></p>	Response to Comments	Department of Toxic Substances Control	Under review, may submit written comments
<p><i>Waste and Water-related</i>  <b>ORC230926-01</b>                      Sunrise Village</p>	<p>The project consists of modifying the cleanup plan based on input received from the community and interested public which includes: 1) a summary section providing clear information on areas of question and concerns, 2) safety measures to manage dust and monitor air, and 3) safety measures to make sure that the Vapor Intrusion Mitigation system is monitored and tested to ensure it remains protective in the long-term. The project is located at 1801 North Euclid Street near the southwest corner of Rosecrans Avenue and Euclid Street in Fullerton. Reference ORC230628-10</p> <p>Staff previously provided comments on the Draft Response Plan for the project, which can be accessed at: <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/july-2023/ORC230628-10.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/july-2023/ORC230628-10.pdf</a>.</p> <p style="text-align: center;">Comment Period: N/A <span style="float: right;">Public Hearing: N/A</span></p>	Response to Comments	Department of Toxic Substances Control	Document reviewed - No comments sent for this document received

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**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Waste and Water-related</i> <b>ORC230927-11</b> Increase in Maximum Daily Operations at Prima Deshecha Landfill	The project consists of increasing the permitted daily maximum tonnage of waste received at the Landfill from 4,000 tons per day (TPD) to 8,000 TPD and allowing 36 operational emergency days on which the 8,000 TPD limit could be exceeded on 1,530 acres. The project is located at 32250 La Pata Avenue near the southeast corner of La Pata Avenue and Stallion Ridge in San Juan Capistrano.  Comment Period: 9/27/2023 - 10/27/2023 Public Hearing: N/A	Notice of Preparation	County of Orange Waste & Recycling	Under review, may submit written comments
<i>Waste and Water-related</i> <b>RVC230901-08</b> Water Reclamation Plant (WRP) No. 7 Phase 1 Non-Potable Water Improvement	The project consists of improving the processes of an existing tertiary treatment plant and canal pump station at WRP No. 7. The project is located near the northwest corner of Madison Street and Lindy Lane in the City of Indio.  Comment Period: 8/21/2023 - 9/19/2023 Public Hearing: 10/10/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	Coachella Valley Water District	Document reviewed - No comments sent for this document received
<i>Waste and Water-related</i> <b>RVC230913-07</b> Pettit Water Storage Tank Expansion and Transmission Pipeline Project	The project consists of demolishing one existing two million gallon capacity storage tank and constructing two new 4.5 million gallon capacity storage tanks. The project is located near the northwest corner of Moreno Beach Drive and Cottonwood Avenue in Moreno Valley. Reference RVC221201-02  Comment Period: 9/11/2023 - 10/25/2023 Public Hearing: N/A	Draft Environmental Impact Report	Eastern Municipal Water District	Document reviewed - No comments sent for this document received
<i>Waste and Water-related</i> <b>RVC230920-11</b> Canyon Lake Water Treatment Plant Phase I Improvements Project	The project consists of demolishing an existing intake pump station, static mixers, a clarifier, and a chemical feed area. The project also consists of constructing an intake pump station, static mixers and sedimentation/flocculation basins, associated equipment, pump stations, and chemical and maintenance buildings. The project borders the City of Lake Elsinore on the southern end of Canyon Lake and is located in Canyon Lake.  <a href="https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/october-2023/RVC230920-11.pdf">https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/october-2023/RVC230920-11.pdf</a>  Comment Period: 9/13/2023 - 10/12/2023 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	Elsinore Valley Municipal Water District	South Coast AQMD staff commented on 10/12/2023

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Notes:  
1. Disposition may change prior to Governing Board Meeting  
2. Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.



**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Institutional (schools, government, etc.)</i> <b>LAC230913-08</b> La Brea Tar Pits Master Plan Project	The project consists of renovating existing structures and constructing a 40,000 square foot museum on 13 acres. The project is located 5801 Wilshire Boulevard on the northwest corner of Wilshire Boulevard and South Curson Avenue in the community of Miracle Mile. Reference LAC220217-05  Staff previously provided comments on the Notice of Preparation for the project, which can be accessed at: <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/march/LAC220217-05.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/march/LAC220217-05.pdf</a> .  Comment Period: 9/11/2023 - 10/26/2023 Public Hearing: 9/30/2023	Draft Environmental Impact Report	County of Los Angeles	Document reviewed - No comments sent for this document received
<i>Institutional (schools, government, etc.)</i> <b>LAC230913-10</b> Roosevelt Elementary School Campus Master Plan Project	The project consists of demolishing six buildings and twelve portables and constructing five new buildings totaling 33,700 square feet. The project also includes one building addition and renovating three buildings and outdoor areas. The project is located at 801 Montana Avenue, and the boundaries are 9th Street to the north, Montana Avenue to the east, Lincoln Boulevard to the south, and Alta Avenue to the west in Santa Monica.  Comment Period: 9/11/2023 - 10/11/2023 Public Hearing: 9/27/2023	Notice of Preparation	Santa Monica-Malibu Unified School District	Document reviewed - No comments sent for this document received
<i>Institutional (schools, government, etc.)</i> <b>LAC230920-03</b> Malibu Middle and High School Campus Specific Plan	The project consists of modifying the City's Local Coastal Program Amendment. The project is located at 30215 Morning View Drive near the southeast corner of Via Cabrillo and Morning View Drive in Malibu. Reference LAC220601-04, LAC211019-05 and LAC200820-01  Comment Period: 9/20/2023 - 10/9/2023 Public Hearing: 10/9/2023	Other	Santa Monica-Malibu Unified School District	Document reviewed - No comments sent for this document received

Key:

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Notes:

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**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Retail</b> <b>SBC230913-09</b> Reche Canyon Plaza	The project consists of constructing a 3,574 square foot fueling station with six fueling dispensers, a 3,000 square foot convenience store, a 9,800 square foot retail space, and a 1,750 square foot drive-through car wash. The project is located at 2501 Reche Canyon Drive and west and south of the intersection of Reche Canyon Road and Shadid Drive. Reference SBC190402-07  Staff previously provided comments on the Notice of Preparation for the project, which can be accessed at: <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/april/SBC190402-07.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/april/SBC190402-07.pdf</a> .  Comment Period: 9/9/2023- 10/24/2023 <span style="float: right;">Public Hearing: N/A</span>	Draft Environmental Impact Report	City of Colton	Document reviewed - No comments sent for this document received
<b>General Land Use (residential, etc.)</b> <b>LAC230901-05</b> Griswold Residential	The project consists of constructing 68 residential units on 9.61 acres. The project is located at 16209 East San Bernardino Road near the northwest corner of East San Bernardino Road and North Hartley Avenue in East Irwindale. Reference LAC230613-11 and LAC220201-09  Comment Period: N/A <span style="float: right;">Public Hearing: 9/27/2023</span>	Final Environmental Impact Report	County of Los Angeles	Document reviewed - No comments sent for this document received
<b>General Land Use (residential, etc.)</b> <b>LAC230901-11</b> 5700 Hannum Avenue Mixed-Use Residential and Commercial Project	The project consists of demolishing a 30,672 square foot office building and constructing 309 residential units and 5,600 square feet of retail use on 2.23 acres. The project is located near the southwest corner of Buckingham Parkway and Hannum Avenue.  Comment Period: 8/29/2023- 9/28/2023 <span style="float: right;">Public Hearing: 9/12/2023</span>	Notice of Preparation	City of Culver City	Document reviewed - No comments sent for this document received

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**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>General Land Use (residential, etc.)</b> <b>LAC230927-06</b> Artesia Place Project (Artesia Boulevard Corridor Specific Plan Amendment)	The project consists of constructing 80 residential units, 11,257 square feet of commercial uses, and 39,803 square feet of open space on 3.3 acres. The project is located at 11709 Artesia Boulevard on the northeast corner of Artesia Boulevard and Alburdis Avenue. Reference LAC230329-03 and ORC220816-01  Comment Period: 9/21/2023 - 11/6/2023 Public Hearing: N/A	Partially Recirculated Draft Environmental Impact Report	City of Artesia	Document reviewed - No comments sent for this document received
<b>General Land Use (residential, etc.)</b> <b>ORC230906-15</b> Hills Preserve Project	The project consists of constructing 504 residential units and 400,752 square feet of commercial uses on 76.2 acres. The project is located near the southwest corner of East Santa Ana Canyon Road and South Festival Drive.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/ORC230906-15.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/ORC230906-15.pdf</a>  Comment Period: 8/24/2023 - 9/25/2023 Public Hearing: 9/7/2023	Notice of Preparation	City of Anaheim	South Coast AQMD staff commented on 9/25/2023
<b>General Land Use (residential, etc.)</b> <b>ORC230906-17</b> Vesting Tentative Tract Map No. 19164 – City Ventures Development (14042 Newport Avenue (APNS: 432-074-07, -08, -09)	The project consists of subdividing three existing parcels into one for constructing one residential unit. The project is located at 14042 Newport Avenue near the southwest corner of Newport Avenue and El Camino Real.  Comment Period: 8/29/2023 - 9/14/2023 Public Hearing: N/A	Other	City of Tustin	Document reviewed - No comments sent for this document received
<b>General Land Use (residential, etc.)</b> <b>RVC230901-03</b> General Plan Amendment (PEN20-0095), Change of Zone (PEN20-0096), Conditional Use Permit for a Planned Unit Development (PEN21-0066), and Tentative Tract Map No. 38459 (PEN22-0127)	The project consists of a subdivision of 32.56 acres into 16.59 acres for 108 residential units, 15.97 acres for an additional 108 residential units, and 0.89 acre for a park. The project is located near the northeast corner of Morton Road and Jennings Court. Reference RVC230308-06  Comment Period: N/A Public Hearing: N/A	Notice of Intent to Adopt a Mitigate Negative Declaration	City of Moreno Valley	Document reviewed - No comments sent for this document received

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ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW  
September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>General Land Use (residential, etc.)</i> <b>RVC230906-18</b> City of Wildomar Proposed General Plan	The project consists of the City's General Plan for developing policies, goals, and guidelines for housing, land use, transportation, and economic development elements with a planning horizon of 2040, which includes constructing 8,992 residential units and 2,965,538 square feet of non-residential uses. The project encompasses 15,170 acres and boundaries include Canyon Lake to the north, Interstate 215 to the west, La Cresta and Murrieta to the south, and Lakeland Village to the west.  Comment Period: 9/7/2023 - 10/6/2023 Public Hearing: 9/25/2023	Notice of Preparation	City of Tustin	Document reviewed - No comments sent for this document received
<i>General Land Use (residential, etc.)</i> <b>RVC230912-01</b> Planning Case PR-2023-001532 (DR)	The project consists of constructing a 7,533 square foot residential unit with 951 square feet of attached Accessory Dwelling Units (ADU) on 0.76 acre. The project is located on the northwest corner of Pinnacle Ridge Road and Chateau Ridge Lane.  Comment Period: 9/12/2023 - 9/26/2023 Public Hearing: N/A	Site Plan	City of Riverside	Document reviewed - No comments sent for this document received
<i>General Land Use (residential, etc.)</i> <b>RVC230920-01</b> Plot Plan (PEN21-0250) Tentative Parcel Map (PEN21-0251)	The project consists of proposing a Plot Plan for 64 residential units and a Tentative Parcel Map to subdivide 8.99 acres into two parcels. The project is located near the northeast corner of Alessandro Boulevard and Flaming Arrow Drive. Reference RVC230906-04  Comment Period: 9/20/2023 - 9/28/2023 Public Hearing: 9/28/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Moreno Valley	Document reviewed - No comments sent for this document received
<i>General Land Use (residential, etc.)</i> <b>RVC230920-05</b> Xenia Multi-Family Residential Project	The project consists of constructing 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 RVC220706-01 and RVC220301-08  Comment Period: 9/13/2023 - 10/13/2023 Public Hearing: 10/25/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Beaumont	Document reviewed - No comments sent for this document received

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**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b><i>General Land Use (residential, etc.)</i></b> <b>RVC230920-14</b> Planning Case PR-2022-001293	The project consists of subdividing 5.74 acres into four parcels for future residential development and proposing an exception to allow grading within the Prenda Arroyo. The project is located near the southeast corner of Alpine Meadows Lane and Harbart Drive.  <div style="text-align: center;">             Comment Period: 9/15/2023 - 10/4/2023                      Public Hearing: N/A           </div>	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Riverside	Document reviewed - No comments sent for this document received
<b><i>General Land Use (residential, etc.)</i></b> <b>SBC230926-02</b> Master Case No. 22-037, General Amendment No. 22-005, Zone Change No. 22-006, Zone Change No. 22-007, and Design Review No. 22-020	The project consists of constructing 24 residential units on 0.9 acre. The project is located near the southeast corner of Foothill Boulevard and Banana Avenue.  <div style="text-align: center;">             Comment Period: 9/26/2023 - 10/17/2023                      Public Hearing: 10/17/2023           </div>	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Fontana	Document reviewed - No comments sent for this document received
<b><i>Plans and Regulations</i></b> <b>LAC230901-04</b> City of Malibu Local Coastal Program Amendment No. LCP-4-MAL-22-0043-1 (MMHS Campus Specific Plan)	The project consists of amending the Land Use Plan and Local Implementation Plan to incorporate redevelopment of a campus. The project is located north of Morning View Drive and east of Via Cabrillo in Malibu.  <div style="text-align: center;">             Comment Period: N/A    Public Hearing: 9/8/2023           </div>	Other	California Coastal Commission	Document reviewed - No comments sent for this document received

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 Notes:  
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**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Plans and Regulations</i> <b>RVC230906-13</b> Redhawk Specific Plan Amendment /PA23-0327	The project consists of amending the Redhawk Specific Plan to provide a revision to uses associated with a golf course and add related standards for those uses. The project is located at 45100 Temecula Parkway.  Comment Period: N/A Public Hearing: N/A	Other	City of Temecula	Document reviewed - No comments sent for this document received
<i>Plans and Regulations</i> <b>RVC230920-02</b> PEN23-0031	The project consists of subdividing 887.3 acres into 14 parcels. The project is located near the southeast corner of Eucalyptus Avenue and Redlands Boulevard.  Comment Period: 9/20/2023 - 9/28/2023 Public Hearing: 9/28/2023	Other	City of Moreno Valley	Document reviewed - No comments sent for this document received
<i>Plans and Regulations</i> <b>SBC230927-04</b> MCN23-0092: General Plan Amendment (GPA23-0003), Zoning District Map Amendment (ZCA23-0004), and Development Code Amendment (ZCA23-0005)	The project consists of redesignating eight parcels from Open Space to Light Industrial and adding an Emergency Shelter Overlay District. The project is located near the southwest corner of Arrow Boulevard and Tokay Avenue.  Comment Period: 9/22/2023 - 10/17/2023 Public Hearing: 10/17/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Fontana	Document reviewed - No comments sent for this document received

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**ATTACHMENT B  
ACTIVE PROJECTS WITH CONTINUED REVIEW OF ENVIRONMENTAL DOCUMENTS PREPARED BY  
OTHER PUBLIC AGENCIES**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Medical Facility</b>  <b>ORC230815-01</b> Spinal Cord Injury and Physical Medicine and Rehabilitation Building at the Tibor Rubin VA Medical Center, Long Beach, California	The project consists of constructing a 460,000 square foot medical facility. The project is located north of Army Way and south of Navy Way at 5901 East Seventh Street in Long Beach.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/ORC230815-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/ORC230815-01.pdf</a> Comment Period: 8/10/2023 - 9/8/2023                                      Public Hearing: N/A	Notice of Scoping and Preparation of an Environmental Assessment	United States Department of Veterans Affairs	South Coast AQMD staff commented on 9/8/2023
<b>General Land Use (residential, etc.)</b>  <b>LAC230809-09</b> Master Case 23-118: Sunridge Specific Plan One-Stop Review	The project consists of constructing 226,000 square feet of commercial use, 2,900,000 square feet of business park, 6,550 residential units, an amphitheater, and 665 acres of recreational use. The project is located east of Railroad Avenue, south of Soledad Canyon Road, and west of Golden Valley.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230809-09.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230809-09.pdf</a> Comment Period: 8/9/2023 - 9/1/2023                                      Public Hearing: N/A	Site Plan	City of Santa Clarita	South Coast AQMD staff commented on 9/1/2023
<b>General Land Use (residential, etc.)</b>  <b>RVC230823-14</b> Belago Park Project (PEN 21-0145, PEN 21-0238, PEN 21-0239, PEN-0240, PEN21-0243, PEN21-0244)	The project consists of subdividing 32.34 acres and construction of 310 residential units. The project is located near the northeast corner of Redlands Boulevard and Cactus Avenue. Reference RVC230802-04  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/RVC230823-14.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/RVC230823-14.pdf</a> Comment Period: 8/23/2023 - 9/15/2023                                      Public Hearing: 8/30/2023	Notice of Preparation	City of Moreno Valley	South Coast AQMD staff commented on 9/15/2023
<b>Plans and Regulations</b>  <b>LAC230726-04</b> Cornfield Arroyo Seco Specific Plan	The project consists of updating land use and zoning regulations, incentives, and boundaries for the future construction of residential units on 600 acres. The project boundaries are Cypress Park to the north, Lincoln Heights to the east, Main Street to the south, and Chinatown to the west. Reference LAC210420-02  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230726-04.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230726-04.pdf</a> Comment Period: 7/20/2023 - 9/18/2023                                      Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	South Coast AQMD staff commented on 9/15/2023

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**ATTACHMENT B**  
**ACTIVE PROJECTS WITH CONTINUED REVIEW OF ENVIRONMENTAL DOCUMENTS PREPARED BY**  
**OTHER PUBLIC AGENCIES**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Plans and Regulations</i> <b>LAC230726-06</b> South Pasadena General Plan and Downtown Specific Plan Update, and 2021-2029 Housing Element#	The project consists of updating the City's General Plan Housing Element to demonstrate there is sufficient capacity to construct 2,775 residential units on 2,272 acres of planning area. The project boundaries are Pasadena to the north, San Marino to the east, Alhambra to the south, and Los Angeles to the southwest within the designated AB 617 East Los Angeles, Boyle Heights, West Commerce community. Reference LAC210422-01 and LAC180202-01 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230726-06.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230726-06.pdf</a>	Draft Program Environmental Impact Report	City of South Pasadena	South Coast AQMD staff commented on 9/6/2023
	Comment Period: 7/24/2023 - 9/6/2023		Public Hearing: 8/8/2023	

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**ATTACHMENT C**  
**PROPOSED AIR PERMIT PROJECTS FOR**  
**WHICH SOUTH COAST AQMD IS CEQA LEAD**  
**AGENCY THROUGH SEPTEMBER 30, 2023**

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
<p>Quemetco is proposing to modify existing South Coast AQMD permits to allow the facility to recycle more batteries and to eliminate the existing daily idle time of the furnaces. The proposed project will increase the rotary feed drying furnace feed rate limit from 600 to 750 tons per day and increase the amount of total coke material allowed to be processed. In addition, the project will allow the use of petroleum coke in lieu of or in addition to calcined coke, and remove one existing emergency diesel-fueled internal combustion engine (ICE) and install two new emergency natural gas-fueled ICEs.</p>	<p>Quemetco</p>	<p>Environmental Impact Report (EIR)</p>	<p>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.</p> <p>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.</p> <p>After the Draft EIR public comment and review period closed, Quemetco submitted additional applications for other permit modifications which are also being evaluated by staff.</p>	<p>Trinity Consultants</p>
<p>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.</p>	<p>Sunshine Canyon Landfill</p>	<p>Subsequent Environmental Impact Report (SEIR)</p>	<p>South Coast AQMD staff reviewed and provided comments on the preliminary air quality analysis, health risk assessment (HRA), and Preliminary Draft SEIR which are currently being addressed by the consultant.</p>	<p>SCS Engineers</p>
<p>Tesoro is proposing to modify its Title V permit to: 1) add gas oil as a commodity that can be stored in three of the six new crude oil storage tanks at the Carson Crude Terminal (previously assessed in the May 2017 Final EIR); and 2) drain, clean and decommission Reservoir 502, a 1.5 million barrel concrete lined, wooden-roof topped reservoir used to store gas oil.</p>	<p>Tesoro Refining &amp; Marketing Company, LLC (Tesoro)</p>	<p>Addendum to the Final Environmental Impact Report (EIR) for the May 2017 Tesoro Los Angeles Refinery Integration and Compliance Project (LARIC)</p>	<p>The consultant provided a Preliminary Draft Addendum, which is undergoing South Coast AQMD staff review.</p>	<p>Environmental Audit, Inc.</p>

[↑ Back to Agenda](#)

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 11

REPORT: Rule and Control Measure Forecast

SYNOPSIS: This report highlights South Coast AQMD rulemaking activities and public hearings scheduled for 2023 and tentative calendar for portions of 2024.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Wayne Natri  
Executive Officer

SLR:MK:IM:JA:ZS

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### **2023 MASTER CALENDAR**

The 2023 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 an AQMP, either the 2016 AQMP or 2022 AQMP, when adopted, Toxics, AB 617 (for BARCT) or measures identified in an AB 617 Community Emission Reduction Plan (CERP), SIP to address comments or actions from U.S. EPA for a rule that is in an approved SIP, or Other. Rulemaking efforts that are noted for implementation of the 2016 AQMP or 2022 AQMP when adopted, 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.

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.



## 2023 MASTER CALENDAR

Month	Title and Description	Type of Rulemaking
December		
1405*	<p><b>Control of Ethylene Oxide Emissions from Sterilization and Related Operations</b></p> <p>Amendments needed to address ethylene oxide emissions from sterilization of medical equipment.</p> <p><i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics

\* *Potentially significant hearing*

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

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

## TENTATIVE 2024 CALENDAR

Month	Title and Description	Type of Rulemaking
1 <sup>st</sup> Quarter		
1118 <sup>*+</sup>	<p><b>Control of Emissions from Refinery Flares</b>  Proposed Amended Rule 1118 will seek to incorporate provisions to further reduce flaring at refineries, for clean service flares, and facility thresholds. Other amendments to improve clarity and to remove obsolete provisions.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 CERP
1135 <sup>+</sup>	<p><b>Emissions of Oxides of Nitrogen from Electricity Generating Facilities</b>  Proposed Amended Rule 1135 will modify provisions for electricity generating units at Santa Catalina Island to reflect a revised BARCT assessment.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 BARCT
1146.2 <sup>#+</sup>	<p><b>Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters</b>  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.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 BARCT
1148.1 <sup>*+</sup>	<p><b>Oil and Gas Production Wells</b>  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.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other/ AB 617 CERP
1159.1 <sup>#</sup>	<p><b>Control of NOx Emissions from Nitric Acid Tanks</b>  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.  <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	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 2024 CALENDAR (Continued)**

Month	Title and Description	Type of Rulemaking
<b>1<sup>st</sup> Quarter</b> (Continued)		
1180	<p><b>Petroleum Refinery and Related Operations Fenceline and Community Air Monitoring</b></p> <p>Rule 1180 will be amended to consider expanding the target list of compounds to include compounds identified in the OEHHA’s updated priority list published in 2019.</p> <p><i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
1180.1	<p><b>Other Refinery Fenceline and Community Monitoring</b></p> <p>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.</p> <p><i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
Regulation XIII <sup>*#</sup>	<p><b>New Source Review</b></p> <p>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.</p> <p><i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
Regulation XX <sup>*#</sup>	<p><b>RECLAIM</b></p> <p>Proposed Amended Regulation XX will address the transition of NOx RECLAIM facilities to a command-and-control regulatory structure.</p> <p><i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
2306 <sup>+*</sup>	<p><b>New Intermodal Railyard Indirect Source Rule</b></p> <p>Proposed Rule 2306 will establish requirements for new intermodal railyards to minimize emissions from indirect sources associated with new railyards.</p> <p><i>Elaine Shen 909.396.2715; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 CERP
<b>2<sup>nd</sup> Quarter</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
317	<p><b>Clean Air Act Non-Attainment Fees</b></p> <p>Proposed amendments may be needed to modify CAA Section 185 fees for non-attainment.</p> <p><i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	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 2024 CALENDAR (Continued)**

Month	Title and Description	Type of Rulemaking
2 <sup>nd</sup> Quarter (Continued)		
1151	<p><b>Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations</b>                      Proposed Amended Rule 1151 will provide clarifications of current requirements and amend provisions to address implementation issues.</p> <p><i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other/ AB 617 CERP
1173 <sup>+</sup>	<p><b>Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants</b>                      Proposed Amended Rule 1173 will further reduce emissions from petroleum and chemical plants by requiring early leak detection approaches.</p> <p><i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 CERP
1435*	<p><b>Control of Toxic Air Contaminant Emissions from Metal Heating Operations</b>                      Proposed Rule 1435 will establish requirements to reduce point source and fugitive toxic air contaminants including hexavalent chromium emissions from heat treating processes. Proposed Rule 1435 will also include monitoring, reporting, and recordkeeping requirements.</p> <p><i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 CERP
1445*	<p><b>Control of Toxic Emissions from Laser Arc Cutting</b>                      Proposed Rule 1445 will establish requirements to reduce hexavalent chromium and other metal toxic air contaminant particulate emissions from laser arc cutting.</p> <p><i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
2304* <sup>+</sup>  316.1	<p><b>Indirect Source Rule for Commercial Marine Ports – Container Terminals Fees for Rule 2304</b>                      Proposed Rule 2304 will establish requirements to reduce emissions from indirect sources related to marine ports. Proposed Rule 316.1 will establish fees to recover the South Coast AQMD’s anticipated cost of implementing Proposed Rule 2304.</p> <p><i>Elaine Shen 909.396.2715; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 CERP

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

## 2023 To-Be-Determined

2023	Title and Description	Type of Rulemaking
102	<p><b>Definition of Terms</b> Proposed amendments may be needed to update and add definitions, and potentially modify exemptions. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
103	<p><b>Definition of Geographical Areas</b> Proposed amendments are needed to update geographic areas to be consistent with state and federal references to those geographic areas. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
209	<p><b>Transfer and Voiding of Permits</b> Proposed amendments may be needed to clarify requirements for change of ownership and permits and the assessment of associated fees. <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
223	<p><b>Emission Reduction Permits for Large Confined Animal Facilities</b> Proposed Amended Rule 223 will seek additional ammonia emission reductions from large, confined animal facilities by lowering the applicability threshold. Proposed amendments will implement BCM-04 in the 2016 AQMP. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
403	<p><b>Fugitive Dust</b> Proposed Amended Rule 403 will seek to remove outdated provisions and add clarification of existing provisions to enhance compliance. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
403.1	<p><b>Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources</b> Proposed Amended Rule 403.1 would clarify existing requirements for dust control and remove outdated provisions contained in supporting documents for Rule 403.1. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
407 <sup>#</sup>	<p><b>Liquid and Gaseous Air Contaminants</b> 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. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT

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<sup>#</sup> Part of the transition of RECLAIM to a command-and-control regulatory structure

**2023 To-Be-Determined (Continued)**

2023	Title and Description	Type of Rulemaking
410	<p><b>Odors from Transfer Stations and Material Recovery Facilities</b>  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.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
425	<p><b>Odors from Cannabis Processing</b>  Proposed Rule 425 will establish requirements for control of odors from cannabis processing.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
430	<p><b>Breakdown Provisions</b>  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.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	RECLAIM / Other
431.1 <sup>#</sup>	<p><b>Sulfur Content of Gaseous Fuels</b>  Proposed Amended Rule 431.1 will assess exemptions, including RECLAIM, and update other provisions, if needed.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT/ AB 617 CERP
431.2 <sup>#</sup>	<p><b>Sulfur Content of Liquid Fuels</b>  Proposed Amended Rule 431.2 will assess exemptions, including RECLAIM, and update other provisions, if needed.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT/ AB 617 CERP
431.3 <sup>#</sup>	<p><b>Sulfur Content of Fossil Fuels</b>  Proposed Amended Rule 431.3 will assess exemptions, including RECLAIM, and update other provisions, if needed.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT/ AB 617 CERP
444	<p><b>Open Burning</b>  Amendments may be needed to clarify existing provisions.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
445 <sup>*</sup>	<p><b>Wood Burning Devices</b>  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.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP

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## 2023 To-Be-Determined (Continued)

2023	Title and Description	Type of Rulemaking
461	<p><b>Gasoline Transfer and Dispensing</b> Amendments to Rule 461 may be needed to address potential regulatory gaps. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
461.1	<p><b>Gasoline Transfer and Dispensing for Mobile Fueling Operations</b> Amendments to Rule 461.1 may be needed to address new information or to improve implementation since this is a newly adopted rule. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
462	<p><b>Organic Liquid Loading</b> Proposed Amended Rule 462 will incorporate the use of advanced techniques to detect fugitive emissions and Facility Vapor Leak. Other amendments may be needed to streamline implementation and add clarity. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
468 <sup>#</sup>	<p><b>Sulfur Recovery Units</b> Proposed Amended Rule 468 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT
469 <sup>#</sup>	<p><b>Sulfuric Acid Units</b> Proposed Amended Rule 469 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT
1101 <sup>#</sup>	<p><b>Secondary Lead Smelters/Sulfur Oxides</b> Proposed Amended Rule 1101 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT

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

## 2023 To-Be-Determined (Continued)

2023	Title and Description	Type of Rulemaking
1102	<p><b>Dry Cleaners Using Solvent Other Than Perchloroethylene</b>  Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 CERP
1105 <sup>#</sup>	<p><b>Fluid Catalytic Cracking Units SOx</b>  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.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT/ AB 617 CERP
1107	<p><b>Coating of Metal Parts and Products</b>  Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1108	<p><b>Cutback Asphalt</b>  Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1108.1	<p><b>Emulsified Asphalt</b>  Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1110.2* <sup>+#</sup>	<p><b>Emissions from Gaseous- and Liquid-Fueled Engines</b>  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.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 BARCT

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



## 2023 To-Be-Determined (*Continued*)

2023	Title and Description	Type of Rulemaking
1110.4 1401 1470	<p><b>Emissions from Emergency Generators</b>  <b>New Source Review of Toxic Air Contaminants</b>  <b>Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines</b></p> <p>Proposed Rule 1110.4 and Proposed Amended Rule 1470 will establish and revise rule provisions to reduce NO<sub>x</sub>, CO, and PM emissions from emergency generators. Proposed Amended Rule 1401 will remove the exemption for emergency generators and therefore require a demonstration that risk thresholds are not exceeded in order to obtain a permit.</p> <p><i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1111	<p><b>Reduction of NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces</b></p> <p>Proposed Amended Rule 1111 will implement the 2022 control measure requiring zero emission residential space heating.</p> <p><i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
1113	<p><b>Architectural Coatings</b></p> <p>Proposed amendments may be needed to address delisted compounds and other amendments to improve clarity and to remove obsolete provisions.</p> <p><i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
1114	<p><b>Petroleum Refinery Coking Operations</b></p> <p>Proposed Amended Rule 1114 will seek to add notification requirements when coke particles, liquid and/or gas is ejected from the coke drum during cutting.</p> <p><i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
1119 <sup>#</sup>	<p><b>Petroleum Coke Calcining Operations – Oxides of Sulfur</b></p> <p>Proposed Amended Rule 1119 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements.</p> <p><i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 BARCT/ AB 617 CERP

\* *Potentially significant hearing*

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

<sup>#</sup> *Part of the transition of RECLAIM to a command-and-control regulatory structure*

## 2023 To-Be-Determined (Continued)

2023	Title and Description	Type of Rulemaking
1121*	<p><b>Control of Nitrogen Oxides from Residential Type, Natural-Gas-Fired Water Heaters</b></p> <p>Proposed amendments may be needed to further reduce NOx emissions from water heaters.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
1122	<p><b>Solvent Degreasers</b></p> <p>Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1124	<p><b>Aerospace Assembly and Component Manufacturing Operations</b></p> <p>Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1125	<p><b>Metal Container, Closure, and Coil Coating Operations</b></p> <p>Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1126	<p><b>Magnet Wire Coating Operations</b></p> <p>Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1128	<p><b>Paper, Fabric, and Film Coating Operations</b></p> <p>Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other

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

## 2023 To-Be-Determined (Continued)

2023	Title and Description	Type of Rulemaking
1130	<p><b>Graphic Arts</b> Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1130.1	<p><b>Screen Printing Operations</b> Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1133.3	<p><b>Emission Reductions from Greenwaste Composting Operations</b> Proposed Amended Rule 1133.3 will seek additional VOCs and ammonia emission reductions from greenwaste and foodwaste composting. Proposed amendments will implement BCM-10 in the 2016 AQMP. <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
1136	<p><b>Wood Products Coatings</b> Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1138 <sup>+</sup>	<p><b>Control of Emissions from Restaurant Operations</b> Proposed Amended Rule 1138 will further reduce emissions from underfired charboilers. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
1142	<p><b>Marine Tank Vessel Operations</b> Proposed Amended Rule 1142 will address VOC and hydrogen sulfide emissions from marine tank vessel operations, applicability, noticing requirements, and provide clarifications. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
1143	<p><b>Consumer Paint Thinners and Multi-Purpose Solvents</b> Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other

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

## 2023 To-Be-Determined (Continued)

2023	Title and Description	Type of Rulemaking
1144	<p><b>Metalworking Fluids and Direct-Contact Lubricants</b> Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1145	<p><b>Plastic, Rubber, Leather, and Glass Coatings</b> Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1146	<p><b>Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters</b> Proposed amendments to Rule 1146 may be needed to incorporate comments from U.S. EPA. <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
1146.1 <sup>#</sup>	<p><b>Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters</b> Proposed amendments to Rule 1146.1 may be needed to clarify provisions for industry-specific categories and to incorporate comments from U.S. EPA. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
1162	<p><b>Polyester Resin Operations</b> Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity. <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1165	<p><b>Control of Emissions from Incinerators</b> Proposed Rule 1165 will establish emission standards, source testing, and monitoring, recordkeeping, and reporting requirements for incinerators. <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
1166	<p><b>Volatile Organic Compound Emissions from Decontamination of Soil</b> Proposed Amended Rule 1166 will update requirements, specifically concerning notifications and usage of mitigation plans (site specific versus various locations). <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other

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**2023 To-Be-Determined (Continued)**

2023	Title and Description	Type of Rulemaking
1171	<p><b>Solvent Cleaning Operations</b>  Proposed Amendments to Rule 1171 may be needed to address certain exempt chemicals and compliance issues.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ Other
1174	<p><b>Control of Volatile Organic Compound Emissions from the Ignition of Barbecue Charcoal</b>  Proposed amendments may be needed to address certain exempt compounds, VOC limits for certain applications, and other amendments to improve clarity.  <i>Heather Farr 909.396.3672; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ Other
1176	<p><b>VOC Emissions from Wastewater Systems</b>  Proposed Amended Rule 1176 will clarify the applicability of the rule to include bulk terminals under definition of “Industrial Facilities,” and streamline and clarify provisions.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other/ AB 617 CERP
1186.1, 1191, 1192, 1193, 1194, 1195, 1196* <sup>+</sup>	<p><b>Fleet Rules</b>  Proposed amendments to Rules 1186.1, 1191, 1192, 1193, 1194, 1195, 1196 will seek to align South Coast AQMD fleet rules with CARB’s final Advanced Clean Fleets should it be adopted.  <i>Vicki White 909.396.3436; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ Other
1403*	<p><b>Asbestos Emissions from Demolition/Renovation Activities</b>  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.  <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1404	<p><b>Hexavalent Chromium Emissions from Cooling Towers</b>  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.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ AQMP

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

**2023 To-Be-Determined (Continued)**

2023	Title and Description	Type of Rulemaking
1411	<p><b>Recovery or Recycling of Refrigerants from Motor Vehicle Air Conditioners</b>                      Proposed Amended Rule 1411 seeks amendments to coincide with Section 609 of the Clean Air Act .  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1415 1415.1	<p><b>Reduction of Refrigerant Emissions from Stationary Air Conditioning Systems, and Reduction of Refrigerant Emissions from Stationary Refrigeration Systems</b>                      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.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Other
1420	<p><b>Emissions Standard for Lead</b>                      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.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1420.1	<p><b>Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities</b>                      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.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1420.2	<p><b>Emission Standards for Lead from Metal Melting Facilities</b>                      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.  <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics

\* Potentially significant hearing

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

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

## 2023 To-Be-Determined (*Continued*)

2023	Title and Description	Type of Rulemaking
1420.3	<p><b>Emissions Standards for Lead from Firing Ranges</b>  <b>Proposed Rule 1420.3 will establish requirements to address lead emissions from firing ranges.</b>  <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Others
1426.1	<p><b>Hexavalent Chromium Emissions from Metal Finishing Operations</b>  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.  <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1430	<p><b>Control of Emissions from Metal Grinding Operations at Metal Forging Facilities</b>  <b>Amendments to Rule 1430 may be needed to further reduce emissions and odors from metal grinding and metal cutting operations at metal forging facilities.</b>  <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AB 617 CERP
1450*	<p><b>Control of Methylene Chloride Emissions</b>  Proposed Rule 1450 will reduce methylene chloride emissions from furniture stripping and establish monitoring, reporting, and recordkeeping requirements.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1455	<p><b>Control of Hexavalent Chromium Emissions from Torch Cutting and Welding</b>  Proposed Rule 1455 will establish requirements to reduce hexavalent chromium emissions from torch cutting and welding of chromium alloys.  <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics/ AB 617 CERP
1466	<p><b>Control of Particulate Emissions from Soils with Toxic Air Contaminants</b>  Amendments may be needed to residential cleanup projects.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1466.1	<p><b>Control of Particulate Emissions from Demolition of Buildings</b>  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.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics

\* *Potentially significant hearing*

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

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

**2023 To-Be-Determined (Continued)**

2023	Title and Description	Type of Rulemaking
1469	<p><b>Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations</b>                      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.  <i>Kalam Cheung 909.396.3281; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1470.1	<p><b>Emissions from Emergency Standby Diesel Fueled Engines</b>                      Proposed Rule 1470.1 seeks to reduce NOx emissions from emergency standby internal combustion engines (ICEs) by replacing older ICEs and requiring the use of commercially available lower emission fuels, such as renewable diesel.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
1472	<p><b>Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines</b>                      Proposed Amended Rule 1472 will remove provisions that are no longer applicable, update and streamline provisions to reflect the 2015 Health Risk Assessment Guidelines and assess the need for Compliance Plans.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	Toxics
1901	<p><b>General Conformity</b>                      Proposed Amended Rule 1901 will establish a new General Conformity determination process for applicable projects receiving federal funding or approval.  <i>TBD; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP
2306.1 <sup>*+</sup>	<p><b>Existing Intermodal Railyard Indirect Source Rule</b>                      Proposed Rule 2306.1 will establish requirements for existing intermodal railyards to minimize emissions from indirect sources associated with these facilities.  <i>Elaine Shen 909.396.2715; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 CERP
Regulation XX	<p><b>RECLAIM - Requirements for Oxides of Sulfur (SOx) Emissions</b>                      Amendments to Regulation XX rules to address SOx requirements at RECLAIM facilities if there is consideration to transition SOx RECLAIM to command-and-control regulatory structure.  <i>Michael Morris 909.396.3282; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	RECLAIM / Other
Regulation XXIII <sup>*+</sup>	<p><b>Facility-Based Mobile Sources</b>                      Proposed rules within Regulation XXIII would reduce emissions from indirect sources (e.g., facilities that attract mobile sources).  <i>Elaine Shen 909.396.2715; CEQA: Barbara Radlein 909.396.2716; Socio: Barbara Radlein 909.396.2716</i></p>	AQMP/ AB 617 CERP

\* Potentially significant hearing

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

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



## 2023 To-Be-Determined *(Continued)*

2023	Title and Description	Type of Rulemaking
Regulation II, III, IV, XIV, XI, XIX, XXIII, XXIV, XXX and XXXV	<p>Various rule amendments may be needed to meet the requirements of state and federal laws, implement OEHHA’s 2015 revised risk assessment guidance, changes from OEHHA to new or revised toxic air contaminants or their risk values, address variance issues, 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 or for a rule that was submitted into the SIP, compliance issues that are raised by the Hearing Board. 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 measures in the 2012, 2016 or 2022 AQMP (upon adoption). 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, U.S. EPA’s National Emission Standards for Hazardous Air Pollutants, or to address the lead National Ambient Air Quality Standard. 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.</p>	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*

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 12

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

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

COMMITTEE: Administrative, October 13, 2023, Reviewed

RECOMMENDED ACTION:

Approve the release of RFQs/RFPs for the month of November.

Wayne Nastri  
Executive Officer

SJ:gp

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### **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 November 3, 2023.

### **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 November 2023

**November 3, 2023 Board Meeting  
Report on RFQs/RFPs Scheduled for Release on November 3, 2023**

**(For detailed information visit South Coast AQMD's website at  
<http://www.aqmd.gov/nav/grants-bids>  
following Board approval on November 3, 2023)**

**SPECIAL TECHNICAL EXPERTISE**

RFQQ #QQ2024-01 Issue RFQQ to Prequalify Vendors for Computer, Network, Printer, Hardware and Software, Audio Visual Equipment Moskowitz/3329

On February 4, 2022, the Board approved a vendor list for purchase of computer, network, printer, hardware and software, and audio visual equipment for a period of two years. The current vendor list will expire on February 4, 2024. This action is to issue an RFQQ to prequalify vendors capable of providing computer, network, printer hardware and software, audio visual equipment; and to purchase desktop computer hardware upgrades for a two-year term beginning February 2, 2024. Funds for these services are included in the FY 2023-24 Budget and will be requested in subsequent fiscal years.

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 13

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, October 13, 2023, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Wayne Natri  
Executive Officer

RMM:XC:DD:HL:dc

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### **Background**

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

### **Summary of Report**

The attached report identifies 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  
November 3, 2023 Board Meeting  
Status Report on Ongoing and Upcoming Projects for  
Information Management

<b>AQ-SPEC Cloud Platform Phase 2</b>	
Brief description	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
Estimated project cost	\$313,350
Overall project status	In Progress
Est. date of completion	4/19/24
Percentage complete	34%
LAST 30 days	<ul style="list-style-type: none"> <li>• Data Model Design completed</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>• System development in progress</li> </ul>

<b>PeopleSoft Electronic Requisition</b>	
Brief description	This will allow submittal of requisitions online, tracking multiple levels of approval, electronic archival, pre-encumbrance of budget, and streamlined workflow
Estimated project cost	\$75,800
Overall project status	In Progress
Est. date of completion	1/15/24
Percentage complete	88%
LAST 30 days	<ul style="list-style-type: none"> <li>• Deployed to Production for Information Management division</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>• Training and Integrated User Testing for other divisions</li> </ul>

<b>Warehouse Indirect Source Rule Online Reporting Portal Phase 4</b>	
Brief description:	Development of online reporting portal for Rule 2305 –Warehouse Indirect Source
Estimated project cost	\$250,000
Overall project status	In Progress
Est. date of completion	Schedule will be available after Planning phase is completed
Percentage complete	10%
LAST 30 days	<ul style="list-style-type: none"> <li>• Phase 4 Enhancements – Planning completed</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>• Phase 4 Enhancements - Systems Development</li> </ul>

ATTACHMENT  
November 3, 2023 Board Meeting  
Status Report on Ongoing and Upcoming Projects for  
Information Management

<b>Online Application Filing</b>	
Brief description	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
Estimated project cost	\$525,000
Overall project status	In Progress
Est. date of completion	10/27/23
Percentage complete	90%
LAST 30 days	<ul style="list-style-type: none"> <li>System Development for Phase 3 of the project (final twelve 400-E-XX forms) completed</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>Complete User Acceptance Testing and deployment to production of Phase 1 of the project (first ten 400-E-XX forms)</li> <li>Complete User Acceptance Testing and deployment to production of next set of Rule 222 forms</li> </ul>

<b>Carl Moyer Program GMS</b>	
Brief description	Development of simplified and streamlined Online Grant Management System (GMS) Portal for Carl Moyer Program
Estimated project cost	\$116,275
Overall project status	In Progress
Est. date of completion	12/8/23
Percentage complete	93%
LAST 30 days	<ul style="list-style-type: none"> <li>Phase 2 – Inspection Module reports development has been completed</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>Inspection Module and Reports User Acceptance Testing underway</li> <li>Phase 3 – Planning for Phase 3</li> </ul>

<b>Agenda Tracking System</b>	
Brief description	Develop new Agenda Tracking System for submittal, review and approval of Governing Board meeting agenda items
Estimated project cost	\$250,000
Overall project status	In Progress
Est. date of completion	12/28/23
Percentage complete	60%
LAST 30 days	<ul style="list-style-type: none"> <li>System Development in progress</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>System Development in progress</li> </ul>

ATTACHMENT  
November 3, 2023 Board Meeting  
Status Report on Ongoing and Upcoming Projects for  
Information Management

<b>PeopleSoft HCM (Human Capital Management) upgrade</b>	
Brief description	Upgrade PeopleSoft HCM product to latest tools and image level to maintain regulatory and functional support
Estimated project cost	\$180,000
Overall project status	In Progress
Est. date of completion	10/31/23
Percentage complete	86%
LAST 30 days	<ul style="list-style-type: none"> <li>• User Training completed</li> <li>• User Acceptance Testing completed</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>• Deployment to production</li> </ul>

<b>Source Test Tracking System (STTS)</b>	
Brief description	Online STTS 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
Estimated project cost	\$250,000
Overall project status	In Progress
Est. date of completion	12/01/23
Percentage complete	93%
LAST 30 days	<ul style="list-style-type: none"> <li>• Deployed to production environment</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>• Complete initial Source Test Submittals with regulated community volunteers</li> </ul>



ATTACHMENT  
November 3, 2023 Board Meeting  
Status Report on Ongoing and Upcoming Projects for  
Information Management

<b>Compliance System</b>	
Brief description	Develop new Compliance System to help streamline the compliance business process
Estimated project cost	\$450,000
Overall project status	In Progress
Est. date of completion	8/21/24
Percentage complete	10%
LAST 30 days	<ul style="list-style-type: none"> <li>Detailed Requirement gathering in progress</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>Detailed requirement gathering in progress</li> </ul>

<b>Website Upgrade</b>	
Brief description	Upgrade the Website Content Management System to latest version
Estimated project cost	\$100,000
Overall project status	In Progress
Est. date of completion	1/12/24
Percentage complete	81%
LAST 30 days	<ul style="list-style-type: none"> <li>Development of enhancements based on industry best practices completed</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>Integration testing of enhancements</li> </ul>

<b>Prequalify Vendor List for PCs, Network Hardware, etc.</b>	
Brief description	Establish list of prequalified vendors to provide computer, network, and printer hardware and software, and to purchase desktop computer hardware upgrades
Estimated project cost	\$300,000
Overall project status	In Progress
Est. date of completion	2/2/2024
Percentage complete	20%
LAST 30 days	<ul style="list-style-type: none"> <li>Developed RFQQ</li> </ul>
NEXT 30 days	<ul style="list-style-type: none"> <li>Release RFQQ November 3, 2023</li> <li>Approve Vendors List February 2, 2024</li> </ul>

ATTACHMENT  
November 3, 2023 Board Meeting  
Status Report on Ongoing and Upcoming Projects for  
Information Management

<b>Renewal of HP Server Maintenance &amp; Support</b>	
Brief description	Purchase of maintenance and support services for servers and storage device
Estimated project cost	\$175,000
Overall project status	In Progress
Est. date of completion	4/30/2024
Percentage complete	0%
LAST 30 days	
NEXT 30 days	<ul style="list-style-type: none"> <li>• Request Board approval for HP server maintenance and support April 5, 2024</li> <li>• Execute purchases April 30, 2024</li> </ul>

<b>Renewal of OnBase Software Support</b>	
Brief description	Authorize the sole source purchase of OnBase software subscription and support for one year
Estimated project cost	\$175,000
Overall project status	In Progress
Est. date of completion	7/30/2024
Percentage complete	0%
LAST 30 days	
NEXT 30 days	<ul style="list-style-type: none"> <li>• Request Board Approval June 7, 2024</li> <li>• Execute purchase July 30, 2024</li> </ul>

ATTACHMENT  
November 3, 2023 Board Meeting  
Status Report on Ongoing and Upcoming Projects for  
Information Management

Projects that have been completed within the last 12 months are shown below	
COMPLETED PROJECTS	
PROJECT	DATE COMPLETED
Oracle PeopleSoft Software Support	August 31, 2023
PeopleSoft E-Requisition deployment for IM division	August 22, 2023
Renewal of OnBase Software Support	July 31, 2023
Air Quality Advisory Enhancement	June 30, 2023
Legal Office System – Phase 2.1	June 7, 2023
WAIRE Program Online Portal – Initial Site Information Report Enhancement	May 26, 2023
Renewal of HP Server Maintenance & Support	April 30, 2023
Purchase of Server and Storage Upgrades	April 30, 2023
Rule 1180 Monitoring Site and Notification Updates	March 30, 2023
WAIRE Program Online Portal – Owner AWR Enhancement	February 22, 2023
Phone System Upgrade	January 28, 2023

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 14

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee held a hybrid meeting on Friday, October 13, 2023. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Vanessa Delgado, Chair  
Administrative Committee

SN:cb

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### **Committee Members**

Present: Chair Vanessa Delgado, Committee Chair  
Vice Chair Michael Cacciotti  
Board Member Gideon Kracov  
Supervisor V. Manuel Perez

### **Call to Order**

Chair Delgado called the meeting to order at 10:06 a.m.

For additional details of the Administrative Committee Meeting, please refer to the [Webcast](#).

### **DISCUSSION ITEMS:**

1. **Board Members' Concerns:** There were no concerns to report.
2. **Chair's Report of Approved Travel:** There was no travel reported.
3. **Report of Approved Out-of-Country Travel:** There was no out-of-country travel reported.

4. **Review November 3, 2023 Governing Board Agenda :** Wayne Nastri, Executive Officer, noted for Board Member awareness that there will be a Public Hearing for Proposed Rule 1110.3 which relates to linear generators, and Proposed Amended Rules 2011 and 2012, which relates to Continuous Emissions Monitoring Systems (CEMS) at RECLAIM facilities . There will also be a Set Hearing for Proposed Amended Rule 1135, which relates to the Southern California Edison’s Pebbly Beach facility on Catalina Island. For additional information please refer to the [Webcast at 4:31.](#)

Board Member Kracov asked staff if Proposed Amended Rule 1110.3 was going back to Stationary Source Committee this month. Mr. Nastri replied that staff was not returning to the Stationary Source Committee.

Harvey Eder, Public Solar Power Coalition, provided public comment on the process and legalities of public comment.

5. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** There were three proposals for modifying compensation for Board Member Assistants/Consultants. This item was moved to under Action Items as approval from the Administrative Committee is needed. For additional information please refer to the [Webcast at 7:15.](#)

6. **Pre-Audit Conference (Presenter: Brandon Young, Engagement Partner) :** Brandon Young, Engagement Partner, Lance, Soll & Lunghard, LLP , provided a timeline of the audit and an outline of the financial statement audit for fiscal year 2022-23. Chair Delgado confirmed with staff that Lance, Soll & Lunghard was previously interviewed by the Administrative Committee. For additional information please refer to the [Webcast at 8:46.](#)

Mr. Eder provided public comment on the time allotted for public comment and the process.

7. **Update on South Coast AQMD Diversity , Equity, Inclusion Efforts:** Dr. Cessa Heard-Johnson, Diversity, Equity & Inclusion (DEI) Officer, provided an update on agency efforts, seasonal events, cultural displays, Statewide DEI Working Group, and discussed Diana Trujillo for Fabulous Female Friday. For additional information please refer to the [Webcast at 13:20.](#)

Chair Delgado expressed her appreciation for staff’s efforts to go out into the community.

Mr. Eder provided public comment regarding the environment, society and government financing.

8. **Report of RFQs/RFPs Scheduled for Release in November:** Sujata Jain, Chief Financial Officer, Finance, reported that this item is to issue a request for qualification and quotations to establish a list of vendors who can provide computers, network printers, hardware and software audio visual equipment and desktop computer hardware upgrade. The funds are available in the 2023-24 budget and will be requested in future budgets. For additional information please refer to the [Webcast at 23:53](#).
9. **Status Report on Major Ongoing and Upcoming Projects for Information Management:** Ron Moskowitz, Chief Information Officer, Information Management, reported on the status of various projects and projects that have been completed. For additional information please refer to the [Webcast at 24:40](#).

Chair Delgado thanked staff for a great job at the EJ Conference.

**ACTION ITEM S:**

5. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** There were three proposals to modify the compensation for: Board Member Kracov’s Board Consultant, Destiny Rodriguez, Councilmember Solache’s Board Assistant, Marisela Santana, and Board Consultant, Uduak-Joe Ntuk. All contract modifications will be effective from September 1, 2023 to June 30, 2024.

Moved by Cacciotti; seconded by Perez, unanimously approved.

Ayes: Cacciotti, Delgado, Kracov, Perez  
 Noes: None

10. **Amend Agreement with Phillips 66 Company for Continued Fenceline Air Measurements at Phillips 66 Wilmington Refinery Using Optical Tent, Recognize Revenue, Appropriate Funds and Amend Contract :** Dr. Jason Low, Deputy Executive Officer, Monitoring & Analysis reported that this item is to amend an existing agreement with Phillips 66 Company, extending the optical tent measurements, recognizing \$250,000 in revenue, appropriating funds to the Monitoring & Analysis budget and amending a contract with the University of California, Los Angeles to continue quality assurance oversight. For additional information please refer to the [Webcast at 26:16](#).

It was identified for the record that Supervisor Perez is a Board Member for CARB but does not have a financial interest and can participate in the item.

Moved by Cacciotti; seconded by Perez, unanimously approved.

Ayes: Cacciotti, Delgado, Kracov, Perez  
 Noes: None

11. **Establish Board Meeting Schedule for Calendar Year 2024 :** Mr. Nastri reported that this item has the schedule for the 2024 Governing Board Meetings . For additional information please refer to the [Webcast at 27:50.](#)

Board Member Kracov asked to confirm that we cross-referenced for holidays such as Yom Kippur. Mr. Nastri confirmed that the dates were verified.

Supervisor Perez inquired about the Climate Change Committee and the committee meetings schedule. Mr. Nastri confirmed that the schedule for the Climate Change Committee will be discussed at the next Climate Change Committee meeting on October 27, 2023.

Mr. Eder provided public comment on the process of public comment.

Moved by Cacciotti; seconded by Perez, unanimously approved.

Ayes: Cacciotti, Delgado, Kracov Perez  
Noes: None

#### **WRITTEN REPORT :**

There were no reports.

#### **OTHER MATTERS:**

12. **Other Business:** Mr. Nastri made a correction that Rule 1110.3 is going back to Stationary Source Committee.
13. **Public Comment:** Mr. Eder provided public comment regarding climate change.
14. **Next Meeting Date:** The next regular Administrative Committee meeting is scheduled for Thursday, November 9, 2023 at 10:00 a.m.

#### **Adjournment**

The meeting was adjourned at 10:40 a.m.

[↑ Back to Agenda](#)

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 15

REPORT: Legislative Committee

SYNOPSIS: The Legislative Committee held a hybrid meeting on Friday, October 13, 2023. The following is a summary of the meeting.

Agenda Item	Recommendation/Action
S. 1920 (Whitehouse, Padilla, Welch) - International Maritime Pollution Accountability Act of 2023	Support
S. 1917 / H.R 4024 (Padilla, Welch, Whitehouse, Booker, Feinstein / Garcia, Barragán, Huffman, Bonamici, Cleaver, Tlaib, Norton, Lee, Schiff, Sherrill, Lieu, Grijalva, Espaillat) - Clean Shipping Act of 2023	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:DPG:ar

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**Committee Members**

Present: Councilmember Michael A. Cacciotti, Committee Chair  
Mayor Patricia Lock Dawson  
Supervisor Curt Hagman  
Supervisor V. Manuel Perez  
Councilmember José Luis Solache  
Councilmember Nithya Raman

Absent: None

**Call to Order**

Chair Michael Cacciotti called the meeting to order at 9:00 a.m.



## **ACTION/DISCUSSION ITEMS:**

### **1. Recommend Position on Federal Bills**

Lisa Tanaka, Assistant Deputy Executive Officer/Legislative, Public Affairs & Media, presented S. 1920 (Whitehouse, Padilla, Welch), the “International Maritime Pollution Accountability Act of 2023.” The bill would require U.S. EPA to assess greenhouse gas (GHG) and criteria pollutant-based emissions fees on operators of oceangoing vessels (OGV). The fees are expected to raise approximately \$250 billion over 10-years for the replacement or retrofitting of Jones Act vessels, research and development, air monitoring, and other port-related programs.

#### **Staff Recommended “Support” Position on S. 1920**

Moved by: Solache Seconded by: Hagman

Ayes: Cacciotti, Dawson, Hagman, Perez, Raman, Solache

Noes: None

Absent: None

Ms. Tanaka presented S. 1917 / H.R 4024 (Padilla, Welch, Whitehouse, Booker, Feinstein / Garcia, Barragán, Huffman, Bonamici, Cleaver, Tlaib, Norton, Lee, Schiff, Sherrill, Lieu, Grijalva, Espaillat), the “Clean Shipping Act of 2023 .” The bill would require U.S. EPA to promulgate regulations to reduce the carbon intensity of fuel used by OGVs. The bill would also eliminate GHG emissions and air pollutants from OGVs at berth or at-anchor at U.S. ports.

Committee Chair Cacciotti asked for information on Jones Act vessels. Ms. Tanaka replied that Jones Act vessels transport cargo between U.S. ports and are U.S.-built, -owned, -flagged and -staffed. There are approximately 40,000 Jones Act vessels.

Committee Chair Cacciotti inquired about the relationship between GHG measures and potential impacts on criteria pollutants. Wayne Natri, Executive Officer, responded that some fuels reduce carbon intensity, but increase NOx emissions. He further noted that it must be ensured that criteria pollutants will not be adversely impacted as a result of GHG reduction measures.

Supervisor Perez inquired about support for the bill. Ms. Tanaka responded that the bill has broad support among elected officials, environmental organizations, and industry. For additional information, please refer to the [Webcast](#) beginning at 7:21.

Thomas Jelenic from Pacific Merchant Shipping Association provided public comment on a national collaborative approach to reduce emissions from OGVs.

#### **Staff Recommended “Support” Position on S. 1917 / H.R 4024**

Moved by: Solache Seconded by: Hagman

Ayes: Cacciotti, Dawson, Hagman, Perez, Raman, Solache

Noes: None

Absent: None

## **2. Amend Contracts for Legislative Representation in Washington, D.C.**

Ms. Tanaka presented current contracts for legislative and regulatory representation in Washington, D.C. with Kadesh & Associates, LLC, Cassidy & Associates and Carmen Group, Inc. This action is to consider approval of the second one-year extension of the existing contracts for Calendar Year 2024 with Kadesh & Associates, LLC for \$226,392; Cassidy & Associates for \$216,000; and Carmen Group, Inc. for \$222,090.

The three firms are bipartisan and leverage their expertise and contacts to advocate for matters of importance to South Coast AQMD including legislative, regulatory and grants before the Administration, agencies, Congress and other stakeholders.

The 118<sup>th</sup> Congress is still in progress, but some accomplishments for 2023 include:

- While other federal accounts have been cut by 30 percent, Targeted Airshed Grants, DERA, and Section 103/105, have been proposed for consistent or better appropriation levels.
- Working with agencies to support South Coast AQMD priorities and funding awards through the Bipartisan Infrastructure Law and Inflation Reduction Act programs. South Coast AQMD proposed criteria for goods movement programs was incorporated in a Congressional letter to U.S. EPA Administrator Michael Regan.
- Access to the Administration and Congress to address issues.

For additional information, please refer to the [Webcast](#) beginning 30:32.

Harvey Eder, Public Solar Power Coalition, provided public comment regarding the use of wind renewable energy for OGVs.

### **Staff Recommended Approval of Second One-Year Extension of the Existing Contracts.**

Moved by: Hagman Second by: Solache

Ayes: Cacciotti, Dawson, Hagman, Perez, Raman, Solache

Noes: None

Absent: None

### **DISCUSSION ITEMS:**

## **3. End-of-Year Summary Report on State Legislature's and Governor's Actions during 2023 Legislative Session**

Philip Crabbe, Senior Public Affairs Manager/Legislative, Public Affairs & Media, presented an end-of-year summary on the 2023 state legislative session.

The funding allocation for the AB 617 program for air districts statewide was \$294 million, including \$60 million for implementation and \$234 million for incentives. An additional \$6 million was provided for community grants.

South Coast AQMD sponsored four state bills, however they either did not pass or became two-year bills. South Coast AQMD also took positions on ten bills and was able to negotiate numerous amendments to legislation.

Several bills supported by South Coast AQMD passed the Legislature and were signed into law by the Governor. The Legislature is in interim recess and will reconvene on January 3, 2024.

Councilmember Solache requested additional information on SB 674 (Gonzalez) regarding fence-line monitoring at refineries and related facilities. For additional information, please refer to the [Webcast](#) beginning 43:07.

Mr. Eder provided public comment regarding offshore wind and geothermal energy legislation.

#### **4. Update and Discussion on Federal Legislative Issues**

South Coast AQMD's federal legislative consultants (Carmen Group, Cassidy & Associates, and Kadesh & Associates) provided written reports on key Washington, D.C. issues.

Gary Hoitsma, Carmen Group, reported that Congress passed a short-term continuing resolution (CR) through November 17, 2023. The negotiations to select the next Speaker of the House of Representatives are ongoing.

Amelia Morales, Cassidy & Associates, stated that their firm is working on the reauthorization of the BioWatch Program which is part of the Office of Countering Weapons of Mass Destruction in the U.S. Department of Homeland Security. BioWatch will sunset on December 21, 2023. South Coast AQMD implements the BioWatch program to monitor for biological threats in our region.

Mark Kadesh, Kadesh & Associates, reported that Laphonza Butler was sworn in as Senator. Congress continues to operate under a CR as none of the 12 appropriations bills have been passed. For additional information, please refer to the [Webcast](#) beginning 49:44.

There was no public comment.

#### **5. Update and Discussion on State Legislative Issues**

South Coast AQMD's state legislative consultants (Resolute, California Advisors, LLC and Joe A. Gonsalves & Son) provided written reports on key issues in Sacramento.

David Quintana, Resolute, reported that the proponents of AB 985 (Arambula) are likely to pursue passage of this two-year bill in 2024. This bill is related to San Joaquin Valley Air Pollution Control District's emission reduction credit system.

Ross Buckley, California Advisors, LLC, reported that discussions regarding SB 674 (Gonzalez), now a 2-year bill, will continue, with the goal of it passing the Legislature in 2024. Also, in August, the Department of Finance reported collecting \$1.34 billion in state revenue above previous state projections.

Paul Gonsalves, Joe A. Gonsalves & Son, reported on the passage of SB 410 (Becker), which enhances connectivity to the electric grid and AB 1216 (Muratsuchi) regarding Hyperion Water Reclamation Plant. South Coast AQMD was able to secure amendments to AB 1216 as directed by the Legislative Committee. For additional information, please refer to the [Webcast](#) beginning 55:50.

Mr. Eder provided public comment regarding solar issues.

#### **OTHER MATTERS:**

##### **6. Other Business**

There was no other business to report.

##### **7. Public Comment Period**

There was no public comment to report.

##### **8. Next Meeting Date**

The next regular Legislative Committee meeting is scheduled for Thursday, November 9, 2023, at 9:00 a.m.

#### **Adjournment**

The meeting was adjourned at 10:01 a.m.

#### **Attachments**

1. Attendance Record
2. Recommend position on Federal Bills
3. Update on Federal Legislative Issues – Written Reports
4. Update on State Legislative Issues – Written Reports

# ATTACHMENT 1

## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT LEGISLATIVE COMMITTEE MEETING ATTENDANCE RECORD – October 13, 2023**

Councilmember Michael Cacciotti.....	South Coast AQMD Board Member
Mayor Patricia Lock Dawson.....	South Coast AQMD Board Member
Supervisor Curt Hagman.....	South Coast AQMD Board Member
Supervisor V. Manuel Perez.....	South Coast AQMD Board Member
Councilmember Nithya Raman.....	South Coast AQMD Board Member
Councilmember José Luis Solache.....	South Coast AQMD Board Member
Guillermo Gonzalez.....	Board Consultant (Perez)
Debra Mendelsohn.....	Board Consultant (McCallon)
Mark Taylor.....	Board Consultant (Rodriguez)
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
Helena DuPont.....	Public Member
Harvey Eder.....	Public Member
Thomas Jelenic.....	Public Member
Bill La Marr.....	Public Member
Patty Senecal.....	Public Member
Derrick Alatorre.....	South Coast AQMD Staff
Barbara Baird.....	South Coast AQMD Staff
Cindy Bustillos.....	South Coast AQMD Staff
Lara Brown.....	South Coast AQMD Staff
Maria Corralejo.....	South Coast AQMD Staff
Philip Crabbe.....	South Coast AQMD Staff
Javier Enriquez.....	South Coast AQMD Staff
Joshua Ewell.....	South Coast AQMD Staff
Denise Gailey.....	South Coast AQMD Staff
Bayron Gilchrist.....	South Coast AQMD Staff
De Groeneveld.....	South Coast AQMD Staff
Sheri Hanizavareh.....	South Coast AQMD Staff
Anissa Cessa Heard-Johnson.....	South Coast AQMD Staff
Sujata Jain.....	South Coast AQMD Staff
Aaron Katzenstein.....	South Coast AQMD Staff

Angela Kim..... South Coast AQMD Staff  
Howard Lee..... South Coast AQMD Staff  
Ron Moskowitz..... South Coast AQMD Staff  
Susan Nakamura..... South Coast AQMD Staff  
Wayne Nastro..... South Coast AQMD Staff  
Robert Paud..... South Coast AQMD Staff  
Sarah Rees..... South Coast AQMD Staff  
Mary Reichert..... South Coast AQMD Staff  
Aisha Reyes..... South Coast AQMD Staff  
MaFe Ruivivar..... South Coast AQMD Staff  
Lisa Tanaka O'Malley..... South Coast AQMD Staff  
Victor Yip..... South Coast AQMD Staff  
Mei Wang..... South Coast AQMD Staff  
Paul Wright..... South Coast AQMD Staff

# ATTACHMENT 2A

South Coast Air Quality Management District  
Legislative Analysis Summary – S. 1920 (Whitehouse, Padilla, Welch)  
Version: As introduced, June 8, 2023  
Analyst: LTO

## **S. 1920 (Whitehouse, Padilla, Welch)** International Maritime Pollution Accountability Act of 2023

**Summary:** International Maritime Pollution Accountability Act of 2023 would require U.S. EPA to assess certain fees on shipping and other vessels, and for other purposes.

**Background:** The federal government and to some extent, the states are assigned responsibility under the Clean Air Act to reduce emissions from mobile sources. The International Maritime Pollution Accountability Act with the Clean Shipping Act of 2023 are a package of bills introduced by Senators Alex Padilla, Sheldon Whitehouse, and others to address greenhouse gas (GHG) emissions and air pollution from ocean going vessels (OGVs).

This bill is supported by the Environmental Defense Fund, Ocean Conservancy, Pacific Environment, A.P. Moller- Maersk, and others.

**Status:** 6/8/23 – Introduced in Senate.

**Specific Provisions:** The International Maritime Pollution Accountability Act of 2023 would require U.S. EPA to levy pollution fees based on GHG and criteria pollutants. Fees would be invested in U.S. maritime industry and for other related purposes.

The pollution fees would apply to OGVs of 10,000 gross tonnage or more which would exclude most domestic shipping. Additionally, covered voyages would include those whose primary purpose is for transporting cargo or freight which is ultimately bound for the United States.

The bill includes GHG fees to be collected from the operator of the covered voyage by the U.S. EPA in conjunction with the U.S. Treasury as follows:

- \$150 per ton fee on the carbon dioxide emissions of the fuel burned on the inbound trip. This provision would sunset if the International Maritime Organization implements a carbon fee at least as high.

For criteria air pollutants emitted within 200 miles of the US shoreline:

- \$6.30 per pound of nitrogen oxides
- \$18.00 per pound of sulfur dioxide
- \$38.90 per pound of particulate matter (PM2.5)

Both GHG and criteria pollutant fees would increase at 5% above inflation annually.

According to the bill author, the pollution fees are expected to raise approximately \$250 billion over 10-years. Eligible uses of revenue collected from the fees would be:

- 25% for replacing (or retrofitting) Jones Act vessels with low-carbon vessels.

- 25% for DOE grants to support R&D of low-carbon maritime fuels.
- 10% for the Clean Ports Program and 5% for related workforce development.
- 10% for ferry electrification and 10% for harbor craft electrification.
- 7% for port infrastructure (MARAD Port Infrastructure Development Program) and 3% for port community air monitoring.
- 3% for the National Oceans and Coastal Security Fund.
- 2% for the Marine Debris Foundation.

**Impacts on South Coast AQMD’s Mission, Operations, or Initiatives:** The South Coast Air Basin is home to more than 17 million people, including nearly two-thirds of the state’s overburdened environmental justice communities. This region has some of the worst air quality in the nation and is in extreme non-attainment for ozone and severe non-attainment for PM<sub>2.5</sub>.

The largest source of air pollution in the South Coast Air Basin stems from mobile sources related to goods movement activity in and around the San Pedro Bay Ports, including heavy-duty trucks, OGVs, locomotives, aircraft, and off-road equipment. OGVs are quickly becoming the largest source of air pollution in our region as heavy-duty trucks and other equipment become cleaner.

Regulatory authority over OGVs is complex involving international and domestic governmental organizations. While state and local government have some authority to reduce air pollution related to OGVs, the federal government has the strongest ability to regulate emissions in U.S. waters and to influence the IMO and other foreign stakeholders.

In summary, the International Maritime Accountability Act could incentivize ocean freight companies to utilize their cleanest vessels when coming to call in the United States, especially the San Pedro Bay Ports. Additionally, pollution fees would help fund improvements and workforce training needed to reduce emissions related to our ports and related industries.

**Recommended Position:** SUPPORT



# ATTACHMENT 2B

II

118<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION

## S. 1920

To require the Administrator of the Environmental Protection Agency to assess certain fees on shipping and other vessels, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

JUNE 8, 2023

Mr. WHITEHOUSE (for himself, Mr. PADILLA, and Mr. WELCH) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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## A BILL

To require the Administrator of the Environmental Protection Agency to assess certain fees on shipping and other vessels, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the “International Maritime  
5 Pollution Accountability Act of 2023”.

6 SEC. 2. FINDINGS.

7 Congress finds that—

8 (1) the greenhouse gas emissions from the ma-  
9 rine shipping industry—

1 (A) account for nearly 3 percent of total  
2 global anthropogenic carbon dioxide emissions;  
3 and

4 (B) are increasing rapidly;

5 (2) the International Maritime Organization  
6 has failed to require emissions reductions with re-  
7 spect to marine shipping that are consistent with  
8 global decarbonization targets; and

9 (3) ports are a large source of air pollution and  
10 contribute to poor air quality in the neighborhoods  
11 surrounding the ports, leading to worse health out-  
12 comes for those who live in those neighborhoods.

13 **SEC. 3. DEFINITIONS.**

14 In this Act:

15 (1) **ADMINISTRATOR.**—The term “Adminis-  
16 trator” means the Administrator of the Environ-  
17 mental Protection Agency.

18 (2) **CALENDAR QUARTER.**—The term “calendar  
19 quarter” means a period of 3 calendar months that  
20 ends on, as applicable, March 31, June 30, Sep-  
21 tember 30, or December 31 of the applicable cal-  
22 endar year.

23 (3) **CARGO OR FREIGHT.**—The term “cargo or  
24 freight” does not include—

1 (A) passengers transported for compensa-  
2 tion or hire;

3 (B) bunker fuel;

4 (C) ship's stores;

5 (D) sea stores; or

6 (E) the legitimate equipment necessary to  
7 the operation of a vessel.

8 (4) COVERED VOYAGE.—

9 (A) IN GENERAL.—The term “covered voy-  
10 age” means a voyage—

11 (i) made using a self-propelled vessel  
12 of 10,000 gross tonnage or more, the pri-  
13 mary purpose of which is transporting  
14 cargo or freight; and

15 (ii) that begins when the vessel leaves  
16 the port of origin and terminates when the  
17 offloading operations at the final port of  
18 call are completed.

19 (B) EXCEPTIONS.—The term “covered  
20 voyage” does not include a voyage—

21 (i) that has been included as an OCS  
22 source (as defined in subsection (a)(4) of  
23 section 328 of the Clean Air Act (42  
24 U.S.C. 7627)) because the voyage has the  
25 potential to emit any air pollutant as de-

1 scribed in subparagraph (C)(i) of that sub-  
2 section and is, as a result, regulated pursu-  
3 ant to that section; or

4 (ii) made for the purposes of trans-  
5 porting military cargo, food aid, or sup-  
6 plies for disaster or emergency relief.

7 (5) CRITERIA AIR POLLUTANT.—The term “cri-  
8 teria air pollutant” is within the meaning of the  
9 Clean Air Act (42 U.S.C. 7401 et seq.).

10 (6) EXCLUSIVE ECONOMIC ZONE.—The term  
11 “exclusive economic zone” has the meaning given  
12 the term in section 107 of title 46, United States  
13 Code.

14 (7) FINAL PORT OF CALL.—The term “final  
15 port of call”, with respect to a covered voyage,  
16 means, as applicable—

17 (A) the port in the United States where  
18 the vessel making the covered voyage offloaded  
19 the last of the cargo or freight of the vessel ul-  
20 timately bound for the United States that was  
21 onboard the vessel on departure from the port  
22 of origin; or

23 (B) if the last of the cargo or freight of the  
24 vessel ultimately bound for the United States  
25 that was onboard the vessel on departure from

1 the port of origin is offloaded in a foreign port,  
2 the most recent port of call in the United  
3 States prior to offloading the last of the cargo  
4 or freight of the vessel that is ultimately bound  
5 for the United States.

6 (8) **IMPORTER.**—The term “importer” means 1  
7 of the parties that qualifies as an importer of record  
8 under section 484(a)(2)(B) of the Tariff Act of  
9 1930 (19 U.S.C. 1484(a)(2)(B)).

10 (9) **INTERMEDIATE PORT.**—The term “inter-  
11 mediate port”, with respect to a covered voyage,  
12 means each foreign port of call of the vessel of the  
13 covered voyage between the port of origin and the  
14 initial port of call of the vessel in the United States.

15 (10) **PORT OF ORIGIN.**—The term “port of ori-  
16 gin”, with respect to a covered voyage, means the  
17 first port of the vessel making the covered voyage  
18 before docking at a port in the United States after  
19 departing which a majority (by mass) of the cargo  
20 or freight of the vessel is ultimately bound for the  
21 United States.

22 (11) **ULTIMATELY BOUND FOR THE UNITED**  
23 **STATES.**—The term “ultimately bound for the  
24 United States”, with respect to cargo or freight, in-  
25 cludes—

1 (A) all cargo or freight that is offloaded in  
2 the United States by a vessel making a covered  
3 voyage; and

4 (B) all cargo or freight that is—

5 (i) initially offloaded at an inter-  
6 mediate port; and

7 (ii) subsequently transported to the  
8 United States by sea, land, or air.

9 **SEC. 4. REPORTING REQUIREMENTS.**

10 (a) **IN GENERAL.**—Beginning on January 1, 2024,  
11 the operator of each covered voyage shall submit to the  
12 Administrator, the Commandant of the Coast Guard, and  
13 the Commissioner of U.S. Customs and Border Protection  
14 the information described in subsection (b).

15 (b) **INFORMATION DESCRIBED.**—The information re-  
16 ferred to in subsection (a), with respect to a covered voy-  
17 age, is—

18 (1) the port of origin;

19 (2) the total distance traveled from the port of  
20 origin to the final port of call;

21 (3) the total time spent traveling between the  
22 port of origin and the final port of call;

23 (4) the total mass of each type of fuel con-  
24 sumed between the port of origin and the final port  
25 of call;

1 (5) the total mass of cargo or freight trans-  
2 ported between the port of origin and the final port  
3 of call;

4 (6) each port of call in the United States;

5 (7) each intermediate port;

6 (8) the final port of call;

7 (9) the mass of cargo or freight on board the  
8 applicable vessel on leaving the port of origin;

9 (10) the percentage of cargo or freight (by  
10 mass) offloaded or unloaded at any intermediate  
11 port, as compared to the capacity of the applicable  
12 vessel and the load of the applicable vessel;

13 (11) the ultimate destination (by country) of  
14 cargo or freight offloaded at intermediate ports, as  
15 compared to the capacity of the applicable vessel and  
16 the load of the applicable vessel;

17 (12) the mass of cargo or freight on board the  
18 applicable vessel on arrival at or departure from, as  
19 applicable, each port of call in the United States;

20 (13) the total time spent in each port of call in  
21 the United States;

22 (14) the total period of time that the applicable  
23 vessel is connected to and reliant on the electrical  
24 grid while in port at a port of call in the United  
25 States;

1 (15) the total mass of each type of fuel con-  
2 sumed—

3 (A) in any port of call in the United  
4 States; and

5 (B) within the exclusive economic zone;

6 (16) the total period of time spent—

7 (A) north of 60 degrees north latitude; or

8 (B) south of 60 degrees south latitude;

9 (17) for each period described in paragraph  
10 (16), the total mass of each type of fuel consumed  
11 during that period; and

12 (18) any other information that the Adminis-  
13 trator, the Commandant of the Coast Guard, and  
14 the Commissioner of U.S. Customs and Border Pro-  
15 tection, in conjunction with the Secretary of the  
16 Treasury, determines is necessary to accurately de-  
17 termine the amount of the fees assessed under sec-  
18 tions 5 and 6.

19 (c) DEADLINE.—The operator of a covered voyage  
20 shall submit the information required under subsection (a)  
21 for each covered voyage of the operator that ended during  
22 a calendar quarter by not later than 30 days after the  
23 end of that calendar quarter.



1 SEC. 5. FEE ON LIFECYCLE CARBON DIOXIDE-EQUIVALENT  
2 EMISSIONS FROM CARGO VESSELS.

3 (a) LIFECYCLE CO<sub>2</sub>-E EMISSIONS PROFILE FOR  
4 MARITIME FUELS.—Not later than January 1, 2024, the  
5 Administrator shall develop a lifecycle carbon dioxide-  
6 equivalent (CO<sub>2</sub>-e) emissions profile for each fuel used in  
7 maritime shipping to express the emissions from the com-  
8 bustion of that fuel in carbon dioxide-equivalent per unit  
9 mass combusted.

10 (b) ASSESSMENT OF FEE.—

11 (1) IN GENERAL.—Beginning on January 1,  
12 2024, not later than 30 days after the date on which  
13 the Administrator receives from the operator of a  
14 covered voyage the information required to be sub-  
15 mitted under section 4(a), the Administrator, in con-  
16 junction with the Secretary of the Treasury, shall  
17 assess on the operator a fee with respect to the cov-  
18 ered voyage in an amount determined in accordance  
19 with paragraph (2).

20 (2) AMOUNT OF FEE.—

21 (A) IN GENERAL.—Subject to subpara-  
22 graph (B) and subsection (d), the amount of a  
23 fee assessed under subsection (a) with respect  
24 to a covered voyage shall be the total sum of,  
25 for each type of fuel consumed during the cov-

1           ered voyage, the product obtained by multi-  
2           plying—

3                   (i) the total mass of the fuel con-  
4                   sumed during the covered voyage;

5                   (ii) the carbon dioxide-equivalent  
6                   emissions of the fuel, expressed in metric  
7                   tons per unit mass of fuel consumed, as  
8                   determined under subsection (a); and

9                   (iii) \$150.

10           (B) ADJUSTMENTS.—

11                   (i) INFLATION.—Beginning        in cal-  
12                   endar year 2025, the Administrator shall  
13                   annually increase the amount described in  
14                   subparagraph (A)(iii) by the percentage  
15                   that is equal to the sum obtained by add-  
16                   ing—

17                           (I) the rate of inflation, as deter-  
18                           mined by the Administrator using the  
19                           changes for the 12-month period end-  
20                           ing the preceding November 30 in the  
21                           Consumer Price Index for All Urban  
22                           Consumers published by the Bureau  
23                           of Labor Statistics of the Department  
24                           of Labor; and

25                           (II) 5 percentage points.

1 (ii) VOYAGES IN POLAR REGIONS.—

2 For any portion of a covered voyage that  
3 involves travel north of 60 degrees north  
4 latitude or south of 60 degrees south lati-  
5 tude, the amount described in subpara-  
6 graph (A)(iii) with respect to fuel con-  
7 sumed during that portion of the voyage,  
8 after adjustment under clause (i), if appli-  
9 cable, shall be tripled.

10 (3) DEADLINE.—A fee assessed under para-  
11 graph (1) shall be due and payable to the Adminis-  
12 trator not later than the later of—

13 (A) the date that is 30 days after the date  
14 on which the fee is assessed; and

15 (B) the end of the calendar year in which  
16 the fee is assessed.

17 (4) PENALTY.—Notwithstanding any other pro-  
18 vision of law or any circumstances that jeopardize  
19 the safety of a vessel the voyage of which is a cov-  
20 ered voyage, the persons aboard such a vessel, or the  
21 environment, if an operator fails to pay a fee as-  
22 sessed under paragraph (1) by the date described in  
23 paragraph (3)—

1 (A) the Administrator shall inform the  
2 Commandant of the Coast Guard of the failure  
3 of the operator to pay the fee; and

4 (B) the Commandant of the Coast Guard  
5 shall, until the Administrator informs the Com-  
6 mandant of the Coast Guard that all out-  
7 standing fees assessed under paragraph (1)  
8 have been paid, prohibit—

9 (i) the operator from operating within  
10 the waters of the United States; and

11 (ii) vessels of the operator from dock-  
12 ing at ports of call in the United States.

13 (c) ALTERNATE FEE FOR IMPORTED CARGO.—

14 (1) DEFINITION OF QUALIFIED IMPORTING  
15 VOYAGE.—In this subsection, the term “qualified im-  
16 porting voyage” means a voyage made using a ves-  
17 sel—

18 (A) the primary purpose of which is trans-  
19 porting cargo or freight; and

20 (B) that, at a foreign port of call, offloads  
21 cargo or freight that is ultimately intended to  
22 be transported to the United States by sea,  
23 land, or air.

24 (2) REQUIREMENTS.—

25 (A) REPORTING.—

1 (i) IN GENERAL.—Beginning on Janu-  
2 ary 1, 2024, each importer for which a  
3 qualified importing voyage has cargo or  
4 freight that is bound for the United States  
5 shall submit to the Administrator the in-  
6 formation described in subsection (b) of  
7 section 4 in accordance with that section  
8 (except as otherwise provided in this para-  
9 graph).

10 (ii) TREATMENT.—For purposes of  
11 clause (i), any reference contained in sec-  
12 tion 4(b) to—

13 (I) the “final port of call” shall  
14 be considered to be a reference to the  
15 foreign port of call within which the  
16 cargo or freight of the importer was  
17 offloaded from the vessel;

18 (II) the “covered voyage” shall  
19 be considered to be a reference to the  
20 qualified importing voyage; and

21 (III) the “port of origin” shall be  
22 considered to be a reference to the  
23 port at which the cargo or freight  
24 bound for the United States was  
25 onboarded.

1 (B) F<sub>EE</sub>.—

2 (i) I<sub>N GENERAL</sub>.—Beginning on Janu-  
3 ary 1, 2024, not later than 30 days after  
4 the date on which the Administrator re-  
5 ceives from an importer described in sub-  
6 paragraph (A)(i) the information required  
7 to be submitted under that subparagraph,  
8 the Administrator, in conjunction with the  
9 Secretary of the Treasury, shall assess on  
10 the importer the fee described in sub-  
11 section (b) in accordance with that sub-  
12 section, but the amount of that fee shall be  
13 adjusted as follows:

14 (I) The amount of the fee shall  
15 be prorated for the share (by mass) of  
16 the cargo or freight on the vessel  
17 making the qualified importing voyage  
18 that is ultimately bound for the  
19 United States that is being imported  
20 by the importer.

21 (II) After the adjustment de-  
22 scribed in subclause (I), the amount  
23 of the fee shall be reduced by the  
24 amount of the fee, if any, otherwise

1 assessed on the qualified importing  
2 voyage pursuant to subsection (b).

3 (ii) TREATMENT.—For purposes of  
4 clause (i), any reference in subsection (b)  
5 to the “covered voyage” shall be considered  
6 to be a reference to the qualified importing  
7 voyage.

8 (C) DEADLINES.—

9 (i) IN GENERAL.—An importer de-  
10 scribed in subparagraph (A)(i) may not  
11 import the cargo or freight from a quali-  
12 fied importing voyage into the United  
13 States until the importer—

14 (I) submits the information re-  
15 quired under subparagraph (A); and

16 (II) pays the fee assessed under  
17 subparagraph (B).

18 (ii) PENALTY.—Notwithstanding any  
19 other provision of law, if, at the time of  
20 importation of the cargo or freight from a  
21 qualifying importing voyage into the  
22 United States, an importer described in  
23 subparagraph (A)(i) cannot provide proof  
24 of payment of the fee assessed under sub-  
25 paragraph (B), the Commissioner of U.S.

1 Customs and Border Protection shall seize  
2 the cargo or freight until the Adminis-  
3 trator informs the Commissioner of U.S.  
4 Customs and Border Protection that all  
5 outstanding fees assessed under subpara-  
6 graph (B) have been paid.

7 (d) RECOGNITION OF FOREIGN POLLUTION FEES.—  
8 If a vessel with cargo or freight ultimately bound for the  
9 United States, or an operator of such a vessel, is subject  
10 to a pollution-based fee by the country of the port of origin  
11 of the vessel, any fee assessed on the operator of the vessel  
12 or an importer with cargo or freight on that vessel under  
13 this section shall be—

14 (1) if the fee from the other country is equal  
15 to or more than 50 percent of the fee that would  
16 otherwise be assessed under this section, reduced by  
17 50 percent; and

18 (2) if the fee from the other country is less  
19 than 50 percent of the fee that would otherwise be  
20 assessed under this section, reduced by an amount  
21 equal to the amount of the fee from the other coun-  
22 try.

23 (e) SUNSET PROVISION.—This section ceases to  
24 apply on the date on which the Administrator publishes  
25 in the Federal Register a determination that the Inter-



1 national Maritime Organization or another agency of the  
2 United Nations has instituted and is enforcing a global  
3 fee on lifecycle carbon dioxide-equivalent emissions from  
4 operators of covered voyages that is in an amount equal  
5 to or greater than the fees assessed for a covered voyage  
6 under this section.

7 SEC. 6. FEES ON CRITERIA AIR POLLUTANTS.

8 (a) EMISSIONS PROFILE.—Not later than January 1,  
9 2024, the Administrator shall develop a lifecycle emissions  
10 profile for each fuel used in maritime shipping to express  
11 the emissions from the combustion of that fuel of each  
12 of nitrogen oxides, sulfur dioxide, and fine particulate  
13 matter (PM<sub>2.5</sub>) per unit mass combusted.

14 (b) ASSESSMENT OF FEE.—

15 (1) IN GENERAL.—Beginning on January 1,  
16 2024, not later than 30 days after the date on which  
17 the Administrator receives from the operator of a  
18 covered voyage the information required to be sub-  
19 mitted under section 4(a), the Administrator, in con-  
20 junction with the Secretary of the Treasury, shall  
21 assess on the operator a fee with respect to the cov-  
22 ered voyage in an amount determined in accordance  
23 with paragraph (2).

24 (2) AMOUNT OF FEE.—

1 (A) IN GENERAL.—Subject to subpara-  
2 graph (B), the amount of a fee assessed under  
3 subsection (a) shall be the total sum of, for  
4 each type of fuel consumed during the covered  
5 voyage—

6 (i) the product obtained by multi-  
7 plying—

8 (I) the total mass of the fuel con-  
9 sumed during the covered voyage  
10 within the exclusive economic zone;

11 (II) the quantity of nitrogen ox-  
12 ides emitted by the consumption of  
13 the fuel, expressed in pounds per unit  
14 mass of fuel consumed, as determined  
15 under subsection (a); and

16 (III) \$6.30;

17 (ii) the product obtained by multi-  
18 plying—

19 (I) the total mass of the fuel con-  
20 sumed during the covered voyage  
21 within the exclusive economic zone;

22 (II) the quantity of sulfur dioxide  
23 emitted by the consumption of the  
24 fuel, expressed in pounds per unit

1 mass of fuel consumed, as determined  
2 under subsection (a); and

3 (III) \$18; and

4 (iii) the product obtained by multi-  
5 plying—

6 (I) the total mass of the fuel con-  
7 sumed during the covered voyage  
8 within the exclusive economic zone;

9 (II) the quantity of fine particu-  
10 late matter emitted by the consump-  
11 tion of the fuel, expressed in pounds  
12 per unit mass of fuel consumed, as  
13 determined under subsection (a); and

14 (III) \$38.90.

15 (B) INFLATION ADJUSTMENT.—Beginning  
16 in calendar year 2025, the Administrator shall  
17 annually increase the amounts described in  
18 clauses (i)(III), (ii)(III), and (iii)(III) of sub-  
19 paragraph (A) by the percentage that is equal  
20 to the sum obtained by adding—

21 (i) the rate of inflation, as determined  
22 by the Administrator using the changes for  
23 the 12-month period ending the preceding  
24 November 30 in the Consumer Price Index  
25 for All Urban Consumers published by the

1 Bureau of Labor Statistics of the Depart-  
2 ment of Labor; and

3 (ii) 5 percentage points.

4 (3) DEADLINE.—A fee assessed under para-  
5 graph (1) shall be due and payable to the Adminis-  
6 trator not later than the later of—

7 (A) the date that is 30 days after the date  
8 on which the fee is assessed; and

9 (B) the end of the calendar year in which  
10 the fee is assessed.

11 (4) PENALTY.—Notwithstanding any other pro-  
12 vision of law or any circumstances that jeopardize  
13 the safety of a vessel the voyage of which is a cov-  
14 ered voyage, the persons aboard such a vessel, or the  
15 environment, if an operator fails to pay a fee as-  
16 sessed under paragraph (1) by the date described in  
17 paragraph (3)—

18 (A) the Administrator shall inform the  
19 Commandant of the Coast Guard of the failure  
20 of the operator to pay the fee; and

21 (B) the Commandant of the Coast Guard  
22 shall, until the Administrator informs the Com-  
23 mandant of the Coast Guard that all out-  
24 standing fees assessed under paragraph (1)  
25 have been paid, prohibit—

- 1 (i) the operator from operating within  
 2 the waters of the United States; and  
 3 (ii) vessels of the operator from dock-  
 4 ing at ports of call in the United States.

5 **SEC. 7. DECARBONIZING SHIPPING AND PORTS.**

6 (a) **MODERNIZING THE JONES ACT FLEET.—**

7 (1) **DEFINITIONS.—**In this subsection:

8 (A) **ADMINISTRATOR.—**The term “Admin-  
 9 istrator” means the Administrator of the Mari-  
 10 time Administration.

11 (B) **JONES ACT VESSEL.—**The term  
 12 “Jones Act vessel” means a documented vessel  
 13 (as defined in section 106 of title 46, United  
 14 States Code) with a coastwise endorsement  
 15 under section 12112 of that title.

16 (C) **LOW-CARBON FUEL.—**The term “low-  
 17 carbon fuel” means a marine fuel the lifecycle  
 18 carbon dioxide-equivalent emissions of which is  
 19 at least 90 percent less than the lifecycle carbon  
 20 dioxide-equivalent emissions of marine fuel oil.

21 (D) **PROGRAM.—**The term “program”  
 22 means the program established under para-  
 23 graph (2).

24 (E) **VESSEL OF THE UNITED STATES.—**  
 25 The term “vessel of the United States” has the

1 meaning given the term in section 116 of title  
2 46, United States Code.

3 (2) ESTABLISHMENT.—For fiscal year 2026  
4 and each fiscal year thereafter, there are appro-  
5 priated, out of any funds in the Treasury not other-  
6 wise appropriated, to the Maritime Administration  
7 an amount equal to 25 percent of the amounts col-  
8 lected pursuant to fees assessed under sections 5  
9 and 6 during the previous calendar year to award  
10 grants, rebates, and low-interest loans, as deter-  
11 mined appropriate by the Administrator, to eligible  
12 entities—

13 (A) to replace existing Jones Act vessels  
14 that use marine fuel oil for propulsion power  
15 with vessels that are propelled using batteries  
16 or low-carbon fuels; or

17 (B) to retrofit existing Jones Act vessels  
18 that use marine fuel oil for propulsion power  
19 into vessels that are propelled using batteries or  
20 low-carbon fuels.

21 (3) MODELED OFF DIESEL EMISSIONS REDUC-  
22 TION ACT.—To the extent practicable, the Adminis-  
23 trator shall administer the program in a manner  
24 similar to the national grant program of the Admin-  
25 istrator of the Environmental Protection Agency

1 under subtitle G of title VII of the Energy Policy  
2 Act of 2005 (42 U.S.C. 16131 et seq.).

3 (4) ELIGIBLE ENTITIES.—An entity eligible for  
4 an award under the program is an owner of a Jones  
5 Act vessel that currently uses marine fuel oil for  
6 propulsion power.

7 (5) SELECTION.—

8 (A) APPLICATION.—An eligible entity seek-  
9 ing an award under the program shall submit  
10 to the Administrator an application at such  
11 time, in such manner, and containing such in-  
12 formation as the Administrator may require,  
13 which shall include a certification that an award  
14 under the program will be used, as applicable—

15 (i) to purchase, or enter into a con-  
16 tract for the construction of, a vessel that  
17 exclusively uses a battery or low-carbon  
18 fuels for all propulsion power; or

19 (ii) to retrofit an existing Jones Act  
20 vessel that uses marine fuel oil for propul-  
21 sion power into a vessel that is propelled  
22 using batteries or low-carbon fuels.

23 (B) PRIORITY.—In selecting the recipients  
24 of awards under the program, the Adminis-  
25 trator shall give priority to entities the replace-

1           ment of whose vessels with vessels that use bat-  
2           teries or low-carbon fuels for all propulsion  
3           power would—

4                   (i) maximize the reduction of green-  
5                   house gas emissions;

6                   (ii) maximize the public health bene-  
7                   fits from the reduction of criteria air pol-  
8                   lutants;

9                   (iii) maximize water quality in ports  
10                  and other bodies of water;

11                  (iv) maximize public health and envi-  
12                  ronmental benefits from every dollar spent  
13                  under the program; and

14                  (v) alleviate air pollution in poor air  
15                  quality areas, including—

16                           (I) areas identified by the Ad-  
17                           ministrators of the Environmental Pro-  
18                           tection Agency as in nonattainment or  
19                           maintenance of national ambient air  
20                           quality standards promulgated under  
21                           section 109 of the Clean Air Act (42  
22                           U.S.C. 7409) for criteria air pollut-  
23                           ants; and

24                           (II) other areas that receive a  
25                           disproportionate quantity of air pollu-



1                   tion, as determined by the Adminis-  
2                   trator of the Environmental Protec-  
3                   tion Agency.

4                   (6) CLAWBACK.—If the Administrator deter-  
5                   mines that the recipient of an award under the pro-  
6                   gram has violated the certification required under  
7                   paragraph (5)(A), the Administrator shall seek reim-  
8                   bursement of the full amount of the award provided  
9                   to the recipient.

10                  (7) MODERNIZING VESSELS OF THE UNITED  
11                  STATES.—If the Administrator determines that no  
12                  existing Jones Act vessels are eligible to receive  
13                  funding under the program, for the duration of that  
14                  determination, paragraphs (2) through (6) shall be  
15                  applied by substituting “vessel of the United States”  
16                  for “Jones Act vessel”.

17                  (b) RESEARCH AND DEVELOPMENT FOR LOW-CAR-  
18                  BON MARITIME FUELS AND LOW-EMISSION MARITIME  
19                  TECHNOLOGIES.—

20                  (1) DEFINITION OF ELIGIBLE ENTITY.—In this  
21                  subsection, the term “eligible entity” means—

22                          (A) a State (including the District of Co-  
23                          lumbia and territories of the United States), re-  
24                          gional, local, or Tribal government;

1 (B) a maritime shipping or logistics com-  
2 pany;

3 (C) a port authority;

4 (D) an accredited institution of higher edu-  
5 cation;

6 (E) a research institution;

7 (F) a person engaged in the production,  
8 transportation, blending, or storage of sustain-  
9 able maritime fuel in the United States or feed-  
10 stocks in the United States that may be used  
11 to produce sustainable maritime fuel;

12 (G) a person engaged in the development,  
13 demonstration, or application of low-emission  
14 maritime technologies; and

15 (H) a nonprofit entity or nonprofit consor-  
16 tium with experience in sustainable maritime  
17 fuels, low-emission maritime technologies, or  
18 other clean transportation research programs.

19 (2) ESTABLISHMENT.—For fiscal year 2026  
20 and each fiscal year thereafter, there are appro-  
21 priated, out of any funds in the Treasury not other-  
22 wise appropriated, to the Department of Energy an  
23 amount equal to 25 percent of the amounts collected  
24 pursuant to fees assessed under sections 5 and 6  
25 during the previous calendar year to award competi-

1       tive grants to eligible entities to carry out projects  
2       in the United States—

3               (A) to produce, transport, blend, or store  
4       low-carbon maritime fuels; or

5               (B) to develop, demonstrate, or apply low-  
6       emission maritime technologies.

7       (3) PRIORITY.—In awarding grants under the  
8       program established under paragraph (2), the Sec-  
9       retary of Energy shall give priority to projects that  
10      maximize—

11              (A) the domestic production and deploy-  
12      ment of sustainable maritime fuels or the use of  
13      low-emission maritime technologies in commer-  
14      cial maritime;

15              (B) reductions in greenhouse gas emis-  
16      sions;

17              (C) public health benefits from criteria air  
18      pollutant reductions;

19              (D) water quality in ports and other bodies  
20      of water;

21              (E) public health and environmental bene-  
22      fits from every dollar spent under that pro-  
23      gram; and

24              (F) the creation of new jobs in the United  
25      States.

1 (c) WORKFORCE DEVELOPMENT.—

2 (1) DEFINITIONS.—In this subsection:

3 (A) LOW-CARBON FUEL.—The term “low-  
4 carbon fuel” means a marine fuel the lifecycle  
5 carbon dioxide-equivalent emissions of which is  
6 at least 90 percent less than the lifecycle carbon  
7 dioxide-equivalent emissions of marine fuel oil.

8 (B) MARITIME ACADEMY.—The term  
9 “maritime academy” means—

10 (i) the United States Merchant Ma-  
11 rine Academy;

12 (ii) a State maritime academy; and

13 (iii) a center of excellence for domestic  
14 maritime workforce training and education  
15 designated under section 51706(a) of title  
16 46, United States Code.

17 (C) PROGRAM.—The term “program”  
18 means the program established under para-  
19 graph (2).

20 (D) ZERO-EMISSION PORT EQUIPMENT OR  
21 TECHNOLOGY.—The term “zero-emission port  
22 equipment or technology” has the meaning  
23 given the term in section 133(d) of the Clean  
24 Air Act (42 U.S.C. 7433(d)).

1           (2) ESTABLISHMENT.—For fiscal year 2026  
2 and each fiscal year thereafter, there are appro-  
3 priated, out of any funds in the Treasury not other-  
4 wise appropriated, to the Environmental Protection  
5 Agency an amount equal to 5 percent of the  
6 amounts collected pursuant to fees assessed under  
7 sections 5 and 6 during the previous calendar year  
8 to award grants and rebates to support workforce  
9 training and development for the maintenance and  
10 operation of zero-emission port equipment or tech-  
11 nology and vessels that are propelled using batteries  
12 or low-carbon fuels, including training, program-  
13 ming, and curriculum development at maritime  
14 academies on the maintenance and operation of  
15 zero-emission port equipment or technology and ves-  
16 sels that are propelled using batteries or low-carbon  
17 fuels.

18           (3) ELIGIBLE ENTITIES.—An entity eligible to  
19 receive an award under the program is—

20                   (A) a State (including the District of Co-  
21 lumbia and territories of the United States), re-  
22 gional, local, or Tribal agency that has jurisdic-  
23 tion over a port authority or a port;

24                   (B) a port authority;

25                   (C) an air pollution control agency;

1 (D) a maritime academy; and

2 (E) a private entity that—

3 (i) applies for a grant under this sub-  
4 section in partnership with an entity de-  
5 scribed in any of subparagraphs (A)  
6 through (D); and

7 (ii) owns, operates, or uses—

8 (I) vessels, the primary purpose  
9 of which are transporting cargo or  
10 freight, that are propelled using bat-  
11 teries or low-carbon fuels; or

12 (II) the facilities, cargo-handling  
13 equipment, transportation equipment,  
14 or related technology of a port.

15 (4) APPLICATION.—An eligible entity seeking  
16 an award under the program shall submit to the Ad-  
17 ministrator an application at such time, in such  
18 manner, and containing such information as the Ad-  
19 ministrator may require.

20 (d) HARBOR CRAFT ELECTRIFICATION.—

21 (1) ESTABLISHMENT.—For fiscal year 2026  
22 and each fiscal year thereafter, there are appro-  
23 priated, out of any funds in the Treasury not other-  
24 wise appropriated, to the Environmental Protection  
25 Agency an amount equal to 10 percent of the

1 amounts collected pursuant to fees assessed under  
2 sections 5 and 6 during the previous calendar year  
3 to award grants, rebates, or low-interest loans, as  
4 determined appropriate by the Administrator—

5 (A) to replace existing harbor craft, except  
6 for ferry vessels, with vessels that use batteries  
7 for all propulsion power; and

8 (B) to support workforce development and  
9 training to support the maintenance, charging,  
10 fueling, and operation of vessels described in  
11 subparagraph (A).

12 (2) MODELED OFF DIESEL EMISSIONS REDUC-  
13 TION ACT.—To the extent practicable, the Adminis-  
14 trator shall administer the program established  
15 under paragraph (1) in a manner similar to the na-  
16 tional grant program of the Administrator under  
17 subtitle G of title VII of the Energy Policy Act of  
18 2005 (42 U.S.C. 16131 et seq.).

19 (3) ELIGIBLE ENTITIES.—An entity eligible to  
20 receive an award under the program established  
21 under paragraph (1) is—

22 (A) a State (including the District of Co-  
23 lumbia and territories of the United States), re-  
24 gional, local, or Tribal agency that has jurisdic-  
25 tion over a port authority or a port;

1 (B) a port authority; and

2 (C) a private entity that—

3 (i) applies for an award under this  
4 subsection in partnership with an entity  
5 described in subparagraph (A) or (B); and

6 (ii) owns, operates, or uses harbor  
7 craft, except for ferry vessels.

8 (4) SELECTION.—

9 (A) APPLICATION.—An eligible entity seek-  
10 ing an award under the program established  
11 under paragraph (1) shall submit to the Admin-  
12 istrator an application at such time, in such  
13 manner, and containing such information as the  
14 Administrator may require, which shall include  
15 a certification that an award under the program  
16 will be used to purchase a vessel that exclu-  
17 sively uses a battery for all propulsion power.

18 (B) PRIORITY.—In selecting the recipients  
19 of awards under the program established under  
20 paragraph (1), the Administrator shall give pri-  
21 ority to entities the replacement of whose har-  
22 bor crafts with vessels that use batteries for all  
23 propulsion power would—

24 (i) maximize the reduction of green-  
25 house gas emissions;



1 (ii) maximize the public health bene-  
2 fits from the reduction of criteria air pol-  
3 lutants;

4 (iii) maximize water quality in ports  
5 and other bodies of water;

6 (iv) maximize public health and envi-  
7 ronmental benefits from every dollar spent  
8 under the program; and

9 (v) alleviate air pollution in poor air  
10 quality areas, including—

11 (I) areas identified by the Ad-  
12 ministrator as in nonattainment or  
13 maintenance of national ambient air  
14 quality standards promulgated under  
15 section 109 of the Clean Air Act (42  
16 U.S.C. 7409) for criteria air pollut-  
17 ants; and

18 (II) other areas that receive a  
19 disproportionate quantity of air pollu-  
20 tion, as determined by the Adminis-  
21 trator.

22 (5) C<sub>LAWBACK</sub>.—If the Administrator deter-  
23 mines that the recipient of an award under the pro-  
24 gram established under paragraph (1) has violated  
25 the certification required under paragraph (4)(A),

1 the Administrator shall seek reimbursement of the  
2 full amount of the award provided to the recipient.

3 (e) FERRY ELECTRIFICATION.—

4 (1) ESTABLISHMENT.—For fiscal year 2026  
5 and each fiscal year thereafter, there are appro-  
6 priated, out of any funds in the Treasury not other-  
7 wise appropriated, to the Environmental Protection  
8 Agency an amount equal to 10 percent of the  
9 amounts collected pursuant to fees assessed under  
10 sections 5 and 6 during the previous calendar year  
11 to award grants, rebates, or low-interest loans, as  
12 determined appropriate by the Administrator—

13 (A) to replace existing ferry or crew vessels  
14 with vessels that use batteries for all propulsion  
15 power; and

16 (B) to support workforce development and  
17 training to support the maintenance, charging,  
18 fueling, and operation of vessels described in  
19 subparagraph (A) that use batteries for all pro-  
20 pulsion power.

21 (2) MODELED OFF DIESEL EMISSIONS REDUC-  
22 TION ACT.—To the extent practicable, the Adminis-  
23 trator shall administer the program established  
24 under paragraph (1) in a manner similar to the na-  
25 tional grant program of the Administrator under

1 subtitle G of title VII of the Energy Policy Act of  
2 2005 (42 U.S.C. 16131 et seq.).

3 (3) ELIGIBLE ENTITIES.—An entity eligible to  
4 receive an award under the program established  
5 under paragraph (1) is—

6 (A) a State (including the District of Co-  
7 lumbia and territories of the United States), re-  
8 gional, local, or Tribal agency that has jurisdic-  
9 tion over a ferry line;

10 (B) a port authority; and

11 (C) a private entity that—

12 (i) applies for an award under this  
13 subsection in partnership with an entity  
14 described in subparagraph (A) or (B); and

15 (ii) owns, operates, or uses ferry or  
16 crew vessels.

17 (4) SELECTION.—

18 (A) APPLICATION.—An eligible entity seek-  
19 ing an award under the program established  
20 under paragraph (1) shall submit to the Admin-  
21 istrator an application at such time, in such  
22 manner, and containing such information as the  
23 Administrator may require, which shall include  
24 a certification that an award under the program

1 will be used to purchase a vessel that exclu-  
2 sively uses a battery for all propulsion power.

3 (B) PRIORITY.—In selecting the recipients  
4 of awards under the program established under  
5 paragraph (1), the Administrator shall give pri-  
6 ority to entities the replacement of whose ferry  
7 or crew vessels with vessels that use batteries  
8 for all propulsion power would—

9 (i) maximize the reduction of green-  
10 house gas emissions;

11 (ii) maximize the public health bene-  
12 fits from the reduction of criteria air pol-  
13 lutants;

14 (iii) maximize water quality in ports  
15 and other bodies of water;

16 (iv) maximize public health and envi-  
17 ronmental benefits from every dollar spent  
18 under the program; and

19 (v) alleviate air pollution in poor air  
20 quality areas, including—

21 (I) areas identified by the Ad-  
22 ministrator as in nonattainment or  
23 maintenance of national ambient air  
24 quality standards promulgated under  
25 section 109 of the Clean Air Act (42

1 U.S.C. 7409) for criteria air pollut-  
2 ants; and

3 (II) other areas that receive a  
4 disproportionate quantity of air pollu-  
5 tion, as determined by the Adminis-  
6 trator.

7 (5) CLAWBACK.—If the Administrator deter-  
8 mines that the recipient of an award under the pro-  
9 gram established under paragraph (1) has violated  
10 the certification required under paragraph (4)(A),  
11 the Administrator shall seek reimbursement of the  
12 full amount of the award provided to the recipient.

13 (f) INCREASED AIR MONITORING IN PORT COMMU-  
14 NITIES.—

15 (1) ESTABLISHMENT.—For fiscal year 2026  
16 and each fiscal year thereafter, there are appro-  
17 priated, out of any funds in the Treasury not other-  
18 wise appropriated, to the Environmental Protection  
19 Agency an amount equal to 3 percent of the  
20 amounts collected pursuant to fees assessed under  
21 sections 5 and 6 during the previous calendar year  
22 to provide grants, rebates, or low-interest loans, as  
23 determined appropriate by the Administrator, to cre-  
24 ate fenceline air monitoring at port boundaries and

1 in communities located within 1 mile of a port  
2 boundary.

3 (2) ELIGIBLE ENTITIES.—An entity eligible to  
4 receive an award under the program established  
5 under paragraph (1) is—

6 (A) a State (including the District of Co-  
7 lumbia and territories of the United States), re-  
8 gional, local, or Tribal government;

9 (B) a State (including the District of Co-  
10 lumbia and territories of the United States), re-  
11 gional, local, or Tribal agency that has jurisdic-  
12 tion over a port authority or port;

13 (C) a port authority;

14 (D) an air pollution control agency; and

15 (E) a nonprofit entity or nonprofit consor-  
16 tium with experience in air pollution moni-  
17 toring.

18 (3) APPLICATION.—An eligible entity seeking  
19 an award under the program established under para-  
20 graph (1) shall submit to the Administrator an ap-  
21 plication at such time, in such manner, and con-  
22 taining such information as the Administrator may  
23 require.

24 (g) FUNDING OF EXISTING PROGRAMS.—

1           (1) CLEAN PORTS PROGRAM.—For fiscal year  
2           2026 and each fiscal year thereafter, there are ap-  
3           propriated, out of any funds in the Treasury not  
4           otherwise appropriated, to the Environmental Pro-  
5           tection Agency an amount equal to 10 percent of the  
6           amounts collected pursuant to fees assessed under  
7           sections 5 and 6 during the previous calendar year  
8           to carry out the program established under section  
9           133 of the Clean Air Act (42 U.S.C. 7433).

10          (2) PORT INFRASTRUCTURE DEVELOPMENT  
11          PROGRAM.—For fiscal year 2026 and each fiscal  
12          year thereafter, there are appropriated, out of any  
13          funds in the Treasury not otherwise appropriated, to  
14          the Department of Transportation an amount equal  
15          to 7 percent of the amounts collected pursuant to  
16          fees assessed under sections 5 and 6 during the pre-  
17          vious calendar year to carry out the program estab-  
18          lished under section 54301 of title 46, United States  
19          Code.

20          (3) OCEANS AND COASTAL SECURITY.—For fis-  
21          cal year 2026 and each fiscal year thereafter, there  
22          are appropriated, out of any funds in the Treasury  
23          not otherwise appropriated, to the National Oceanic  
24          and Atmospheric Administration an amount equal to  
25          3 percent of the amounts collected pursuant to fees

1 assessed under sections 5 and 6 during the previous  
2 calendar year for deposit into the National Oceans  
3 and Coastal Security Fund established under section  
4 904(a) of the National Oceans and Coastal Security  
5 Act (16 U.S.C. 7503).

6 (4) MARINE DEBRIS FOUNDATION.—For fiscal  
7 year 2026 and each fiscal year thereafter, there are  
8 appropriated, out of any funds in the Treasury not  
9 otherwise appropriated, to the Department of Com-  
10 merce an amount equal to 2 percent of the amounts  
11 collected pursuant to fees assessed under sections 5  
12 and 6 during the previous calendar year to carry out  
13 subtitle B of title I of the Save Our Seas 2.0 Act  
14 (33 U.S.C. 4211 et seq.).

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# ATTACHMENT 2C

South Coast Air Quality Management District

Legislative Analysis Summary – S. 1917 / H.R. 4024 (Padilla, Welch, Whitehouse, Booker, Feinstein / Garcia, Barragán, Huffman, Bonamici, Cleaver, Tlaib, Norton, Lee, Schiff, Sherrill, Lieu, Grijalva, Espailat)

Version: As introduced, June 8, 2023

Analyst: LTO

## **S. 1917 / H.R. 4024 (Padilla, Welch, Whitehouse, Booker, Feinstein / Garcia, Barragán, Huffman, Bonamici, Cleaver, Tlaib, Norton, Lee, Schiff, Sherrill, Lieu, Grijalva, Espailat) Clean Shipping Act of 2023**

**Summary:** The Clean Shipping Act of 2023 would amend the Clean Air Act to establish standards to limit the carbon intensity of the fuel used by certain vessels, and for other purposes.

**Background:** The Clean Shipping Act of 2023 and the International Maritime Pollution Accountability Act are a package of bills introduced by Senators Alex Padilla, Sheldon Whitehouse, Dianne Feinstein, and Corey Booker to address greenhouse gas (GHG) emissions and air pollution from ocean going vessels (OGV). The House companion bill to the Clean Shipping Act (H.R. 4024) was introduced by Representatives Robert Garcia and Nanette Barragán.

This bill is endorsed by the following environmental and community organizations: Achieving Community Tasks Successfully; Azul; Breathe Southern California; California Environmental Voters; Catholic Charities Diocese of Stockton; Center for Biological Diversity; Center for Human Rights and Environment; Earthjustice; Environmental Defense Fund; Environmental Investigation Agency; Environmental Justice Committee, AAPI Equity Alliance; Faith Action Climate Team; Friends of the Earth; Green Latinos; Healthy Port Communities Coalition; Inland Ocean Coalition; Little Manila Rising; Long Beach Alliance for Children with Asthma; National Ocean Protection Coalition; New York City Environmental Justice Alliance; Ocean Conservancy; Ocean Defense Initiative; Opportunity Green; Pacific Environment; People for Climate Action – Seattle; Regional Asthma Management & Prevention; Restoring Earth Connection; San Pedro & Peninsula Homeowners Coalition; Seattle Cruise Control; Sierra Club; STAND.earth; Unitarian Universalist Church of Long Beach; Washington Physicians for Social Responsibility; and Waterway Advocates.

The Clean Shipping Act is supported by the following businesses and organizations: ABB; CALSTART; Cape Horn Engineering; Corvus Energy; Dealfeng New Energy Technology Ltd.; Evolve Hydrogen Inc.; Fourth Tack LLC; Future Proof Shipping B.V.; Green Hydrogen Coalition; Hy Stor Energy; International Windship Association; Maersk; Magnuss Corp.; NAVTEK NAVAL TECHNOLOGIES INC.; Ocean Assets Institute; Renewable Hydrogen Alliance; SHIFT Clean Solutions Ltd.; Spaera; Sustainable Ships; Unitrove; Wattlab; Wind+Wing Technologies Inc.; Zero Emissions Ship Technology Association; and ZULU Associates.

**Status:** 6/8/23 – Introduced in Senate and House.

**Specific Provisions:** The Clean Shipping Act would require U.S. EPA to promulgate regulations to reduce the carbon intensity of fuel used by OGVs and to eliminate GHG emissions and air pollutants from OGVs at berth or at-anchor at U.S. ports. The intent of the bill is to reduce GHG emissions by 2040 to be consistent with the Paris Agreement goal to limit warming to 1.5

degrees Celsius; and to reach zero-emissions for GHG and air pollutants at berth or at-anchor by 2030.

The bill would create progressively lower carbon intensity standards for fuels used by OGVs. The baseline for the fuel standards would be the average carbon intensity of fuel used by all vessels on covered voyages in the calendar year 2024. The standards would be as follows:

- 2027 - 2029: at least 20% less than baseline
- 2030 - 2034: at least 45% less than baseline
- 2040 and thereafter: 100% reduction

The bill includes flexibility for U.S. EPA to set less stringent fuel standards based on technological and economic feasibility with consideration for potential adverse impacts on public health and safety. including with respect to air quality, water, and waste. It also would allow U.S. EPA to harmonize with standards established by the International Maritime Organization (IMO) that are equal or more stringent.

**Impacts on South Coast AQMD’s Mission, Operations, or Initiatives:** The South Coast Air Basin is home to more than 17 million people, including nearly two-thirds of the state’s overburdened environmental justice communities. This region has some of the worst air quality in the nation and is in extreme non-attainment for ozone and severe non-attainment for PM<sub>2.5</sub>.

The largest source of air pollution in the South Coast Air Basin stems from mobile sources related to goods movement activity in and around the San Pedro Bay Ports, including heavy-duty trucks, OGVs, locomotives, aircraft and off-road equipment. OGVs are quickly becoming the largest source of air pollution in our region as heavy-duty trucks and other equipment become cleaner.

Regulatory authority over OGVs is complex, involving international and domestic governmental organizations. While state and local government have some authority to reduce air pollution related to OGVs, the federal government has the strongest ability to regulate emissions in U.S. waters and to influence the IMO and other foreign stakeholders. The Clean Shipping Act would require the U.S. EPA Administrator to take a more aggressive approach to reducing GHG emissions from OGVs coming to call at U.S. ports.

The bill provisions related to OGVs would take effect 3-years later than CARB’s 2020 At-Berth regulations, which requires the last class of vessels to comply by January 1, 2027. However, the Clean Shipping Act would require elimination of both GHG and criteria pollutants at-berth and at-anchor. The Clean Shipping Act also sends signals to the IMO and foreign stakeholders that the U.S. is committed to reducing GHGs and air pollution from OGVs in our nation’s waters.

The bill authors have indicated willingness to discuss potential improvements to ensure criteria pollutants are reduced and not adversely impacted by GHG measures. Overall, the Clean

South Coast Air Quality Management District  
Legislative Analysis Summary – S. 1917 / H.R. 4024 (Padilla, Welch, Whitehouse, Booker, Feinstein / Garcia,  
Barragán, Huffman, Bonamici, Cleaver, Tlaib, Norton, Lee, Schiff, Sherrill, Lieu, Grijalva, Espaillat)  
Version: As introduced, June 8, 2023  
Analyst: LTO

Shipping Act is in alignment with South Coast AQMD's efforts to reduce air pollution from OGVs and sends a clear message that emissions reductions from OGVs are needed to the domestic and international governmental bodies.

**Recommended Position:** SUPPORT

# ATTACHMENT 2D

II

118<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION

## **S. 1917**

To amend the Clean Air Act to provide for the establishment of standards to limit the carbon intensity of the fuel used by certain vessels, and for other purposes.

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### IN THE SENATE OF THE UNITED STATES

JUNE 8, 2023

Mr. PADILLA (for himself, Mr. WELCH, Mr. WHITEHOUSE, Mr. BOOKER, and Mrs. FEINSTEIN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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## **A BILL**

To amend the Clean Air Act to provide for the establishment of standards to limit the carbon intensity of the fuel used by certain vessels, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the “Clean Shipping Act  
5 of 2023”.

6 SEC. 2. MARINE ZERO GREENHOUSE GAS FUEL STANDARD.

7 The Clean Air Act is amended by inserting after sec-  
8 tion 212 (42 U.S.C. 7546) the following:

1 "SEC. 212A. MARINE ZERO GREENHOUSE GAS FUEL STAND-  
 2    ARD.

3           “(a) MARINE VESSEL FUEL CARBON INTENSITY  
 4 STANDARDS.—

5           “(1) STANDARDS.—The Administrator shall, by  
 6 regulation and except as provided in paragraph (3),  
 7 require each vessel on a covered voyage to comply  
 8 with standards for the carbon intensity of the fuel  
 9 used by that vessel so that the carbon intensity is—

10                 “(A) in each of calendar years 2027  
 11 through 2029, at least 20 percent less than the  
 12 carbon intensity baseline;

13                 “(B) in each of calendar years 2030  
 14 through 2034, at least 45 percent less than the  
 15 carbon intensity baseline;

16                 “(C) in each of calendar years 2035  
 17 through 2039, at least 80 percent less than the  
 18 carbon intensity baseline; and

19                 “(D) in calendar year 2040 and each cal-  
 20 endar year thereafter, 100 percent less than the  
 21 carbon intensity baseline.

22           “(2) PROMULGATION OF STANDARDS.—The Ad-  
 23 ministratoꝛ shall finalize—

24                 “(A) the standard required by paragraph  
 25 (1)(A) by not later than January 1, 2026; and

1 “(B) the standards required by each of  
2 subparagraphs (B) through (D) of paragraph  
3 (1) by not later than 2 years before the respec-  
4 tive standard goes into effect.

5 “(3) TECHNOLOGICAL OR ECONOMIC FEASI-  
6 BILITY.—

7 “(A) IN GENERAL.—If the Administrator  
8 determines that a reduction in carbon intensity  
9 required under paragraph (1) is not techno-  
10 logically or economically feasible by the applica-  
11 ble deadline under that paragraph, the Admin-  
12 istrator, in lieu of promulgating the standard  
13 otherwise required by that paragraph, shall pro-  
14 mulgate a standard that will achieve the max-  
15 imum reduction in the carbon intensity of the  
16 fuel used by vessels on covered voyages that is  
17 technologically and economically feasible by the  
18 applicable deadline.

19 “(B) CONSIDERATIONS.—In determining  
20 technological and economic feasibility for pur-  
21 poses of subparagraph (A), the Administrator  
22 shall take into account the net reduction of  
23 emissions of greenhouse gases and potential ad-  
24 verse impacts on public health, safety, and the  
25 environment, including with respect to air qual-

1           ity, water quality, and the generation and dis-  
2           posal of solid waste.

3           “(4) HARMONIZATION WITH INTERNATIONAL  
4           STANDARDS.—If the Administrator determines that  
5           standards mandated by the International Maritime  
6           Organization for reduction of the carbon intensity of  
7           fuel used by vessels for a calendar year are equal to  
8           or more stringent than the standards under para-  
9           graph (1) for that calendar year, the Administrator  
10          may adopt those standards.

11          “(5) EXEMPTION.—Any vessel that is on cov-  
12          ered voyages for 30 days or fewer during a calendar  
13          year shall be exempt from the standards promul-  
14          gated under this subsection for that year.

15          “(6) COMMON OWNERSHIP OR CONTROL.—For  
16          purposes of determining compliance with any stand-  
17          ard established under this subsection, the Adminis-  
18          trator may allow the carbon intensity of the fuels  
19          used by vessels under common ownership or control  
20          to be averaged.

21          “(7) OVERCOMPLIANCE.—The Administrator  
22          may allow vessels to credit overcompliance with any  
23          standard established under this subsection towards  
24          demonstrating compliance with any future standard  
25          under this subsection.

1 “(b) MONITORING AND REPORTING.—

2 “(1) LIST OF METHODS.—

3 “(A) IN GENERAL.—The Administrator  
4 shall develop a list of acceptable methods for  
5 monitoring and reporting compliance with the  
6 standards established under subsection (a).

7 “(B) CONSISTENCY OF METHODS.—The  
8 Administrator, to the maximum extent prac-  
9 ticable, shall ensure the consistency of the  
10 methods included in the list required under sub-  
11 paragraph (A) with similar reporting schemes  
12 developed by the European Union and the  
13 International Maritime Organization.

14 “(2) ANNUAL REPORTING REQUIREMENTS.—

15 For each calendar year, a vessel shall report to the  
16 Administrator—

17 “(A) the carbon intensity of the fuel used  
18 for each covered voyage;

19 “(B) the amount of fuel used for each cov-  
20 ered voyage; and

21 “(C) the total greenhouse gas emissions  
22 measured in carbon dioxide equivalent for all  
23 covered voyages.

24 “(3) ANNUAL REPORT.—Not later than 180  
25 days after the end of each annual reporting period



1 under paragraph (2), the Administrator, in consulta-  
2 tion with the Secretary of Transportation and the  
3 Commandant of the Coast Guard, shall publish a re-  
4 port that—

5 “(A) compiles the data reported under  
6 paragraph (2); and

7 “(B) includes an explanation intended to  
8 facilitate public understanding of—

9 “(i) the carbon dioxide equivalent  
10 emissions of vessels on covered voyages;

11 and

12 “(ii) the carbon intensity of fuels used  
13 by those vessels.

14 “(c) ENFORCEMENT.—The standards established  
15 under subsection (a) and the annual reporting require-  
16 ments of subsection (b)(2) shall be considered an emission  
17 standard or limitation for purposes of section 304(a)(1).

18 “(d) DEFINITIONS.—In this section:

19 “(1) CARBON DIOXIDE EQUIVALENT.—The  
20 term ‘carbon dioxide equivalent’ means the number  
21 of metric tons of carbon dioxide emissions with the  
22 same global warming potential as 1 metric ton of  
23 another greenhouse gas, as calculated using Equa-  
24 tion A–1 in section 98.2(b) of title 40, Code of Fed-

1 eral Regulations (as in effect on the date of enact-  
2 ment of this section).

3 “(2) CARBON INTENSITY.—The term ‘carbon  
4 intensity’ means the quantity of lifecycle greenhouse  
5 gas emissions per unit of fuel energy, expressed in  
6 grams of carbon dioxide equivalent per megajoule.

7 “(3) CARBON INTENSITY BASELINE.—The term  
8 ‘carbon intensity baseline’ means the average carbon  
9 intensity of the fuel used by all vessels on covered  
10 voyages in calendar year 2024.

11 “(4) COVERED VOYAGE.—The term ‘covered  
12 voyage’ means any voyage of a vessel for the purpose  
13 of transporting passengers or cargo for commercial  
14 purposes—

15 “(A) that is between any ports of call  
16 under the jurisdiction of the United States; or

17 “(B) that is between a port of call under  
18 the jurisdiction of the United States and a port  
19 of call under the jurisdiction of a foreign coun-  
20 try.

21 “(5) GREENHOUSE GAS.—The term ‘greenhouse  
22 gas’ means carbon dioxide, methane, nitrous oxide,  
23 hydrofluorocarbons, perfluorocarbons, and sulfur  
24 hexafluoride.

1           “(6) LIFECYCLE GREENHOUSE GAS EMIS-  
2           SIONS.—The term ‘lifecycle greenhouse gas emis-  
3           sions’ has the meaning given the term in section  
4           211(o)(1).

5           “(7) PORT OF CALL.—The term ‘port of call’  
6           means the port where a vessel stops to load or un-  
7           load cargo or to embark or disembark passengers.

8           “(8) VESSEL.—The term ‘vessel’ means a vessel  
9           of 400 gross tonnage or more.”.

10   SEC. 3. IN-PORT MARINE VESSEL ZERO EMISSION STAND-  
11                                   ARDS.

12           Section 213 of the Clean Air Act (42 U.S.C. 7547)  
13   is amended by adding at the end the following:

14           “(e) IN-PORT MARINE VESSEL ZERO EMISSION  
15   STANDARDS.—

16           “(1) STANDARDS.—Except as provided in para-  
17           graph (2) and not later than January 1, 2026, the  
18           Administrator shall promulgate (and from time to  
19           time revise) standards to eliminate, by not later than  
20           January 1, 2030, emissions of greenhouse gases and  
21           air pollutants for which air quality criteria have been  
22           issued under section 108 from vessels at anchorage  
23           or at berth in the contiguous zone of the United  
24           States (as described in Presidential Proclamation

1 7219 (43 U.S.C. 1331 note; 64 Fed. Reg. 48701,  
2 49844)).

3 “(2) EXCEPTION.—If the Administrator deter-  
4 mines that standards required by paragraph (1) are  
5 not technologically or economically feasible, the Ad-  
6 ministrator shall promulgate standards that achieve  
7 the maximum reduction of the emissions described  
8 in that paragraph from the vessels described in that  
9 paragraph that is technologically and economically  
10 feasible.

11 “(3) CONSIDERATIONS.—In determining tech-  
12 nological and economic feasibility under paragraph  
13 (2), the Administrator shall take into account the  
14 net reduction of emissions of greenhouse gases, the  
15 net reduction of emissions of air pollutants for which  
16 air quality criteria have been issued under section  
17 108, and potential adverse impacts on public health,  
18 safety, and the environment, including with respect  
19 to air quality, water quality, and the generation and  
20 disposal of solid waste.”.

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# ATTACHMENT 3A



**Carmen Group**  
I N C O R P O R A T E D

**To:** South Coast AQMD Legislative Committee

**From:** Carmen Group

**Date:** September 28, 2023

**Re:** Federal Update -- Executive Branch

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**Congressional Outlook:** As Congress approached the end of the Federal fiscal year on September 30<sup>th</sup> with little progress on appropriations bills, a government shutdown appeared next to inevitable, leaving great uncertainty about how the end-of-the-year wrap-up on FY24 spending and policy would unfold. The immediate sticking point was lack of agreement about a short-term continuing resolution (CR), the business-as-procedure for averting a shutdown and giving Congress more time to settle differences. House Republicans were hoping to agree among themselves on a CR that would make incremental progress on controlling spending, addressing the border, and forcing a negotiation with the Senate, but were mostly unsuccessful as the deadline approached.

## **Department of Transportation**

**FRA Announces CRISI Grant Awards:** In September, the Federal Railroad Administration (FRA) announced the award of \$1.4 billion from the Bipartisan Infrastructure Law for 70 grants under the Consolidated Rail Infrastructure and Safety Improvements (CRISI) program. California received six grants, at least three of which explicitly involve projects designed to reduce rail emissions from locomotives. Meanwhile, the FRA is expected to announce the availability of significantly increased new funding for the next round of CRISI grants by the end of this year.

**DOT Announces Funds Available for EV Charger Reliability:** In September, the Department of Transportation announced the availability of \$100 million from the Bipartisan Infrastructure Law to repair and replace existing but non-operational publicly-available electric vehicle (EV) charging infrastructure. The funds are part of a legally mandated 10% set-aside from the National Electric Vehicle Infrastructure (NEVI) formula program which is helping states build out a national system of new EV charging stations. Applications due November 13, 2023.

**FAA Announces Funds Available for Reduced-Emission Aviation Projects:** In September, the Federal Aviation Administration (FAA) announced the availability of nearly \$300 million from the Inflation Reduction Act for Sustainable Aviation Fuels (SAF) grants designed to reduce emissions from aviation. These include \$245 million for infrastructure projects and \$47 million for low-emission aviation technology projects. Applications due November 27, 2023

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**FAA Appointment:** In September, the President nominated Michael Whitaker to be Administrator of the Federal Aviation Administration. Whitaker is a former FAA Deputy Administrator with 30 years of aviation experience, currently serving as CEO of a Hyundai company designing an electric advanced air mobility vehicle.

### **Environmental Protection Agency**

**EPA Announces Funds Available for Climate Pollution Reduction Grants:** In September, the Environmental Protection Agency (EPA) announced the availability of \$4.6 billion for the Climate Pollution Reduction Grants (CPRG) program created by the Inflation Reduction Act. The program is designed to reduce emissions of greenhouse gases and other harmful pollution. EPA anticipates awarding approximately 30 to 115 grants ranging between \$2 million and \$500 million, while also advancing the Justice40 Initiative to ensure that 40% of certain Federal investments flow to disadvantaged communities. Applications due April 1, 2024.

**EPA Solicits Applicants for Environmental Education Grants:** In September, the EPA announced that up to \$3.6 million is being made available for grants under the 2023 Environmental Education (EE) Local Grant Program. EPA will award grants in each of EPA's 10 Regions, between \$50,000-\$100,000 each, for a total of 30-40 grants nationwide. Each Region has published a solicitation notice with their respective regional details. Applicants must apply to the Regional notice that corresponds with the location of their proposed project. Applications due November 8, 2023.

### **Department of Energy**

**DOE Announces Funds and Loans to Support EV Transition:** In September, the Department of Energy (DOE) announced a \$15.5 billion package of funding and loans focused on retooling existing factories for the transitions to electric vehicles. This includes \$2 billion for a funding opportunity to spur conversion of manufacturing plants, \$10 billion in new loan authority under the Advanced Technology Vehicles Manufacturing Loan Program, and a Notice of Intent to invest \$3.5 billion to boost production of advanced batteries and battery materials.

**DOE Recognizes Eleven Women for Achievements in Clean Energy:** In September the DOE announced winners of the 2023 Clean Energy Education and Empowerment (C3E) Awards, honoring eleven women for outstanding leadership and accomplishments in clean energy. One of the awardees was from California: **Leuwam Tesfai**, Deputy Director of Energy and Climate Policy at the California Public Utilities Commission.

**Notable Appointment:** **Jeff Marootian** was promoted to be Principal Deputy Assistant Secretary for the office of Energy Efficiency and Renewable Energy.

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**Outreach:** Contacts included staff at the Department of Transportation, the Maritime Administration, the Federal Railroad Administration, and the Energy & Transportation Joint Office, as well as representatives of our trucking industry coalition involving discussions on current issues, grant programs, and possible meetings in October.

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# ATTACHMENT 3B



To: South Coast Air Quality Management District  
From: Cassidy & Associates  
Date: September 28, 2023  
Re: September Report

## *HOUSE/SENATE*

### *Congress*

Congress has less than a week remaining to pass spending legislation to avoid a government shutdown. On the evening of September 26, the Senate voted 77-19 to advance a measure which would fund the government through November 19. The bill is endorsed by the White House and includes about \$6 billion in aid for Ukraine and \$6 billion for disaster relief. If the Senate does pass and send the Continuing Resolution to the House, Speaker Kevin McCarthy (R-CA-20) must decide whether to bring it to the floor, a decision that could prompt members of his party to challenge his Speakership.

Also on Tuesday evening, the House voted to start debate on the Defense, Agriculture, State and Foreign Operations, and Homeland Security appropriations bills. However, these bills are nonstarters in the Senate so they do not change the likelihood of a government shutdown at the end of the week. Speaker Kevin McCarthy (R-CA-20) has said he is in favor of passing a 30- or 45-day Continuing Resolution to allow time for passing the remainder of the Fiscal Year 2024 appropriations bills and negotiating a spending deal with the Senate.

### *EPA*

On August 30, the Environmental Protection Agency (EPA) announced the availability of up to \$350 million in formula grant funding to monitor and reduce methane emissions from the oil and

gas sector and for the environmental restoration of well sites. The funding is provided by the Inflation Reduction Act through the Methane Emissions Reduction Program and aims to help reach the Biden administration's climate and clean air goals. Read the announcement [here](#).

An EPA report released on September 12 shows that the Inflation Reduction Act has spurred carbon dioxide emissions reductions from the electricity sector and beyond. Specifically, the report says that the Inflation Reduction Act lowers carbon dioxide emissions sector wide, including electricity generation and use, by 34-45% below 2005 levels in 2030. In the electric power sector, the Inflation Reduction Act will cause carbon dioxide emission reductions of 49-83% below 2005 levels in 2030. The EPA states that the Inflation Reduction Act reduces carbon dioxide emissions in all end use-sectors, including in residential and commercial buildings, industry, and transportation. Read the report [here](#).

On September 20, the EPA launched \$4.6 billion in competitive grants to fund state, local, and tribal programs and policies that reduce pollution, advance environmental justice, and deploy clean energy solutions. This funding is a part of the Climate Pollution Reduction Grants program, which was established by the Inflation Reduction Act. Through the program, the EPA has already awarded \$250 million to fund climate action plans in nearly all states – this round of competitive grants will fund these initiatives. The deadline to apply to the general competition is April 1, 2024, and the deadline for the tribes and territories competition is May 1, 2024. Read more about the grant opportunity [here](#).

On September 22, the Environmental Protection Agency proposed strengthening a 2020 Clean Air Act rule to make sure industrial facilities which emit large amounts of air pollution cannot increase emissions when reclassifying from a “major source” of emissions to an “area source.” Under the proposed change, any source that wishes to reclassify in this way must establish federally enforceable permit conditions which will better protect public health, containing safeguards to prevent emissions increases above what would be allowed under a major source emission standard under the Clean Air Act. This would apply to all sources choosing to reclassify and sources which have been reclassified since January 25, 2018. Read more [here](#).

Cassidy and Associates support in September:

- Worked with South Coast AQMD staff to strategize on DC outreach
- Provided strategic guidance regarding reauthorization and funding of the Homeland Security Biowatch program
- Advised staff on House and Senate Appropriations markups, focusing on South Coast AQMD priorities
- Continued to monitor and report on activities in Congress and the Administration that impact the District



## *IMPORTANT LEGISLATIVE DATES*

**September 30, 2023:**

FY 2023 appropriations expire.

**September 30, 2023:**

The Farm Bill, an omnibus package of legislation that supports US agriculture and food industries expires; the bill is reauthorized on a five-year cycle.

**September 30, 2023:**

Deadline for the Federal Aviation Administration reauthorization.

**September 30, 2023:**

National Flood Insurance Program reauthorization deadline.

## *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](mailto: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](mailto:Cherie.short@hq.dhs.gov))

U.S. Department of State – Bill Killion (Office – 202-647-7595 / Cell – 202-294-2605 / Email – [killionw@state.gov](mailto:killionw@state.gov))

U.S. Department of Transportation – Sean Poole (Office – 202-597-5109 / Cell – 202-366-3132 / Email – [sean.poole@dot.gov](mailto:sean.poole@dot.gov))

# ATTACHMENT 3C

## KADESH & ASSOCIATES

South Coast AQMD Report for the October 2023  
Legislative Meeting covering September 2023  
Kadesh & Associates

With only two days remaining in FY 2023, neither the House nor the Senate has voted on a continuing resolution (CR), let alone all twelve full-year appropriations bills, meaning we are very likely to see a government shutdown beginning at midnight on September 30.

To their credit, the Senate has, on a bipartisan basis, started the process of considering a CR to maintain current funding levels through November 17, along with \$6B for Ukraine and \$6B for FEMA disaster assistance. There are also efforts underway to add funding for border/asylum needs. At the current pace, the Senate will vote on this CR on Sunday, October 1, which guarantees at least a technical shutdown over the weekend.

However, deep disagreements within the House majority mean that this shutdown will probably not just be a technicality. In order to placate holdouts in the Republican conference, House leadership continues to move further away from the budget agreements that were reached in the Fiscal Responsibility Act just a few months ago. This week, the House has set the stage for party-line votes on the FY24 Defense, State/Foreign Operations, Homeland Security, and Agriculture-FDA appropriations bills. The Agriculture bill is expected to fail due to concerns from rural Republican members over low funding levels and from frontline Republicans who oppose having to vote on the restrictions on the morning after pill.

House leadership also hopes to bring up a 30-day CR coupled with immigration/border language opposed by the White House. As of now, the House does not have the votes to pass this CR, nor have they agreed to consider the Senate CR. Meanwhile, the House Freedom Caucus just released a new set of appropriations process demands, which illustrates the essentially impossible negotiating position that Speaker McCarthy is attempting to maintain.

Given all of this, executive branch agencies are publishing shutdown contingency plans and notifying employees about who needs to report and who needs to stay home. This applies to Congress as well; although votes will continue in the event of a shutdown, nonessential meetings and activities will cease, and some staff will not report.

### Kadesh & Associates Activity Summary-

-Worked with South Coast AQMD and the congressional delegation on whole-of-government efforts to address air quality through BIL and IRA funding programs.

### Contacts:

Contacts included staff and Members throughout the CA delegation, especially new members of the delegation, authors of priority legislation, Senate offices, and members of key committees. We have also been in touch with administration staff.

###

## South Coast Air Quality Management District Legislative and Regulatory Update –September 2023

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### ❖ Important Upcoming Dates

October 14 – Last Day for the Governor to Sign or Veto Legislation Passed by the Legislature

### ❖ RESOLUTE Actions on Behalf of South Coast AQMD. RESOLUTE partners David Quintana, and Alfredo Arredondo continued their representation of South Coast AQMD before the State’s Legislative and the Executive branch. Selected highlights of our recent advocacy include:

- Provided ongoing updates as the Legislature headed into the last two weeks of session.
- Set and attended meetings with legislative offices as needed in support and opposition of legislation of interest

### ❖ AB 985 (Arambula) -South Coast AQMD Position: Oppose

This bill was not passed by the legislature and was held on the Assembly Floor.

# ATTACHMENT 4B



## CALIFORNIA ADVISORS, LLC

South Coast AQMD Report  
California Advisors, LLC  
October 13, 2023, Legislative Committee Hearing

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### **Legislative Update**

The 2023 legislative session ended in the early hours of September 15. The Legislature worked very long hours during the days leading up to the legislative deadline. The California State Assembly gavelled down first just before midnight and the State Senate adjourned just after midnight. For the last week of session, it was reported that about 720 bills were still pending consideration by Legislators.

With the Legislature now adjourned, the focus shifts to the Governor's office. Governor Gavin Newsom has until Saturday, October 14<sup>th</sup> to act on the bills passed. If signed, most bills go into effect at the start of the new year, unless they have an urgency clause or specify otherwise. Notably, the Legislature convenes in a two-year cycle and this year was the first year of the 2023-2024 Legislative session. Under the state Constitution, bills introduced in the first year of the session can be carried over to the following year and are referred to as "two-year" bills.

The Legislature will reconvene on Wednesday, January 3, 2024.

### **Budget Update**

According to the Department of Finance's monthly bulletin, the state collected \$1.344 billion, or 11.1 percent, above the August forecast as receipts from all sources exceeded their estimates. Receipts for the first two months of the 2023-24 fiscal year were \$75 million, or 0.3 percent, above the forecast of \$21.906 billion. Sales tax was \$441 million above forecast in August, offsetting a \$453-million shortfall in July that was due to processing delays. Personal income tax withholding exceeded the forecast by \$367 million in August. The Budget Act monthly cashflow reflects the expected impact of delayed payment and filing deadlines for Californians in most counties to October 16. The delay affects personal and corporate income tax categories other than withholding, however the extent to which variance relative to the forecast is caused by taxpayers' behavior differing from assumptions is unknown. Preliminary General Fund agency cash receipts for the entire 2022-23 fiscal year were \$980 million above the 2023-24 Budget Act forecast of \$167.627 billion.

This has been one of the few times over the last year that revenues have exceeded forecasts. Recall, the state had to make several cuts in this year's budget given the shortfall. We could potentially see some of those cuts being restored if the state continues down a strong financial path.

## **Appointments Update**

We are pleased to report that two South Coast AQMD Board Member appointments by the Governor had confirmation votes by the full Senate.

Board Member Gideon Kracov was approved by the Senate on a unanimous vote to the South Coast Air Quality Management District's Governing Board.

Board Member V. Manuel Perez was also approved on a unanimous vote to the California Air Resources Board.

Additionally, on September 27, Governor Newsom announced that he had appointed Cliff Rechtschaffen to the California Air Resources Board. He has served as a Commissioner on the Public Utilities Commission since 2017. This position will require confirmation by the Senate when they return in 2024.

# ATTACHMENT 4C



## **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 – September 2023  
**DATE:** Thursday, September 28, 2023

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The Legislature spent the first half of September focused on moving their remaining bills through the legislative process and to the Governor before they adjourned for interim recess on September 14, 2023. The Legislature will return for the second half of the 2023-24 legislative session on January 3, 2024.

This year, the Legislature introduced 3,030 bills, 1,974 Assembly Bills and 1,056 Senate bills. Of those, 1,326 were sent to the Governor for his consideration. Thus far, the governor has signed 508 bills, vetoed 6 and has 812 to take action on before his October 14, 2023, deadline.

Looking forward towards the 2024 Legislative Session, the Assembly has elected a new Speaker, Assemblymember Robert Rivas, who took over on July 1, 2023. Additionally, the Senate will have a new Senate President Pro Tempore, Senator Mike McGuire, who will take over in January 2024. Senator McGuire will serve a relatively short term as he is termed out in 2026.

Both Assembly Speaker Rivas and Senate President Pro Tempore elect McGuire are from Northern California, and both come from rural districts, a sharp contrast to their predecessors who both come from highly urbanized areas of Southern California. Assembly Speaker Rivas and Senate President Pro Tempore elect McGuire will both make their own changes to the legislative process by way of new committee chairs, the makeup of committees, and leadership roles in both houses.

The following will provide you with an end of session recap on issues of interest to the district:

- AB 1216 (Muratsuchi): Our office worked with the Author and the sponsors of the bill on amendments that would ensure the District is reimbursed for all costs associated with the bill. AB 1216 was passed by the Legislature on September 7, 2023 and is now before the Governor for his consideration.

- AB 1465 (Wicks): Our office has been supporting this measure on behalf of the District throughout the legislative process. The bill is currently on the Senate Floor and was moved to the inactive file on September 6, 2023. This is now a 2-year bill.
- AB 1638 (Fong): Our office worked with the Author's office on amendments to exclude the District from the requirements in the bill. The Author agreed to our amendments and amended the bill on September 1, 2023 in the Senate Appropriations Committee. The Legislature passed this bill on September 6, 2023 and it is now before the Governor for his consideration.
- SB 410 (Becker): Our office has been supporting this measure on behalf of the District throughout the legislative process. The bill was passed by the Legislature on September 14, 2023 and it is now before the Governor for his consideration.
- SB 842 (Bradford): Our office worked with the Author's office to submit a Letter to the Journal that ensured the District's autonomy around the California Energy Commissions refinery turnarounds and maintenance process.

The following will provide you with updates of interest to the District:

### **HONDA SETTLEMENT AGREEMENT**

On September 13, 2023, CARB reached a settlement agreement with American Honda Motor of Torrance for \$7.9 million for violations of CARB's small off-road engine (SORE) air quality regulations. This is the third SORE enforcement action against Honda in the past four years.

In 2021, CARB testing revealed multiple SORE families did not meet the carbon canister capacity requirements under CARB's evaporative emission standards and SORE regulations. The carbon canister absorbs excess gasoline vapors from the fuel tank. To address this, Honda requested and was granted a variance which allowed the units to be sold contingent upon meeting specific criteria outlined in the variance. Honda failed to meet the terms, leading to the revocation of the variance. All units sold under the variance were then non-compliant with California regulations and, thus, illegal.

Honda cooperated with CARB to resolve all allegations of violating SORE and Evaporative Emissions Regulations. Honda's settlement includes a \$5,694,452 civil penalty that will go to CARB's Air Pollution Control Fund, which provides funding for projects and research to improve the state's air quality. The remaining \$2,273,967 will fund the following Supplemental Environmental Projects (SEP):

- New Voices Are Rising: Envisioning Resilience Hubs in the Community (Rose Foundation for Communities and the Environment, Pasadena), \$42,675
- Inland Empire Environmental Health and Education Connections (El Sol Neighborhood Educational Center), \$2,114,484
- Asthma Impact Model Stanislaus County (Central California Asthma Collaborative), \$79,077
- Side Street Projects – Woodworking Bus (Side Street Projects, Oakland), \$37,730



## **\$38 MILLION FOR EV CHARGING**

On September 13, 2023, the California Energy Commission (CEC) opened applications for \$38 million in equity-focused incentives to fund publicly accessible EV charging stations in low-income and disadvantaged communities in 28 counties in northern and southern California. The rebates are part of the California Electric Vehicle Infrastructure Project (CALeVIP), the nation's largest EV charging incentive initiative. This is the second phase of CALeVIP's Golden State Priority Project, which offers funding for direct current fast charging (DCFC) stations. A first phase of incentives was offered earlier this year in California's eastern and central regions.

The rebates are available for installations by businesses, nonprofits, tribes and public entities. Eligible locations must be in disadvantaged and low-income communities as defined by the California Climate Investments Priority Populations Map. Rebates for charging equipment can cover 50% of a project's total costs or up to \$100,000 based on charger capacities.

The application window is from September 13, 2023 to December 12, 2023, at which point proposals will be reviewed and awards made based on meeting requirements and project readiness.

## **PEOPLE OF THE STATE OF CALIFORNIA V. BIG OIL**

On September 16, 2023, Governor Newsom and Attorney General Rob Bonta announced that California is suing Big Oil for more than 50 years of deception, cover-up, and damage that have cost California taxpayers billions of dollars in health and environmental impacts. The defendants in the case include Exxon, Shell, Chevron, ConocoPhillips, BP, and The American Petroleum Institute.

Governor Newsom and Attorney General Rob Bonta claim that for decades Oil and gas executives have known about the dangers of the fossil fuels they produce. They highlight industry-funded reports directly linking fossil fuel consumption to rising global temperatures and damage to our air, land, and water. The State claims that Oil companies intentionally suppressed that information from the public and policymakers to protect their profits, and spent billions of dollars to spread disinformation on climate change and delay our transition away from fossil fuels.

The State is asking the court to order the oil companies to pay for the costs of their impacts to the environment, human health, and Californians' livelihoods, and to help protect the state against the harms that climate change will cause in years to come. Additionally, the State is seeking to prohibit oil companies from engaging in further pollution and destruction of California communities and natural resources and levy financial penalties on Big Oil for lying to the public. Lastly, the State wants the industry to immediately stop its ongoing efforts to deceive or misinform about their catastrophic impacts and award punitive damages to the state to punish these companies for their misconduct.

## **INTERNATIONAL METHANE-REDUCTION INITIATIVE**

On September 20, 2023, the State of California announced the launch of a new climate initiative that will recruit subnational governments worldwide to commit to mitigating and reducing methane, with founding signatories from Mexico, South Africa, Brazil, Nigeria, and India. The new Subnational Methane Action Initiative was launched by Governor Newsom at Climate Week in New York City. Seven jurisdictions from across the globe have signed on so far.

California set a goal to reduce 40% of its methane emissions by 2030 compared to 2013 levels, and is leading the country with innovative solutions, including \$100 million in funding to support a constellation of satellites that can monitor for large methane plumes. The California Air Resources Board, California Environmental Protection Agency and California Natural Resources Agency are collaboratively leading these efforts.

Participants in this effort include California (USA), Queretaro (Mexico), Gauteng (South Africa), Espirito Santo (Brazil), Cross River State (Nigeria), Yucatan (Mexico), and Delhi (India). Other partners in the effort include the Climate Group, which convenes subnational governments for climate action through the Under2 Coalition, and the UC Berkeley Center for Law, Energy, and Environment, which will work with state agencies and Initiative members to create action plans, track progress, organize regular peer-to-peer learning opportunities, and share best practices.

While over 150 countries have agreed to collectively reduce global methane emissions by at least 30% below 2020 levels by 2030 through the Global Methane Pledge of 2021, meeting this target will require significant efforts from subnational jurisdictions. As the primary regulators of emissions from agriculture, energy and landfills, these levels of government are particularly suited to reducing methane emissions.

## **GOVERNOR'S APPOINTMENTS**

On September 27, 2023, Governor Newsom announced the appointment of Cliff Rechtschaffen, to the California Air Resources Board. Rechtschaffen has served as a Commissioner on the California Public Utilities Commission since 2017. He served as a Senior Advisor on Climate and Energy in the Office of Governor Brown from 2011 to 2017. Rechtschaffen was Acting Director of the California Department of Conservation in 2011 and served as Special Assistant Attorney General at the California Department of Justice, Attorney General's Office from 2007 to 2010. Rechtschaffen was a Professor and Co-Founder of the Environmental Law and Justice Clinic at Golden Gate University School of Law from 1993 to 2007. He served as a Deputy Attorney General in the Environment Section of the California Department of Justice, Attorney General's Office from 1986 to 1993. Rechtschaffen earned a Juris Doctor degree from Yale Law School and a Bachelor of Arts degree in Politics from Princeton University. This position requires Senate confirmation.

## **2023 LEGISLATIVE DEADLINES**

September 1 - Last day for fiscal committees to meet and report bills

September 5-14 - Floor session only. No committees may meet for any purpose, except Rules Committee, bills referred pursuant to Assembly Rule 77.2, and Conference Committees

September 8 - Last day to amend on the Floor

September 14 - Last day for each house to pass bills. Interim Recess begins upon adjournment

October 14 – Last day for Governor to take action on bills.

January 3, 2024 – Legislature reconvenes.

[↑ Back to Agenda](#)

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 16

REPORT: Mobile Source Committee

SYNOPSIS: The Mobile Source Committee held on Friday, October 20, 2023.  
The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Holly J Mitchell, Acting Chair  
Mobile Source Committee

SLR:ja

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### **Committee Members**

Present: Supervisor Holly J. Mitchell, Committee Vice Chair  
Mayor Larry McCallon  
Supervisor V. Manuel Perez  
Councilmember Nithya Raman  
Councilmember Carlos Rodriguez

Absent: Board Member Gideon Kracov, Committee Chair

### **Call to Order**

Committee Vice Chair Mitchell called the meeting to order at 9:02 a.m.

For additional details, please refer to the [Webcast](#).

### **ROLL CALL**

### **INFORMATIONAL ITEMS (Items 1-2):**

#### **1. Status Update on South Coast Air Basin Attainment Plan for the 2012 Annual PM2.5 Standard**

Sarah Rees, Deputy Executive Officer/Planning, Rule Development and Implementation, presented this item. For additional details, please refer to the [webcast](#) beginning at 8:40.

Supervisor Perez asked about air monitoring in Riverside County. Dr. Rees responded that one of the monitors with the highest PM2.5 levels is located in Riverside County, but clarified that Coachella Valley attains the 2012 annual PM2.5 standard. Supervisor Perez also inquired about unpaved and paved road dust and expressed concern about resuspended dust from paved roads. Dr. Rees explained that although paving helps reduce emissions compared to unpaved roads, vehicles driving on paved roads also resuspends dust. For additional details, please refer to the [webcast](#) beginning at 29:22.

Councilmember Rodriguez inquired about the interconnectivity of South Coast AQMD and federal efforts to reduce PM2.5 emissions. Dr. Rees responded that while both ozone and PM2.5 are sensitive to NOx reductions from federal sources, direct PM2.5 emissions have the greatest impact on ambient PM2.5 levels and most direct PM2.5 emission sources fall under South Coast AQMD's regulatory authority. For additional details, please refer to the [webcast](#) beginning at 35:27.

Councilmember Rodriguez raised concerns about the federal government not doing enough to control emissions and emphasized the need to engage with Congress and other policymakers to accelerate their efforts. Wayne Natri, Executive Officer, mentioned that staff recently met with senior U.S. EPA officials and policymakers in Washington, DC to highlight the need for U.S. EPA to control emissions and provide greater flexibility and tools for states to meet federal standards. For additional details, please refer to the [webcast](#) beginning at 37:23.

Supervisor Perez inquired about U.S. EPA's receptiveness to the need to reduce emissions from federal sources. Mr. Natri noted progress but expressed the need for more aggressive action. He cited an example of U.S. EPA's truck rule, although the rule was not as stringent as desired and ongoing efforts related to ocean-going vessels. For additional details, please refer to the [webcast](#) beginning at 44:38.

Harvey Eder, Public Solar Power Coalition, discussed PM2.5 precursors, nonattainment classifications for ozone and PM2.5 standards, and the premature deaths associated with air pollution. For additional details, please refer to the [webcast](#) beginning at 32:00.

**2. Annual Report on AB 2766 Funds from Motor Vehicle Registration Fees for Fiscal Year 2021-2022**

Lane Garcia, Program Supervisor/Planning, Rule Development and Implementation, presented the Annual Report on AB 2766 Funds from Motor Vehicle Registration Fees for FY 2021-22.

- 3.** Chair Mitchell asked if educational institutions such as schools and community colleges are eligible for AB 2766 funds. Staff responded that the statutory language limits eligibility to local city and county governments.

Supervisor Perez asked for clarification on jurisdictions included in the AB 2766 program, and whether it applies to Special Districts or other types of entities. Staff explained that the statutory language specifies local city and county governments.

Supervisor Perez asked if any of the funds distribution shown in the presentation was associated with distribution criteria such as AB 617 communities, disadvantaged communities, refineries, or any other category. Staff explained that the distribution of funds and emission reductions were solely attributable to projects implemented by local governments using AB 2766 funds. Supervisor Perez also asked for clarification on how the funds were distributed to the city and county jurisdictions, and whether the funds are related to vehicles driven in their communities. Staff explained the funds are generated based on the paid vehicle registrations within the District and then distributed based on the population ratio of each jurisdiction.

Councilmember Rodriguez noted that Transportation Demand Management was at the top of the list of categories in terms of emission reduction and cost effectiveness. He asked if there was any dialog between staff and cities regarding suggestions for projects that are more cost effective. He also asked if staff is monitoring the fund balances for jurisdictions, noting that some cities save up a balance. Staff explained that the spirit of the legislation was to allow the participating jurisdictions flexibility in deciding what projects to pursue, provided there is a clear connection towards mobile source emissions reductions. Staff further explained outreach to jurisdictions is one of our primary roles in helping them decide on projects and ensuring they are spending funds appropriately. Staff also explained that the jurisdictions spend between 80 and 90 percent of their received funds each fiscal year.

Councilmember Raman asked if staff could highlight any particularly effective or innovative projects. Staff explained that city and county rideshare projects are very effective at reducing mobile source emissions and are very cost effective. Staff further explained that many jurisdictions are installing electric vehicle charging stations, but there is currently no emission factor associated with those types of projects.

Mayor McCallon asked about the status of any potential “bad actors” or jurisdictions that are not spending AB 2766 funds appropriately. Staff explained that in the most recent AB 2766 audit results, 99.4 percent of all funds received by the jurisdictions were spent appropriately.

4. Mr. Eder urged the need for cities to have teams dedicated to understanding energy concerns as well as health effects, especially in terms of particulate matter.

**WRITTEN REPORTS (Items 3-5):**

**5. Rule 2305 Implementation Status Report: Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program**

This item was received and filed.

**6. Rule 2202 Activity Report: Rule 2202 Summary Status Report**

This item was received and filed.

**7. Intergovernmental Review of Environmental Documents and CEQA Lead Agency Projects**

This item was received and filed.

**OTHER MATTERS:**

**8. Other Business**

There was no other business to report.

**9. Public Comment Period**

Thomas Jelenic, Pacific Merchant Shipping Association, thanked the committee and the Board for its work with stakeholders during the development of the Ports ISR. He thanked Board Member Kracov for a recent visit to the Ports to see the steps being taken to reduce emissions, to become a zero emissions port. He also extended an invitation to any Mobile Source Committee member or Board Member that would like to visit. He further expressed the collaborative approach is the best way to reduce emissions and since the initiation of the Clean Air Action Plan, the San Pedro Port Complex has reduced diesel toxics by 90 percent through a voluntary program. Mr. Eder championed the idea of replacing oil and gas use with solar power. He stated that solar power technology is a viable option that needs to be tested and explored further.

**10. Next Meeting Date**

The next regular Mobile Source Committee meeting is scheduled for Friday, November 17, 2023 at 9:00 a.m.

**Adjournment**

The meeting adjourned at 10:51 a.m.

**Attachments**

1. Attendance Record
2. Rule 2305 Implementation Status Report: Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program – Written Report
3. Rule 2202 Activity Report – Written Report
4. Intergovernmental Review of Environmental Documents and CEQA Lead Agency Projects – Written Report

## ATTACHMENT 1

### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT MOBILE SOURCE COMMITTEE MEETING

**Attendance – October 20, 2023**

Mayor Larry McCallon.....	South Coast AQMD Board Member
Supervisor Holly Mitchell .....	South Coast AQMD Board Member
Supervisor V. Manuel Perez.....	South Coast AQMD Board Member
Councilmember Nithya Raman .....	South Coast AQMD Board Member
Mayor Carlos Rodriguez .....	South Coast AQMD Board Member
Guillermo Gonzales.....	Board Consultant (Perez)
Jackson Guze .....	Board Consultant (Raman)
Loraine Lundquist .....	Board Consultant (Mitchell)
Debra Mendelsohn.....	Board Consultant (McCallon)
Andrew Silva .....	Board Consultant (Lock Dawson)
Mark Taylor.....	Board Consultant (Rodriguez)
Mark Abramowitz .....	Community Environmental Services
Curtis Coleman.....	Southern California Air Quality Alliance
Ramine Cromartie .....	Western States Petroleum Association
Helena DuPont.....	California Strategies
Harvey Eder.....	Public Solar Power Coalition
Thomas Jelenic .....	Pacific Merchant Shipping Association
Gillian Kass .....	Ramboll
Scott King.....	CARB
Bill La Marr.....	California Small Business Alliance
Bethmarie Quiambao .....	Southern California Edison
David Rothbart .....	Los Angeles County Sanitation District
Peter Whittingham.....	Public Affairs Advisors
Derrick Alatorre.....	South Coast AQMD Staff
Jacob Allen .....	South Coast AQMD Staff
Debra Ashby.....	South Coast AQMD Staff
Jason Aspell.....	South Coast AQMD Staff
Laurence Brown .....	South Coast AQMD Staff
Cindy Bustillos .....	South Coast AQMD Staff
Marc Carreras-Sospedra .....	South Coast AQMD Staff
Philip Crabbe III.....	South Coast AQMD Staff
Joshua Ewell.....	South Coast AQMD Staff
Lane Garcia .....	South Coast AQMD Staff
Scott Gallegos.....	South Coast AQMD Staff
Bay Gilchrist.....	South Coast AQMD Staff
De Groeneveld.....	South Coast AQMD Staff
Alex Han.....	South Coast AQMD Staff
Sheri Hanizavareh .....	South Coast AQMD Staff
Dillon Harris.....	South Coast AQMD Staff



Christian Hynes .....	South Coast AQMD Staff
Sujata Jain.....	South Coast AQMD Staff
John Kampa .....	South Coast AQMD Staff
Roupen Karakouzian .....	South Coast AQMD Staff
Aaron Katzenstein .....	South Coast AQMD Staff
Farzaneh Khalaj.....	South Coast AQMD Staff
Angela Kim .....	South Coast AQMD Staff
Ricky Lai .....	South Coast AQMD Staff
Howard Lee .....	South Coast AQMD Staff
Sang-Mi Lee .....	South Coast AQMD Staff
Jason Low .....	South Coast AQMD Staff
Paul Macias .....	South Coast AQMD Staff
Ian MacMillan .....	South Coast AQMD Staff
Terrence Mann.....	South Coast AQMD Staff
Ron Moskowitz .....	South Coast AQMD Staff
Susan Nakamura.....	South Coast AQMD Staff
Wayne Nastri .....	South Coast AQMD Staff
Robert Paud .....	South Coast AQMD Staff
Marissa Poon .....	South Coast AQMD Staff
Eric Praske.....	South Coast AQMD Staff
Sarah Rees .....	South Coast AQMD Staff
Mary Reichert.....	South Coast AQMD Staff
Aisha Reyes .....	South Coast AQMD Staff
Zafiro Sanchez.....	South Coast AQMD Staff
Nicole Silva .....	South Coast AQMD Staff
Lisa Tanaka O'Malley .....	South Coast AQMD Staff
Vanessa Tanik .....	South Coast AQMD Staff
Sergio Torres Callejas .....	South Coast AQMD Staff
Paul Wright.....	South Coast AQMD Staff
Victor Yip.....	South Coast AQMD Staff
Alex Zhang .....	South Coast AQMD Staff



South Coast  
 Air Quality Management District  
 21865 Copley Drive, Diamond Bar, CA 91765  
 (909) 396-2000, [www.aqmd.gov](http://www.aqmd.gov)

**Rule 2305 Implementation Status Report:**  
**Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program**

*September 1, 2023 to September 30, 2023*

**1. Implementation and Outreach Activities:**

Activity	Since Last Report	Since Rule Adoption
Calls and Emails to WAIRE Program Hotline (909-396-3140) and Helpdesk ( <a href="mailto:waire-program@aqmd.gov">waire-program@aqmd.gov</a> )	352	5,164
Views of Compliance Training Videos (outside of webinars)	255	5,771
Emails Sent with Information About WAIRE Program Resources	3,261	~ 63,150
Visits to <a href="http://www.aqmd.gov/waire">www.aqmd.gov/waire</a>	2,687	~ 45,535
Presentations to Stakeholders	1*	143

*\*Transportation Research Board Freight Data Workshop*

**2. Highlights of Recent Implementation Activities**

Phase 1 warehouse operators (including those with greater than or equal to 250,000 square feet) were required to submit their first Annual WAIRE Report (AWR) by March 2, 2023, which includes the actions and/or investments they completed in the 2022 compliance period. As of September 30<sup>th</sup>, 485 warehouse operators filed an AWR.<sup>1</sup> This represents about 48% of the anticipated Phase 1 group. Of the submitted reports, 46 warehouse operators still need to submit the required fees (including mitigation fees, as applicable). The 485 operators who submitted an AWR report earned a total of about 236,800 WAIRE Points, which far exceeds their total WAIRE Points Compliance Obligation. The number of WAIRE Points earned by an operator that are in excess of their compliance obligation may be banked for future compliance. The operators also reported that they will pay a total of approximately \$9.7 million in mitigation fees, of which about \$7.7 million were paid by September 30, 2023.

Rule 2305 allows warehouse operators the option of earning WAIRE Points for "early" actions completed prior to their first compliance period. In addition, warehouse facility owners may voluntarily earn WAIRE Points from early actions that can be transferred to operators at the same site. As of September 30<sup>th</sup>, 182 warehouse operators and facility owners filed Early Action AWRs.<sup>1</sup> These early action reports include a total earning of about 68,454 WAIRE Points.

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<sup>1</sup> Staff has begun auditing these reports. Some of these reports may have been filed to bank points for future compliance periods. Information on these audits will be provided in future monthly reports and/or the annual report.

On September 12, 2023, a compliance advisory was sent out to 3,261 email addresses to inform warehouse owners and operators of Rule 2305 requirements and past deadlines. Hard copies were also mailed to 5,250 addresses related to warehouse facilities potentially subject to the rule. The compliance advisory included language regarding upcoming enforcement action and daily penalties for violators.

On September 15, 2023, staff presented an update on the WAIRE Program following the first year of implementation, including the status of reporting by the regulated entities, actions and/or investments completed to comply with the rule, the amount of WAIRE Points earned, enhanced outreach efforts, enforcement activities, and anticipated emissions reduced.

On September 20, 2023, South Coast AQMD issued a press release announcing the agency's enforcement initiative to bring warehouses into compliance with the rule.

Throughout September, staff completed the audit of records for acquiring near-zero emission and zero emission trucks and zero emission yard hostlers. Staff made a note if any of the records were not verifiable and provided guidance to operators to improve their recordkeeping practices. Staff continued to follow up with warehouse operators who have not yet paid the required fees for their AWR submittal. Staff also held virtual consultation sessions with various stakeholders to provide compliance support, as needed. Ongoing WAIRE Program implementation also included reviewing and verifying information in the Warehouse Operations Notifications (WONs) submitted by warehouse facility owners.

Staff is currently working on 5 Public Records Acts Requests this month requesting information related to Rule 2305 reporting data. Staff is continuing to work on developing a standard process for making WAIRE Program data available on the F.I.N.D. tool.

Rule 2305 provides an option of proposing a Custom WAIRE Plan for actions that are not on the WAIRE Menu. Staff received 8 Custom WAIRE Plan applications for the 2023 compliance period and is currently evaluating their potential for earning WAIRE Points. Four Custom WAIRE Plans were revised and resubmitted for evaluation. Per Rule 2305, Custom WAIRE Plans that will receive approval by the South Coast AQMD must be made available for public review 30 days prior to approval.

#### **Anticipated Activities in October**

- Staff plan to resume the in-person site visits targeting Phase 1 operators to ensure receipt of the compliance advisory, collect warehouse contact information, share information on rule requirements, and provide technical assistance, as needed.
- Continue to conduct outreach to Phase 1 and Phase 2 warehouse operators to advise of Rule 2305 requirements
- Make referrals to the Office of Compliance & Enforcement to evaluate potential enforcement action, if applicable.
- Continue to review and verify submitted information and analyze data submitted through R2305 reports (e.g., WONs, ISIRs, AWRs, early action AWRs).
- Continue to audit reports submitted by warehouse owners and operators in response to the Public Records Acts Requests.
- Complete final review of Custom WAIRE Plan applications submitted for the 2023 compliance period.

- Continue to develop an approach for addressing business confidentiality concerns and making WAIRE Program data publicly accessible via the online F.I.N.D. tool on the South Coast AQMD website.
- Continue to enhance the WAIRE POP software to support improved functionality (e.g., program administration, and an amendment process for submitted reports).



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • www.aqmd.gov

## Rule 2202 Summary Status Report

Activity for January 1, 2023 – September 30, 2023

Employee Commute Reduction Program (ECRP)	
# of Submittals:	283

Emission Reduction Strategies (ERS)	
# of Submittals:	167

Air Quality Investment Program (AQIP) Exclusively		
County	# of Facilities	\$ Amount
Los Angeles	37	\$ 212,730
Orange	2	\$ 15,982
Riverside	2	\$ 9,720
San Bernardino	1	\$ 4,766
<b>TOTAL:</b>	<b>42</b>	<b>\$ 243,198</b>

ECRP w/AQIP Combination		
County	# of Facilities	\$ Amount
Los Angeles	0	\$ 0
Orange	0	\$ 0
Riverside	0	\$ 0
San Bernardino	0	\$ 0
<b>TOTAL:</b>	<b>0</b>	<b>\$ 0</b>

### Total Active Sites as of September 30, 2023

ECRP (AVR Surveys)			TOTAL Submittals w/Surveys	AQIP	ERS	TOTAL
ECRP <sup>1</sup>	AQIP <sup>2</sup>	ERS <sup>3</sup>				
526	8	68	602	100	645	1,347
39.05%	0.59%	5.05%	44.69%	7.42%	47.89%	100% <sup>4</sup>

### Total Peak Window Employees as of September 30, 2023

ECRP (AVR Surveys)			TOTAL Submittals w/Surveys	AQIP	ERS	TOTAL
ECRP <sup>1</sup>	AQIP <sup>2</sup>	ERS <sup>3</sup>				
378,772	2,760	9,828	391,360	13,381	265,761	670,502
56.49%	0.41%	1.47%	58.37%	1.99%	39.64%	100% <sup>4</sup>

- Notes:**
1. ECRP Compliance Option.
  2. ECRP Offset (combines ECRP w/AQIP). AQIP funds are used to supplement the ECRP AVR survey shortfall.
  3. ERS with Employee Survey to get Trip Reduction credits. Emission/Trip Reduction Strategies are used to supplement the ECRP AVR survey shortfall.
  4. Totals may vary slightly due to rounding.

DRAFT

BOARD MEETING DATE: November 3, 2023

AGENDA NO.

REPORT: Intergovernmental Review of Environmental Documents and CEQA Lead Agency Projects

SYNOPSIS: This report provides a listing of environmental documents prepared by other public agencies seeking review by South Coast AQMD between September 1, 2023 and September 30, 2023, and proposed projects for which South Coast AQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, October 20, 2023, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Wayne Nastri  
Executive Officer

SR:MK:MM:BR:SW:ET

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**Background**

The California Environmental Quality Act (CEQA) Statute and Guidelines require public agencies, when acting in their lead agency role, to provide an opportunity for other public agencies and members of the public to review and comment on the analysis in environmental documents prepared for proposed projects. A lead agency is when a public agency has the greatest responsibility for supervising or approving a proposed project and is responsible for the preparation of the appropriate CEQA document.

Each month, South Coast AQMD receives environmental documents, which include CEQA documents, for proposed projects that could adversely affect air quality. South Coast AQMD fulfills its intergovernmental review responsibilities, in a manner that is consistent with the Board's 1997 Environmental Justice Guiding Principles and Environmental Justice Initiative #4, by reviewing and commenting on the adequacy of the air quality analysis in the environmental documents prepared by other lead agencies.

The status of these intergovernmental review activities is provided in this report in two sections: 1) Attachment A lists all of the environmental documents prepared by other public agencies seeking review by South Coast AQMD that were received during the reporting period; and 2) Attachment B lists the active projects for which South Coast AQMD has reviewed or is continuing to conduct a review of the environmental documents prepared by other public agencies. Further, as required by the Board's October 2002 Environmental Justice Program Enhancements for fiscal year (FY) 2002-03, each attachment includes notes for proposed projects which indicate when South Coast AQMD has been contacted regarding potential air quality-related environmental justice concerns. The attachments also identify for each proposed project, as applicable: 1) the dates of the public comment period and the public hearing date; 2) whether staff provided written comments to a lead agency and the location where the comment letter may be accessed on South Coast AQMD's website; and 3) whether staff testified at a hearing.

In addition, the South Coast AQMD will act as lead agency for a proposed project and prepare a CEQA document when: 1) air permits are needed; 2) potentially significant adverse impacts have been identified; and 3) the South Coast AQMD has primary discretionary authority over the approvals. Attachment C lists the proposed air permit projects for which South Coast AQMD is lead agency under CEQA.

**Attachment A – Log of Environmental Documents Prepared by Other Public Agencies and Status of Review, and Attachment B – Log of Active Projects with Continued Review of Environmental Documents Prepared by Other Public Agencies**

Attachment A contains a list of all environmental documents prepared by other public agencies seeking review by South Coast AQMD that were received pursuant to CEQA or other regulatory requirements. Attachment B provides a list of active projects, which were identified in previous months' reports, and which South Coast AQMD staff is continuing to evaluate or prepare comments relative to the environmental documents prepared by other public agencies. The following table provides statistics on the status of review<sup>1</sup> of environmental documents for the current reporting period for Attachments A and B combined<sup>2</sup>:

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<sup>1</sup> The status of review reflects the date when this Board Letter was prepared. Therefore, Attachments A and B may not reflect the most recent updates.

<sup>2</sup> Copies of all comment letters sent to the lead agencies are available on South Coast AQMD's website at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>.

<b>Statistics for Reporting Period from September 1, 2023 to September 30, 2023</b>	
<b>Attachment A:</b> Environmental Documents Prepared by Other Public Agencies and Status of Review	74
<b>Attachment B:</b> Active Projects with Continued Review of Environmental Documents Prepared by Other Public Agencies (which were previously identified in the July 2023, and August 2023 reports)	13
<b>Total Environmental Documents Listed in Attachments A &amp; B</b>	<b>87</b>
<i>Comment letters sent</i>	<i>10</i>
<i>Environmental documents reviewed, but no comments were made</i>	<i>50</i>
<i>Environmental documents currently undergoing review</i>	<i>27</i>

Staff focuses on reviewing and preparing comments on environmental documents prepared by other public agencies for proposed projects: 1) where South Coast AQMD is a responsible agency under CEQA (e.g., when air permits are required but another public agency is lead agency); 2) that may have significant adverse regional air quality impacts (e.g., special event centers, landfills, goods movement); 3) that may have localized or toxic air quality impacts (e.g., warehouse and distribution centers); 4) where environmental justice concerns have been raised; and 5) which a lead or responsible agency has specifically requested South Coast AQMD review.

If staff provided written comments to a lead agency, a hyperlink to the “South Coast AQMD Letter” is included in the “Project Description” column which corresponds to a notation in the “Comment Status” column. In addition, if staff testified at a hearing for a proposed project, a notation is also included in the “Comment Status” column. Copies of all comment letters sent to lead agencies are available on South Coast AQMD’s website at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>. Interested parties seeking information regarding the comment periods and scheduled public hearings for projects listed in Attachments A and B should contact the lead agencies for further details as these dates are occasionally modified.

In January 2006, the Board approved the Clean Port Initiative Workplan (Workplan). One action item of the Workplan 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 accordance with this action item, Attachments A and B organize the environmental documents received according to the following categories: 1) goods movement projects; 2) schools; 3) landfills and wastewater projects; 4) airports; and 5) general land use projects. In response to the action item relative to mitigation, staff maintains a compilation of mitigation measures presented as a series of tables relative to off-road engines; on-road engines; harbor craft; ocean-going vessels; locomotives; fugitive dust; and greenhouse gases which are available on 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 such as ground support equipment.

### **Attachment C – Proposed Air Permit Projects for Which South Coast AQMD is CEQA Lead Agency**

The CEQA lead agency is responsible for determining the type of environmental document to be prepared if a proposal requiring discretionary action is considered to be a “project” as defined by CEQA. South Coast AQMD periodically acts as lead agency for its air permit projects and the type of environmental document prepared may vary depending on the potential impacts. For example, an Environmental Impact Report (EIR) is prepared when there is 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 a proposed project will not generate significant adverse environmental impacts, or the impacts can be mitigated to less than significance. The ND and MND are types of CEQA documents which analyze the potential environmental impacts and describe the reasons why a significant adverse effect on the environment will not occur such that the preparation of an EIR is not required.

Attachment C of this report summarizes the proposed air permit projects for which South Coast AQMD is lead agency and is currently preparing or has prepared environmental documentation pursuant to CEQA. As noted in Attachment C, South Coast AQMD is lead agency for three air permit projects during September 2023.

### **Attachments**

- A. Environmental Documents Prepared by Other Public Agencies and Status of Review
- B. Active Projects with Continued Review of Environmental Documents Prepared by Other Public Agencies
- C. Proposed Air Permit Projects for Which South Coast AQMD is CEQA Lead Agency

**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

<u>SOUTH COAST AQMD LOG-IN NUMBER</u>	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<i>Warehouse &amp; Distribution Centers</i> <b>ORC230906-07</b> Use Permit 06-21-5437-26200 Enterprise Way New Industrial Building	The project consists of demolishing a 144,906 square foot office building and constructing a 165,803 square foot warehouse. The project is located at 26200 Enterprise Way near the southeast corner of Enterprise Way and Dimension Drive.  Comment Period: 9/5/2023- 10/5/2023 Public Hearing: 11/9/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Lake Forest	** Under review, may submit written comments
<i>Warehouse &amp; Distribution Centers</i> <b>ORC230927-07</b> 1500 S. Raymond Avenue Industrial Project	The project consists of removing existing structures and constructing a 138,419 square foot warehouse. The project is located at 1500 S. Raymond Avenue near the northeast corner of South Raymond Avenue and State Route 91.  Comment Period: 9/20/2023- 10/19/2023 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Fullerton	** Under review, may submit written comments
<i>Warehouse &amp; Distribution Centers</i> <b>RVC230901-01</b> Rubidoux Commerce Park	The project consists of constructing five industrial buildings totaling 1,184,102 square feet on 80.8 acres. The project is located on the southeast corner of Montana Avenue and 25th Street. Reference RVC211021-01, RVC201201-05, and RVC190903-14  Comment Period: 8/22/2023- 10/9/2023 Public Hearing: N/A	Recirculated Draft Environmental Impact Report	City of Jurupa Valley	** Under review, may submit written comments
<i>Warehouse &amp; Distribution Centers</i> <b>RVC230901-09</b> Coachella Airport Business Park#	The project consists of constructing a 329,100 square foot warehouse, 81,000 square feet for business uses, 76,800 square feet for vehicle storage, 128,600 square feet for self-storage, 135,000 square feet for an IID substation, and 8,650 square feet for fast food and a gas station on 45.46 acres. The project is located on the northwest corner of State Route 86 and Airport Boulevard within the designated AB 617 Eastern Coachella Valley community. Reference RVC230412-06  Comment Period: 8/28/2023- 9/28/2023 Public Hearing: N/A	Notice of Preparation	City of Coachella	** Under review, may submit written comments

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

Note:

1. Disposition may change prior to Governing Board Meeting
2. Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Warehouse &amp; Distribution Centers</i> <b>RVC230905-01</b> Majestic Freeway Business Center Phase II - Plot Plan 220003 (Building 18), Plot Plan 220008 (Building 13), Plot Plan 220009 (Building 17), and Plot Plan 220015 (Buildings 14A and 14B)	The project consists of constructing five warehouses totaling 1,280,183 square feet on 70.37 acres. The project is located on four separate plot plan applications within Mead Valley: the northwest corner of Martin Street and Harvill Avenue, the northwest corner of Perry Street and Harvill Avenue, the northeast corner of Harvill Avenue and America's Tire Drive, and the southwest corner of Peregrine Way and Harvill Avenue. Reference RVC220803-01  Comment Period: 8/31/2023- 10/16/2023 Public Hearing: N/A	Draft Environmental Impact Report	County of Riverside	** Under review, may submit written comments
<i>Warehouse &amp; Distribution Centers</i> <b>RVC230906-01</b> PLAN2023-1009 Inland Harbor Annexation and Industrial	The project consists of 1) annexing 149.6 acres into the Beaumont city limits, 2) changing the zone designation into industrial, and 3) constructing three warehouses totaling 2,154,016 square feet. The project is located on the southwest corner of Beaumont Avenue and California Avenue. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/RVC230906-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/RVC230906-01.pdf</a>  Comment Period: 9/6/2023- 9/28/2023 Public Hearing: N/A	Site Plan	City of Beaumont	South Coast AQMD staff commented on 9/27/2023
<i>Warehouse &amp; Distribution Centers</i> <b>RVC230906-06</b> First Industrial Logistics at Wilson Avenue (DPR22-00017)	The project consists of constructing a 192,623 square foot warehouse on 9.52 acres. The project is located near the southwest corner of Wilson Avenue and East Rider Street. Reference RVC230405-06 and RVC220628-06  Comment Period: 9/6/2023- 9/20/2023 Public Hearing: 9/20/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Perris	Document reviewed - No comments sent for this document received
<i>Warehouse &amp; Distribution Centers</i> <b>RVC230913-02</b> Plot Plan (PEN22-0144)	The project consists of demolishing a 63,000 square foot building and constructing a 164,968 square foot warehouse on 8.62 acres. The project is located at 14050 Day Street midway between Alessandro Boulevard and Cactus Avenue.  Comment Period: 9/8/2023- 9/28/2023 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Moreno Valley	Document reviewed - No comments sent for this document received

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

Note

1: Disposition may change prior to Governing Board Meeting

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





**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Industrial and Commercial</i> <b>ORC230901-07</b> Walker Street Digital Billboard Project	The project consists of constructing a double-sided digital billboard. The project is located near the northwest corner of Walker Street and State Route 91.  Comment Period: 8/25/2023 - 9/26/2023 Public Hearing: 10/3/2023	Notice of Intent to Adopt a Mitigated Negative Declaration	City of La Palma	Document reviewed - No comments sent for this document received
<i>Industrial and Commercial</i> <b>ORC230914-01</b> The DisneylandForward Project	The project consists of modifying the limits of the existing Theme Park and Hotel District boundaries within the existing Disneyland Resort Specific Plan (DRSP) perimeter, renaming Districts within the DRSP, and establishing Overlays for Disney's Anaheim Resort Specific Plan No. 92-2 (ARSP) Properties. The project is bordered generally by East Ball Road to the north, State Route 57 to the east, State Route 22 to the south, and South West Street to the west.  Comment Period: 9/14/2023 - 10/30/2023 Public Hearing: 10/9/2023	Draft Subsequent Environmental Impact Report	City of Anaheim	** Under review, may submit written comments
<i>Industrial and Commercial</i> <b>ORC230920-06</b> Walker Street Digital Billboard Project	The project consists of constructing a double-sided digital billboard. The project is located near the northwest corner of Walker Street and State Route 91. Reference ORC230901-07  Comment Period: 9/14/2023 - 10/13/2023 Public Hearing: 11/7/2023	Recirculated Notice of Intent to Adopt a Mitigated Negative Declaration	City of La Palma	Document reviewed - No comments sent for this document received
<i>Industrial and Commercial</i> <b>SBC230920-09</b> El Camino Project (Primary Case File No. DRC2023-00067)	The project consists of the following two options on a 30.11 acre-site: 1) demolishing 175,685 square feet of existing structures and constructing 992,331 square feet of buildings; or 2) demolishing 237,895 square feet of existing structures, redeveloping 32,890 square feet of remaining structures, and constructing a 40,085 square foot beverage distribution facility. The project is located near the northeast corner of Haven Avenue and 6th Street. Reference SBC230823-07  Comment Period: 9/14/2023 - 10/14/2023 Public Hearing: 9/28/2023	Revised Notice of Preparation	City of Rancho Cucamonga	** Under review, may submit written comments

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

Note

1: Disposition may change prior to Governing Board Meeting

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**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Industrial and Commercial</b> <b>SBC230927-02</b> Philadelphia Street Industrial Development Site and East End Annexation project (PL20-0003, PL20-0004, PL20-0005)	The project consists of annexing of 56.87 acres of land from unincorporated San Bernardino County and constructing three industrial buildings totaling 63,900 square feet on 3.95 acres. The project is located near the southwest corner of Francis Avenue and East End Avenue. Reference SBC230719-05  Comment Period: 9/27/2023 - 10/3/2023 Public Hearing: 10/3/2023	Other	City of Chino	Document reviewed - No comments sent for this document received
<b>Waste and Water-related</b> <b>LAC230906-02</b> World Oil Terminals - Vernon	The project consists of a permit renewal of an existing hazardous waste facility permit to increase volume per rail car to transfer and store hazardous waste. The project is located at 3650 East 26th Street on the southeast corner of East 26th Street and South Downey Road in Vernon. Reference LAC230712-05, LAC220414-06, LAC211109-10, LAC211019-02, LAC201110-09, LAC190919-04, and LAC180515-07  Comment Period: N/A Public Hearing: N/A	Notice of Final Hazardous Waste Facility Permit Decision	Department of Toxic Substance Control	** Under review, may submit written comments
<b>Waste and Water-related</b> <b>LAC230920-08</b> Berg Metals Investigation#	The project consists of an update to the investigation extension of soil contaminated with lead, copper, antimony, and zinc on 10.6 acres. The project is located at 2652 Long Beach Avenue near the southeast corner of Long Beach Avenue and East 24th Street in Los Angeles within the designated AB 617 South Los Angeles community. Reference LAC230322-08 and LAC210114-02  Comment Period: N/A Public Hearing: N/A	Other	Department of Toxic Substances Control	Document reviewed - No comments sent for this document received
<b>Waste and Water-related</b> <b>LAC230920-12</b> F.E. Weymouth Water Treatment Plan and La Verne Site Improvements Program	The project consists of improving four existing facilities, constructing a 60,000 square foot warehouse, and constructing a 35,000 square foot engineering building on 135 acres. The project is located near the northwest corner of Wheeler Avenue and 5th Street in La Verne. Reference LAC221213-09  Staff previously provided comments on the Notice of Preparation for the project, which can be accessed at: <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/january-2023/LAC221213-09.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/january-2023/LAC221213-09.pdf</a> .  Comment Period: 9/18/2023 - 11/2/2023 Public Hearing: 10/4/2023	Draft Program Environmental Impact Report	Metropolitan Water District of Southern California	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.

Note

1: Disposition may change prior to Governing Board Meeting

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





**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<p><i>Waste and Water-related</i></p> <p><b>RVC230901-08</b> Water Reclamation Plant No. 7 Phase 1 Non-Potable Water Improvement</p>	<p>The project consists of improving the processes of an existing tertiary treatment plant and canal pump station at WRP 7. The project is located near the northwest corner of Madison Street and Lindy Lane in the City of Indio.</p> <p style="text-align: center;">Comment Period: 8/21/2023 - 9/19/2023                      Public Hearing: 10/10/2023</p>	<p>Notice of Intent to Adopt a Mitigated Negative Declaration</p>	<p>Coachella Valley Water District</p>	<p>Document reviewed - No comments sent for this document received</p>
<p><i>Waste and Water-related</i></p> <p><b>RVC230913-07</b> Pettit Water Storage Tank Expansion and Transmission Pipeline Project</p>	<p>The project consists of demolishing one existing 2 million-gallon capacity storage tank and constructing two new 4.5 million-gallon capacity storage tanks. The project is located near the northwest corner of Moreno Beach Drive and Cottonwood Avenue in Moreno Valley. Reference RVC221201-02</p> <p style="text-align: center;">Comment Period: 9/11/2023 - 10/25/2023                      Public Hearing: N/A</p>	<p>Draft Environmental Impact Report</p>	<p>Eastern Municipal Water District</p>	<p>Document reviewed - No comments sent for this document received</p>
<p><i>Waste and Water-related</i></p> <p><b>RVC230920-11</b> Canyon Lake Water Treatment Plant Phase I Improvements Project</p>	<p>The project consists of demolishing an existing intake pump station, static mixers, a clarifier, and a chemical feed area. The project also consists of constructing an intake pump station, static mixers and sedimentation/flocculation basins, associated equipment, pump stations, and chemical and maintenance buildings. The project borders the City of Lake Elsinore on the southern end of Canyon Lake and is located in Canyon Lake.</p> <p style="text-align: center;">Comment Period: 9/13/2023 - 10/12/2023                      Public Hearing: N/A</p>	<p>Notice of Intent to Adopt a Mitigated Negative Declaration</p>	<p>Elsinore Valley Municipal Water District</p>	<p>** Under review, may submit written comments</p>
<p><i>Waste and Water-related</i></p> <p><b>RVC230927-08</b> Haystack Stormwater Channel Rehabilitation Project</p>	<p>The project consists of improving the Haystack Channel to capture and convey nuisance water to drains, to optimize the hydraulic capacity of the culverts, and to remediate diminished channel capacity and protect storm drain outlets. The project is located north of Haystack Road, east of State Highway 74, and west of Portola Avenue.</p> <p style="text-align: center;">Comment Period: 9/25/2023 - 10/24/2023                      Public Hearing: 10/26/2023</p>	<p>Notice of Intent to Adopt a Mitigated Negative Declaration</p>	<p>City of Palm Desert</p>	<p>Document reviewed - No comments sent for this document received</p>

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

Note

1: Disposition may change prior to Governing Board Meeting

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



**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Institutional (schools, government, etc.)</i> <b>LAC230920-03</b> Malibu Middle and High School Campus Specific Plan	The project consists of modifying the City's Local Coastal Program Amendment. The project is located at 30215 Morning View Drive near the southeast corner of Via Cabrillo and Morning View Drive in Malibu. Reference LAC220601-04, LAC211019-05 and LAC200820-01  Comment Period: 9/20/2023 - 10/9/2023                      Public Hearing: 10/9/2023	Other	Santa Monica-Malibu Unified School District	Document reviewed - No comments sent for this document received
<i>Institutional (schools, government, etc.)</i> <b>LAC230920-13</b> Bowtie Parcel Demonstration Wetland Project	The project consists of enhancing habitat, improving water quality, and increasing public access to open space and the Los Angeles River. The project is located at the northernmost end of the former Taylor Yard in Glassell Park.  Comment Period: N/A    Public Hearing: N/A	Final Initial Study Mitigated Negative Declaration	California Department of Parks and Recreation	Document reviewed - No comments sent for this document received
<i>Institutional (schools, government, etc.)</i> <b>RVC230906-11</b> Patriot High School Stadium Improvement Project	The project consists of stadium improvements which include constructing new stadium lights, a new scoreboard, new home and visitor bleachers, a 3,000 square foot concession and restroom building, and a metal screen. The project is located near the northeast corner of Bethel Road and Jurupa Road in Jurupa Valley.  Comment Period: 8/30/2023 - 9/28/2023                                      Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	Jurupa Unified School District	Document reviewed - No comments sent for this document received
<i>Institutional (schools, government, etc.)</i> <b>RVC230926-03</b> PLN23-0150 Fitwell Health Campus	The project consists of constructing a 9,000 square foot office building, a 35,000 square foot fitness center and museum, and a 34,200 square foot multi-purpose center. The project is located north of Wickerd Road, east of Haun Road, south of Garbani Road, and west of Antelope Road.  Comment Period: 9/26/2023 - 10/10/2023                                      Public Hearing: 10/10/2023	Site Plan	City of Menifee	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.

Note

1: Disposition may change prior to Governing Board Meeting

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





**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

<u>SOUTH COAST AQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>General Land Use (residential, etc.)</i> <b>LAC230901-11</b> 5700 Hannum Avenue Mixed-Use Residential and Commercial Project	The project consists of demolishing a 30,672 square foot office building and constructing 309 residential units and 5,600 square feet of retail use on 2.23. The project is located near the southwest corner of Buckingham Parkway and Hannum Avenue.  Comment Period: 8/29/2023 - 9/28/2023 Public Hearing: 9/12/2023	Notice of Preparation	City of Culver City	Document reviewed - No comments sent for this document received
<i>General Land Use (residential, etc.)</i> <b>LAC230906-16</b> Maribel Transit Priority Project	The project consists of demolishing an existing 38,545 square foot commercial building and constructing 348 residential units and 476,777 square feet of commercial uses on approximately 22.48 acres. The project boundaries include multi-family residences to the north, Cloverdale Avenue to the east, Wilshire Boulevard to the south, and Cochran Avenue to west.  Comment Period: 8/31/2023 - 10/2/2023 Public Hearing: N/A	Notice of Preparation	City of Anaheim	** Under review, may submit written comments
<i>General Land Use (residential, etc.)</i> <b>LAC230913-06</b> 1360 N. Vine Project	The project consists of demolishing 32,844 square feet of existing structures and constructing a building with subterranean parking on 89,559 square feet and one of two development options. Option one includes constructing 429 residential units, a 55,000 square foot grocery store, 5,000 square feet of retail uses, and 8,988 square feet as either restaurants or 12 additional residential units. Option two includes constructing 463,521 square feet of office uses, 11,914 square feet of restaurant uses, and 8,988 square feet as either restaurants or nine residential units. The project is located on the southeast corner of Vine Street and De Longpre Avenue in the community of Hollywood. Reference LAC220614-02 and LAC170622-08  Comment Period: N/A Public Hearing: 10/4/2023	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent for this document received
<i>General Land Use (residential, etc.)</i> <b>LAC230927-03</b> 4501 Orange Avenue Residential Project	The project consists of demolishing two commercial buildings and constructing 32 residential units on 44,153 square feet. The project is located near the southwest corner of East San Antonio Drive and Orange Avenue.  Comment Period: 9/26/2023 - 10/25/2023 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Long 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.

Note

1: Disposition may change prior to Governing Board Meeting

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



**ATTACHMENT A**  
**ENVIRONMENTAL DOCUMENTS PREPARED BY OTHER PUBLIC AGENCIES AND STATUS OF REVIEW**  
**September 1, 2023 to September 30, 2023**

<u>SOUTH COAST AQMD LOG-IN NUMBER</u>	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>General Land Use (residential, etc.)</i> <b>RVC230901-10</b> General Plan Amendment No. 200008, Tentative Tract Map No. 37871	The project consists of amending the land use designation to accommodate subdividing 74.36 acres into 12 residential units with a minimum lot size of one acre and a remainder parcel of 66.2 acres. The project boundaries include State Highway 74 to the north, Joppe Avenue to the east, National Forest to the south, and Guthridge Lane to the west in Homeland.  Comment Period: N/A Public Hearing: N/A	Other	Riverside County	Document reviewed - No comments sent for this document received
<i>General Land Use (residential, etc.)</i> <b>RVC230906-04</b> Plot Plan (PEN21-0250) Tentative Parcel Map (PEN21-0251)	The project consists of proposing a Plot Plan for 64 residential units and a Tentative Parcel Map to subdivide 8.99 acres into two parcels. The project is located near the northeast corner of Alessandro Boulevard and Flaming Arrow Drive.  Comment Period: 8/31/2023- 9/20/2023 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Moreno Valley	Document reviewed - No comments sent for this document received
<i>General Land Use (residential, etc.)</i> <b>RVC230906-08</b> Sevilla II Tentative Tract Map No. 38557	The project consists of constructing 204 residential units, proposing change of zone, and combining two parcels into one parcel. The project boundaries include Avenue 50 to the north, Van Buren to the east, 51 <sup>st</sup> Avenue to the south, and Calhoun Street to the west.  Comment Period: 9/5/2023- 10/5/2023 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Coachella	Document reviewed - No comments sent for this document received
<i>General Land Use (residential, etc.)</i> <b>RVC230906-10</b> Tentative Tract Map 38264 (PEN22-013) Conditional Use Permit (PEN22-0014)	The project consists of proposing a Conditional Use Permit, subdividing 18.36 acres, and constructing 55 residential units. The project is located near the southeast corner of Cottonwood Avenue and Quincy Street.  Comment Period: 8/29/2023- 9/28/2023 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Moreno Valley	Document reviewed - No comments sent for this document received

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

Note

1: Disposition may change prior to Governing Board Meeting

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















**ATTACHMENT B  
ACTIVE PROJECTS WITH CONTINUED REVIEW OF ENVIRONMENTAL DOCUMENTS PREPARED BY  
OTHER PUBLIC AGENCIES**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Plans and Regulations</b>  <b>LAC230823-11</b> City of Lawndale General Plan Update	The project consists of updating the Community's General Plan to develop policies, goals, and guidelines for housing, land use, transportation, and economic development elements with a planning horizon of 2045 encompassing 917 acres. The project boundaries are Hawthorne to the north and west, Gardena and unincorporated areas of Los Angeles County to the east, and City of Torrance to the south, and Redondo Beach to the south and west. Reference LAC221213-07  Comment Period: 8/15/2023 - 10/2/2023 Public Hearing: N/A	Draft Environmental Impact Report	City of Lawndale	**Under review, may submit written comments
<b>Warehouse &amp; Distribution Centers</b>  <b>LAC230802-02</b> Whittier Boulevard Business Center	The project consists of redeveloping a 295,499 square foot warehouse on 13.49 acres. The project is located near the southwest corner of Whittier Boulevard and Penn Street. Reference: LAC221220-04  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230802-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230802-02.pdf</a> Comment Period: 7/28/2023 - 9/11/2023 Public Hearing: 9/13/2023	Draft Environmental Impact Report	City of Whittier	South Coast AQMD staff commented on 9/8/2023
<b>Warehouse &amp; Distribution Centers</b>  <b>LAC230823-09</b> Walnut Business Park	The project consists of constructing four warehouses totaling of 414,778 square feet on 25 acres. The project boundaries are Paseo Del Prado to the north, an existing development to the east, Valley Boulevard to the south, and South Lemon Avenue to the west.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230823-09.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/LAC230823-09.pdf</a> Comment Period: 8/16/2023 - 9/18/2023 Public Hearing: 8/29/2023	Notice of Preparation	City of Walnut	South Coast AQMD staff commented on 9/15/2023
<b>Industrial and Commercial</b>  <b>RVC230823-10</b> Moreno Valley Business Park Building 5 Project	The project consists of amending the Specific Plan Land Use and constructing a 212,313 square foot industrial building. The project is located near the southeast corner of Ironwood Avenue and Heacock Street. Reference: RVC210623-06  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/RVC230823-10.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/RVC230823-10.pdf</a> Comment Period: 8/23/2023 - 9/18/2023 Public Hearing: 9/7/2023	Notice of Preparation	City of Moreno Valley	South Coast AQMD staff commented on 9/19/2023
<b>Medical Facility</b>  <b>ORC230815-01</b> Spinal Cord Injury and Physical Medicine and Rehabilitation Building at the Tibor Rubin VA Medical Center, Long Beach, California	The project consists of constructing a 460,000 square foot medical facility. The project is located north of Army Way and south of Navy Way at 5901 East Seventh Street in Long Beach.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/ORC230815-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2023/september-2023/ORC230815-01.pdf</a> Comment Period: 8/10/2023 - 9/8/2023 Public Hearing: N/A	Notice of Scoping and Preparation of an Environmental Assessment	United States Department of Veterans Affairs	South Coast AQMD staff commented on 9/8/2023

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

Note:

1. Disposition may change prior to Governing Board Meeting
2. Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.





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**ATTACHMENT C  
PROPOSED AIR PERMIT PROJECTS FOR  
WHICH SOUTH COAST AQMD IS CEQA LEAD  
AGENCY THROUGH SEPTEMBER 30, 2023**

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
<p>Quemetco is proposing to modify existing South Coast AQMD permits to allow the facility to recycle more batteries and to eliminate the existing daily idle time of the furnaces. The proposed project will increase the rotary feed drying furnace feed rate limit from 600 to 750 tons per day and increase the amount of total coke material allowed to be processed. In addition, the project will allow the use of petroleum coke in lieu of or in addition to calcined coke, and remove one existing emergency diesel-fueled internal combustion engine (ICE) and install two new emergency natural gas-fueled ICEs.</p>	<p>Quemetco</p>	<p>Environmental Impact Report (EIR)</p>	<p>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.</p> <p>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.</p> <p>After the Draft EIR public comment and review period closed, Quemetco submitted additional applications for other permit modifications which are also being evaluated by staff.</p>	<p>Trinity Consultants</p>
<p>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.</p>	<p>Sunshine Canyon Landfill</p>	<p>Subsequent Environmental Impact Report (SEIR)</p>	<p>South Coast AQMD staff reviewed and provided comments on the preliminary air quality analysis, health risk assessment (HRA), and Preliminary Draft SEIR which are currently being addressed by the consultant.</p>	<p>SCS Engineers</p>
<p>Tesoro is proposing to modify its Title V permit to: 1) add gas oil as a commodity that can be stored in three of the six new crude oil storage tanks at the Carson Crude Terminal (previously assessed in the May 2017 Final EIR); and 2) drain, clean and decommission Reservoir 502, a 1.5 million barrel concrete lined, wooden-roof topped reservoir used to store gas oil.</p>	<p>Tesoro Refining &amp; Marketing Company, LLC (Tesoro)</p>	<p>Addendum to the Final Environmental Impact Report (EIR) for the May 2017 Tesoro Los Angeles Refinery Integration and Compliance Project (LARIC)</p>	<p>The consultant provided a Preliminary Draft Addendum, which is undergoing South Coast AQMD staff review.</p>	<p>Environmental Audit, Inc.</p>

[↑ Back to Agenda](#)

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 17

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee held a hybrid meeting on Friday, October 20, 2023. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Mayor Larry McCallon, Chair  
Stationary Source Committee

JA:cr

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### **Committee Members**

Present: Mayor Larry McCallon, Committee Chair  
Supervisor Holly J. Mitchell, Committee Vice Chair  
Vice Chair Michael A. Cacciotti  
Chair Vanessa Delgado  
Board Member Veronica Padilla-Campos  
Councilmember José Luis Solache

### **Call to Order**

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

For additional information of the Stationary Source Committee Meeting, please refer to the [Webcast](#).

### **Roll Call**

### **INFORMATIONAL ITEM S:**

#### **1. RECLAIM Quarterly Report – 15<sup>th</sup> Update**

Michael Morris, Planning & Rules Manager/Planning, Rule Development and Implementation, provided the quarterly update regarding transitioning the NOx RECLAIM program to a command-and-control regulatory structure. For additional details, please refer to the [Webcast](#) beginning at 4:40.

Board Member Veronica Padilla-Campos asked how RECLAIM facilities offset emission increases. Mr. Morris explained the difference between RECLAIM allocations and emission reduction credits (ERCs) under New Source Review and the limited supply of ERCs in the Regulation XIII New Source Review open market. For additional details please refer to the [Webcast](#) beginning at 14:44.

Vice Chair Cacciotti asked how staff plans to address ERC supply challenges. Mr. Morris stated that staff is considering multiple options to address ERCs and will be discussing this in upcoming Working Group Meetings . For additional details please refer to the [Webcast](#) beginning at 16:01.

There were no public comments.

## **2. Update on Proposed Amended Rule 1405 – Control of Ethylene Oxide Emissions from Sterilization and Related Operations**

Michael Krause, Assistant Deputy Executive Officer/Planning, Rule Development and Implementation, presented updates to Proposed Amended Rule 1405 (PAR 1405) since the last update to Stationary Source Committee on September 15, 2023. For additional details, please refer to the [Webcast](#) beginning at 17:26.

Committee Chair McCallon asked about the rationale for fenceline monitoring when sterilization facilities are required to have a permanent total enclosure (PTE ) and CEMS. Mr. Krause clarified that fenceline monitoring is an interim measure that would sunset after the in-stack CEMS are implemented. For additional details, please refer to the [Webcast](#) beginning at 27:04.

Board Member Padilla-Campos inquired about feedback from community stakeholders and notification to the community after PAR 1405 is approved by the Board. Mr. Krause explained staff recently held a Working Group Meeting and did not receive comments from community stakeholders. Mr. Krause also explained that staff posts a notice of the Public Hearing as part of the public process and that community stakeholders can receive email notices if they choose to sign-up. For additional details, please refer to the [Webcast](#) beginning at 28:15.

Vice Chair Cacciotti asked about any other outstanding issues. Mr. Krause explained that industry stakeholders have continued to express concern regarding fenceline monitoring with other potential sources of ethylene oxide (EtO). Mr. Krause discussed the curtailment process, including the opportunity to provide substantial evidence, if fenceline monitoring values exceed the threshold. For additional details, please refer to the [Webcast](#) beginning at 29:34.

Committee Chair McCallon asked about curtailment triggers, the likelihood of curtailment and feedback from U.S. FDA regarding curtailment. Mr. Krause explained the various curtailment thresholds and expressed it is unlikely curtailment would be triggered at the lower threshold once controls were in place, however there

was a higher threshold proposed prior to those controls being installed. Mr. Krause reported that U.S. FDA has reviewed PAR 1405 and staff revised the proposal to include a curtailment exemption for products likely to be in shortage, as identified by U.S. FDA or local hospitals. For additional details, please refer to the [Webcast](#) beginning at 31:54.

Committee Vice Chair Mitchell requested clarification regarding the concessions made to industry, such as PTE average times, facility-specific mass emission rates, and alternatives to PTE. Mr. Krause clarified that industry stakeholders raised specific issues, and staff worked with stakeholders to provide additional clarity and incorporated revisions to address concerns while not compromising the integrity of the rule. Mr. Krause explained, for example, that for PTE s industry stakeholders asked for an eight-hour averaging time, and staff revised the averaging time from 1 to 15 minutes which was consistent with other rules that require PTEs . For additional details, please refer to the [Webcast](#) beginning at 33:08.

Councilmember Solache expressed appreciation to staff and noted that his concerns regarding fenceline monitoring were addressed by previous speakers. For additional details, please refer to the [Webcast](#) beginning at 36:03.

Harvey Eder, Public Solar Power Coalition, expressed concern regarding EtO in relation to ambient studies, and state and federal Clean Air Acts. Mr. Eder also expressed concern that EtO is a byproduct of combustion of fossil fuels. For additional details, please refer to the [Webcast](#) beginning at 37:14.

Lee Moore, McKesson, asked about the thresholds of curtailment for warehouses and baselines levels and guidelines for fenceline monitoring of warehouses. For additional details, please refer to the [Webcast](#) beginning at 39:03.

Darbi Gottlieb, AdvaMed, expressed appreciation for meetings with staff and refinements in rule language. Ms. Gottlieb stated progress has been made , but several issues remain. Ms. Gottlieb identified compliance deadlines as subject to supply chain concerns and other factors outside facility control and requested pathways for extensions. Mr. Gottlieb also expressed concerns about the accuracy of fenceline monitoring and the curtailment provisions, stating the curtailment exemption for shortages is not practical. For additional details, please refer to the [Webcast](#) beginning at 40:28.

Mr. Krause clarified that warehouses are not subject to curtailment and fenceline monitoring and explained the investigatory nature of fenceline monitoring. Mr. Krause stated staff is looking at compliance timelines to ensure they are appropriate. Jason Low, Deputy Executive Officer, Monitoring and Analysis, elaborated on the reliability of fenceline monitoring and the investigatory nature of ambient air monitoring. For additional details, please refer to the [Webcast](#) beginning at 43:37.

Committee Chair McCallon expressed appreciation to staff and encouraged staff to continue to work with all stakeholders to resolve all remaining issues and stated that staff did not need to bring PAR 1405 to the November Stationary Source Committee meeting. For additional details, please refer to the [Webcast](#) beginning at 46:06.

**3. Update on Proposed Rule 1110.3 – Emissions from Linear Generators**

Mr. Morris provided an update on Proposed Rule 1110.3. For additional details, please refer to the [Webcast](#) beginning at 47:14.

Committee Chair McCallon inquired about the length of time it would take to develop a South Coast AQMD certification program for linear generators. Mr. Morris explained that the process required a high level of involvement among interested parties and that it was difficult to speculate on the length of time needed to do all the testing. Committee Chair McCallon asked how long it would take until a rule amendment would take place. Mr. Morris provided an estimation of approximately two to three years. For additional details, please refer to the [Webcast](#) beginning at 50:35.

Vice Chair Cacciotti asked for an explanation of the certification process. Mr. Morris explained the collaborative public process that would involve staff from source testing and engineering, members of the public and manufacturers. For additional details, please refer to the [Webcast](#) beginning at 51:25.

Chris Chavez, Coalition for Clean Air, expressed support for the proposed rule. For additional details, please refer to the [Webcast](#) beginning at 52:37.

Chair McCallon encouraged staff to continue working on the certification. For additional details, please refer to the [Webcast](#) beginning at 53:08.

**WRITTEN REPORTS :**

**4. Twelve-month and Three-month Rolling Average Price of Compliance Years 2022 and 2023 NOx and SOx RTCs (June – September 2023)**

The report was acknowledged by the committee.

**5. Notice of Violation Penalty Summary**

The report was acknowledged by the committee.

**OTHER MATTERS :**

**6. Other Business**

There was no other business to report.

**7. Public Comment Period**

Duncan McKee, representing La Puente community, commented on Quemetco's permit applications. He urged South Coast AQMD to not let Quemetco burn plastic and rubber and encouraged building additional facilities to process batteries.

Mr. McKee asked for better communication and dialogue with South Coast AQMD staff and Board Members regarding this matter. For additional details, please refer to the [Webcast](#) beginning at 54:09.

#### **8. Next Meeting Date**

The next Stationary Source Committee meeting is scheduled for Friday, November 17, 2023 at 10:30 a.m.

#### **Adjournment**

The meeting was adjourned at 11:25 a.m.

#### **Attachments**

1. Attendance Record
2. Twelve-month and Three-month Rolling Average Price of Compliance Years 2022 and 2023 NOx and SOx RTCs (June – September 2023)
3. Notice of Violation Penalty Summary

**ATTACHMENT 1**

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
STATIONARY SOURCE COMMITTEE  
Attendance –October 20, 2023**

Councilmember Michael A. Cacciotti .....	South Coast AQMD Board Member
Senator Vanessa Delgado (Ret).....	South Coast AQMD Board Member
Mayor Larry McCallon .....	South Coast AQMD Board Member
Supervisor Holly J. Mitchell .....	South Coast AQMD Board Member
Board Member Veronica Padilla-Campos.....	South Coast AQMD Board Member
Councilmember José Luis Solache.....	South Coast AQMD Board Member
William Kelly .....	Board Consultant (Cacciotti)
Debra Mendelsohn.....	Board Consultant (McCallon)
Andrew Silva.....	Board Consultant (Dawson)
Mark Taylor .....	Board Consultant (Rodriguez)
Mark Abramowitz.....	Community Environmental Services
Chris Chavez.....	Coalition for Clean Air
Curtis Coleman.....	Southern California Air Quality Alliance
Ramine Cromartie.....	WSPA
Harvey Eder.....	Public Solar Power Coalition
Darbi Gottlieb.....	AdvaMed
Bill LaMarr .....	California Alliance of Small Business Associations
Duncan McKee.....	La Puente community member
Lee Moore.....	McKesson
Bethmarie Quiambao.....	Southern California Edison
Derrick Alatorre .....	South Coast AQMD staff
Jason Aspell .....	South Coast AQMD staff
Barbara Baird.....	South Coast AQMD staff
Scott Gallegos.....	South Coast AQMD staff
Bayron Gilchrist.....	South Coast AQMD staff
Kathryn Higgins.....	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
Howard Lee.....	South Coast AQMD staff
Jason Low.....	South Coast AQMD staff
Ian MacMillan.....	South Coast AQMD staff
Terrance Mann.....	South Coast AQMD staff
Michael Morris .....	South Coast AQMD staff
Ron Moskowitz.....	South Coast AQMD staff
Susan Nakamura.....	South Coast AQMD staff
Wayne Nastro.....	South Coast AQMD staff
Sarah Rees.....	South Coast AQMD staff
Catherine Rodriguez.....	South Coast AQMD staff
Lisa Tanaka O’Malley.....	South Coast AQMD staff
Jillian Wong .....	South Coast AQMD staff
Paul Wright.....	South Coast AQMD staff
Victor Yip.....	South Coast AQMD staff



# South Coast Air Quality Management District

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

## Twelve-Month and Three-Month Rolling Average Price of Compliance Years 2022 and 2023 NOx and SOx RTCs (June – September 2023)

October 2023 Report to Stationary Source Committee

**Table I**

Twelve-Month Rolling Average Price Data for Compliance Year 2022 NOx RTCs  
(Report to Governing Board if rolling average price greater than \$22,500/ton)<sup>1</sup>

Twelve-Month Rolling Average Price Data for Compliance Year 2022 NOx RTC					
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12-month (tons)	Total Price of Volume Traded During Past 12-month (\$)	Number of Trades with Price	Rolling Average Price <sup>2</sup> (\$/ton)
Jan-22	Jan-21 to Dec-21	165.4	\$5,473,709	18	\$33,085
Feb-22	Feb-21 to Jan-22	165.4	\$5,473,709	18	\$33,085
Mar-22	Mar-21 to Feb-22	165.4	\$5,473,709	18	\$33,085
Apr-22	Apr-21 to Mar-22	193.6	\$6,611,522	22	\$34,146
May-22	May-21 to Apr-22	194.6	\$6,656,124	24	\$34,198
Jun-22	Jun-21 to May-22	176.4	\$6,227,716	22	\$35,311
Jul-22	Jul-21 to Jun-22	174.8	\$6,373,786	24	\$36,457
Aug-22	Aug-21 to Jul-22	176.3	\$6,434,733	32	\$36,489
Sep-22	Sep-21 to Aug-22	174.6	\$6,443,413	33	\$36,894
Oct-22	Oct-21 to Sep-22	151.8	\$5,960,928	31	\$39,280
Nov-22	Nov-21 to Oct-22	155.6	\$6,005,989	44	\$38,611
Dec-22	Dec-21 to Nov-22	105.6	\$4,005,989	42	\$37,953
Jan-23	Jan-22 to Dec-22	87.8	\$3,238,965	41	\$36,871
Feb-23	Feb-22 to Jan-23	286.8	\$6,212,543	77	\$21,659
Mar-23	Mar-22 to Feb-23	356.0	\$7,298,709	93	\$20,501
Apr-23	Apr-22 to Mar-23	327.8	\$6,160,896	89	\$18,792
May-23	May-22 to Apr-23	353.9	\$6,671,187	106	\$18,852
Jun-23	Jun-22 to May-23	354.2	\$6,679,467	107	\$18,857
Jul-23	Jul-22 to Jun-23	339.3	\$5,952,322	105	\$17,543
Aug-23	Aug-22 to Jul-23	471.6	\$7,539,742	120	\$15,986



Twelve-Month Rolling Average Price Data for Compliance Year 2022 NOx RTC					
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12-month (tons)	Total Price of Volume Traded During Past 12-month (\$)	Number of Trades with Price	Rolling Average Price <sup>2</sup> (\$/ton)
Sep-23	Sep-22 to Aug-23	556.8	\$7,989,356	139	\$14,349
Oct-23	Oct-22 to Sep-23	Compliance Year 2022 RTCs can no longer be traded after August 2023			

**Table II**

Twelve-Month Rolling Average Price Data for Compliance Year 2023 NOx RTCs  
(Report to Governing Board if rolling average price greater than \$22,500/ton)<sup>1</sup>

Twelve-Month Rolling Average Price Data for Compliance Year 2023 NOx RTC					
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12-month (tons)	Total Price of Volume Traded During Past 12-month (\$)	Number of Trades with Price	Rolling Average Price <sup>2</sup> (\$/ton)
Jan-23	Jan-22 to Dec-22	40.8	\$1,954,673	5	\$47,864
Feb-23	Feb-22 to Jan-23	40.9	\$1,956,548	6	\$47,866
Mar-23	Mar-22 to Feb-23	40.9	\$1,956,548	6	\$47,866
Apr-23	Apr-22 to Mar-23	40.9	\$1,956,548	6	\$47,866
May-23	May-22 to Apr-23	60.7	\$2,386,163	10	\$39,311
Jun-23	Jun-22 to May-23	51.7	\$1,468,779	11	\$28,422
Jul-23	Jul-22 to Jun-23	72.8	\$2,130,599	14	\$29,269
Aug-23	Aug-22 to Jul-23	73.8	\$2,152,599	15	\$29,171
Sep-23	Sep-22 to Aug-23	82.7	\$2,290,774	20	\$27,711
Oct-23	Oct-22 to Sep-23	73.7	\$1,931,554	19	\$26,213

**Table III**

Three-Month Rolling Average Price Data for Compliance Year 2022 NOx RTCs  
(Report to Governing Board if rolling average price greater than \$35,000/ton)<sup>1</sup>

Three-Month Rolling Average Price Data for Compliance Year 2022 NOx RTC					
Reporting Month	3-Month Period	Total Volume Traded with Price During Past 3-month (tons)	Total Price of Volume Traded During Past 3-month (\$)	Number of Trades with Price	Rolling Average Price <sup>2</sup> (\$/ton)
Jan-22	Oct-21 to Dec-21	97.4	\$3,780,324	10	\$38,803
Feb-22	Nov-21 to Jan-22	79.5	\$3,110,524	7	\$39,114
Mar-22	Dec-21 to Feb-22	29.5	\$1,110,524	5	\$37,614
Apr-22	Jan-22 to Mar-22	28.2	\$1,137,813	4	\$40,372
May-22	Feb-22 to Apr-22	29.2	\$1,182,415	6	\$40,506

Three-Month Rolling Average Price Data for Compliance Year 2022 NOx RTC					
Reporting Month	3-Month Period	Total Volume Traded with Price During Past 3-month (tons)	Total Price of Volume Traded During Past 3-month (\$)	Number of Trades with Price	Rolling Average Price <sup>2</sup> (\$/ton)
Jun-22	Mar-22 to May-22	29.2	\$1,182,415	6	\$40,506
Jul-22	Apr-22 to Jun-22	21.3	\$852,942	6	\$40,000
Aug-22	May-22 to Jul-22	24.3	\$962,009	13	\$39,531
Sep-22	Jun-22 to Aug-22	25.1	\$998,189	15	\$39,706
Oct-22	Jul-22 to Sep-22	4.8	\$189,849	11	\$39,359
Nov-22	Aug-22 to Oct-22	22.5	\$751,041	18	\$33,377
Dec-22	Sep-22 to Nov-22	21.7	\$714,861	16	\$32,946
Jan-23	Oct-22 to Dec-22	33.5	\$1,058,361	20	\$31,577
Feb-23	Nov-22 to Jan-23	210.8	\$3,317,078	40	\$15,735
Mar-23	Dec-22 to Feb-23	280.0	\$4,403,244	56	\$15,726
Apr-23	Jan-23 to Mar-23	268.2	\$4,059,744	52	\$15,138
May-23	Feb-23 to Apr-23	96.2	\$1,641,059	35	\$17,053
Jun-23	Mar-23 to May-23	27.4	\$563,174	20	\$20,562
Jul-23	Apr-23 to Jun-23	32.8	\$644,369	22	\$19,658
Aug-23	May-23 to Jul-23	142.1	\$1,830,563	27	\$12,882
Sep-23	Jun-23 to Aug-23	227.7	\$2,308,077	47	\$10,136
Oct-23	Jul-23 to Sep-23	Compliance Year 2022 RTCs can no longer be traded after August 2023			

**Table IV**

Three-Month Rolling Average Price Data for Compliance Year 2023 NOx RTCs  
(Report to Governing Board if rolling average price greater than \$35,000/ton)<sup>1</sup>

Three-Month Rolling Average Price Data for Compliance Year 2023 NOx RTC					
Reporting Month	3-Month Period	Total Volume Traded with Price During Past 3-month (tons)	Total Price of Volume Traded During Past 3-month (\$)	Number of Trades with Price	Rolling Average Price <sup>2</sup> (\$/ton)
Jan-23	Oct-22 to Dec-22	14.4	\$545,813	3	\$38,000
Feb-23	Nov-22 to Jan-23	14.4	\$547,688	4	\$38,031
Mar-23	Dec-22 to Feb-23	14.4	\$547,688	4	\$38,031
Apr-23	Jan-23 to Mar-23	0.04	\$1,875	1	\$50,000
May-23	Feb-23 to Apr-23	19.8	\$429,615	4	\$21,671
Jun-23	Mar-23 to May-23	28.3	\$561,871	6	\$19,857
Jul-23	Apr-23 to Jun-23	49.4	\$1,223,691	9	\$24,765
Aug-23	May-23 to Jul-23	30.6	\$816,076	6	\$26,680
Sep-23	Jun-23 to Aug-23	31.0	\$821,995	9	\$26,524
Oct-23	Jul-23 to Sep-23	9.9	\$160,175	6	\$16,221

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<sup>1</sup> District Rule 2002 (f)(1)(H) requires that any rolling average price greater than the threshold triggers a report to the Governing Board. The Governing Board determined at the March 3, 2023 meeting that the requirements of Rule 2002 (f)(1)(H) are no longer applicable to the RECLAIM program, therefore this information is provided as a courtesy.

<sup>2</sup> District Rule 2015(b)(6) - Backstop Provisions provides additional "evaluation and review of the compliance and enforcement aspects of the RECLAIM program" if the average annual RTC price reported in the RECLAIM Annual Audit Report exceeds \$15,000 per ton. The average annual RTC price is reported to the Governing Board in March of each year. The Governing Board determined at the March 3, 2023 meeting that no additional analysis or action was required in response to the price threshold exceedance from the most recent report.

**Table V**

Twelve-Month Rolling Average Price Data for Compliance Year 2022 SOx RTCs  
(Report to Governing Board if rolling average price greater than \$50,000/ton)<sup>3</sup>

Twelve-Month Rolling Average Price Data for Compliance Year 2022 SOx RTC					
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12-month (tons)	Total Price of Volume Traded During Past 12-month (\$)	Number of Trades with Price	Rolling Average Price <sup>4</sup> (\$/ton)
Jan-22	Jan-21 to Dec-21	None	-	-	-
Feb-22	Feb-21 to Jan-22	None	-	-	-
Mar-22	Mar-21 to Feb-22	None	-	-	-
Apr-22	Apr-21 to Mar-22	None	-	-	-
May-22	May-21 to Apr-22	None	-	-	-
Jun-22	Jun-21 to May-22	None	-	-	-
Jul-22	Jul-21 to Jun-22	None	-	-	-
Aug-22	Aug-21 to Jul-22	None	-	-	-
Sep-22	Sep-21 to Aug-22	None	-	-	-
Oct-22	Oct-21 to Sep-22	None	-	-	-
Nov-22	Nov-21 to Oct-22	None	-	-	-
Dec-22	Dec-21 to Nov-22	None	-	-	-
Jan-23	Jan-22 to Dec-22	131.5	\$262,908	6	\$2,000
Feb-23	Feb-22 to Jan-23	135.3	\$273,999	8	\$2,025
Mar-23	Mar-22 to Feb-23	135.3	\$273,999	8	\$2,025
Apr-23	Apr-22 to Mar-23	135.3	\$273,999	8	\$2,025
May-23	May-22 to Apr-23	135.3	\$273,999	8	\$2,025
Jun-23	Jun-22 to May-23	135.3	\$273,999	8	\$2,025
Jul-23	Jul-22 to Jun-23	136.7	\$276,765	9	\$2,024
Aug-23	Aug-22 to Jul-23	136.7	\$276,765	9	\$2,024
Sep-23	Sep-22 to Aug-23	136.7	\$276,765	9	\$2,024
Oct-23	Oct-22 to Sep-23	Compliance Year 2022 RTCs can no longer be traded after August 2023			

**Table VI**

Twelve-Month Rolling Average Price Data for Compliance Year 2023 SOx RTCs  
(Report to Governing Board if rolling average price greater than \$50,000/ton)<sup>3</sup>

<b>Twelve-Month Rolling Average Price Data for Compliance Year 2023 SOx RTC</b>					
<b>Reporting Month</b>	<b>12-Month Period</b>	<b>Total Volume Traded with Price During Past 12-month (tons)</b>	<b>Total Price of Volume Traded During Past 12-month (\$)</b>	<b>Number of Trades with Price</b>	<b>Rolling Average Price<sup>4</sup> (\$/ton)</b>
Jan-23	Jan-22 to Dec-22	None	-	-	-
Feb-23	Feb-22 to Jan-23	None	-	-	-
Mar-23	Mar-22 to Feb-23	None	-	-	-
Apr-23	Apr-22 to Mar-23	None	-	-	-
May-23	May-22 to Apr-23	None	-	-	-
Jun-23	Jun-22 to May-23	None	-	-	-
Jul-23	Jul-22 to Jun-23	None	-	-	-
Aug-23	Aug-22 to Jul-23	None	-	-	-
Sep-23	Sep-22 to Aug-23	None	-	-	-
Oct-23	Oct-22 to Sep-23	None	-	-	-

<sup>3</sup> Pursuant to District Rule 2002(f)(1)(Q), the requirement to report 12-month rolling average SOx RTC price ended February 1, 2020. This table is provided as a courtesy.

<sup>4</sup> District Rule 2015(b)(6) - Backstop Provisions provides additional "evaluation and review of the compliance and enforcement aspects of the RECLAIM program" if the average annual RTC price reported in the RECLAIM Annual Audit Report exceeds \$15,000 per ton. The average annual RTC price is reported to the Governing Board in March of each year.

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

**Settlement Penalty Report (09/01/2023 - 09/30/2023)**

**Total Penalties**

Civil Settlement: \$248,575.50

MSPAP Settlement: \$54,009.00

**Total Cash Settlements: \$302,584.50**

**Fiscal Year through 09/30/2023 Cash Total: \$1,116,314.50**

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
<b>Civil</b>						
191080	ASBESTOS ABATEMENT, INC.	1403	09/07/2023	JL	P74596, P76201	\$7,026.00
70343	BREA MALL MGMT OFFICE	201, 1415	09/13/2023	SH	P65773, P65796	\$6,500.00
153992	CANYON POWER PLANT	2004, 3002	09/06/2023	KER	P66140	\$4,392.00
143741	DCOR, LLC	463, 1148.1, 1173, 2004, 2012	09/15/2023	JL	P69300, P72860, P74512, P74518	\$31,664.00
136539	DEL ROSA FUEL	461	09/06/2023	MR	P64975, P76171	\$1,000.00
171049	E&B NATURAL RESOURCES MGMT. CORP.	203, 1148.2	09/01/2023	RM	P69274, P73353	\$29,309.00
117560	EQUILON ENTER, LLC-SHELL OIL PROD. US	221, 3002	09/05/2023	EC	P73260, P74083, P75504	\$7,450.00
196900	EXPRESS DISPOSAL, INC.	403	09/20/2023	RM	P74769, P74770, P74771	\$3,975.00
62862	IMPERIAL IRRIGATION DISTRICT/ COACHELLA	3002	09/20/2023	ND	P64795	\$5,269.50
175733	JAUREGUI & CULVER, INC.	1166	09/22/2023	ND	P66022	\$4,684.00
186629	KB HOME SOUTHERN CALIFORNIA	403	09/07/2023	SH	P74134, P74135, P74139, P74148, P75217	\$7,500.00
197755	KB HOMES/COUNTRY VIEW	403	09/06/2023	JL	P76463	\$11,710.00
800170	LA CITY, DWP HARBOR GENERATING STATION	218.1, 2004	09/14/2023	DH	P63823, P63833, P66226	\$7,728.00
800193	LA CITY, DWP VALLEY GENERATING STATION	2004, 3002	09/14/2023	DH	P66146, P76058	\$7,377.00
61962	LA CITY, HARBOR DEPT	461, 2004	09/15/2023	EC	P70010, P70017, P70019	\$5,900.00
141295	LEKOS DYE AND FINISHING, INC.	1146, 2004, 2005, 2012, 2012 Appendix A	09/14/2023	KCM	P57883, P66074, P66081, P66084, P66086, P66087, P66093, P66095, P66100, P68318, P68329	\$15,000.00
130156	LEYMASTER ENVIRONMENTAL CONSULTING, LLC	221, 1166	09/08/2023	EC	P73404	\$10,850.00
131425	MATRIX OIL CORPORATION-RIDEOUT HEIGHTS	203, 1173	09/06/2023	JL	P73324	\$10,831.00
173747	NORTHGATE JEFFERSON ARCO AM/PM	461, 41960.2	09/13/2023	ND	P70167	\$15,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
145553	PETER'S FAMILY CLEANER, PALACE CLEANER	203, 1102, 1402, 1421	09/12/2023	BT	P62763, P62765, P62770, P62771	\$1,000.00
126498	STEELSCAPE, INC.	2004, 2012 Appendix A, 3002	09/06/2023	EC	P67382, P67394, P74608, P74621	\$11,400.00
182752	TORRANCE LOGISTICS COMPANY, LLC	203, 462, 3002	09/21/2023	DH	P66839, P74362	\$37,741.00
166440	WEST COAST ARBORIST	203, 13 CCR 2460	09/08/2023	EC	P73901, P75220, P75225	\$5,269.00
<b>Total Civil Settlements: \$248,575.50</b>						

<b>MSPAP</b>						
114854	AUTO SPA CONNECTION, INC.	203, 461	09/15/2023	CL	P75703	\$1,942.00
183567	GS II, INC.	3002	09/08/2023	CL	P73699	\$2,142.00
126222	JENAL ENGINEERING CORP	1166	09/15/2023	CL	P70199	\$937.00
190612	LA GLORY 661 INC	461	09/01/2023	CL	P77651	\$1,456.00
197779	LENNAR AT THE FARM	403	09/01/2023	CL	P76406	\$4,605.00
183723	LOS ANGELES ENGINEERING, INC	403	09/01/2023	CL	P63478	\$5,747.00
95067	MESA WATER DISTRICT	203	09/08/2023	CL	P73822	\$971.00
174480	PHENOMENEX, INC.	203	09/08/2023	VA	P78309	\$11,928.00
156312	ROSECRANS ENERGY	1118	09/01/2023	CL	P73266	\$3,845.00
178674	SOIL MIXING SERVICES, INC.	403, 1466	09/01/2023	CL	P73507	\$4,144.00
145795	SOUTHLAND DISPOSAL COMPANY	403	09/08/2023	VA	P74781	\$3,747.00
169250	UNIVERSAL SERVICE STATION INC	461	09/01/2023	CL	P72984	\$6,440.00
128898	VONS CO INC NO 2155	201, 203	09/15/2023	CL	P73162	\$1,842.00
101196	WARREN DUNCAN CONTRACTING	1166	09/06/2023	GV	P69159, P69162	\$1,961.00
23506	WEST LOS ANGELES COLLEGE	203, 461	09/01/2023	CL	P77801	\$2,302.00
<b>Total MSPAP Settlements: \$54,009.00</b>						

**SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX  
FOR SEPTEMBER 2023 PENALTY REPORT**

**REGULATION II - PERMITS**

- Rule 201 Permit to Construct
- Rule 203 Permit to Operate
- Rule 218.1 Continuous Emission Monitoring Performance Specifications
- Rule 221 Plans

**REGULATION IV - PROHIBITIONS**

- Rule 403 Fugitive Dust - Pertains to solid particulate matter emitted from man-made activities
- Rule 461 Gasoline Transfer and Dispensing
- Rule 462 Organic Liquid Loading
- Rule 463 Storage of Organic Liquids

**REGULATION XI - SOURCE SPECIFIC STANDARDS**

- Rule 1102 Petroleum Solvent Dry Cleaners
- Rule 1118 Emissions from Refinery Flares
- Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters
- Rule 1148.1 Oil and Gas Production Wells
- Rule 1148.2 Hydraulic Fracturing of Oil and Gas Wells
- Rule 1166 Volatile Organic Compound Emissions from Decontamination of Soil
- Rule 1173 Fugitive Emissions of Volatile Organic Compounds

**REGULATION XIV - TOXICS**

- Rule 1402 Control of Toxic Air Contaminants from Existing Sources
- 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 1466 Control of Particulate Emissions from Soils with Toxic Air Contaminants

**REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)**

- Rule 2004 Requirements
- Rule 2005 New Source Review for RECLAIM
- Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions
- Rule 2012 Appendix A  
Protocol for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions



**SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX  
FOR SEPTEMBER 2023 PENALTY REPORT**

**REGULATION XXX- TITLE V PERMITS**

Rule 3002 Requirements

**CALIFORNIA HEALTH AND SAFETY CODE**

41960.2 Gasoline Vapor Recovery

42402 Violation of Emission Limitations – Civil Penalty

42411 Annual increase in maximum penalties

**CALIFORNIA CODE OF REGULATIONS**

13 CCR 2460 Portable Equipment Testing Requirements

[↑ Back to Agenda](#)

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 18

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a hybrid meeting on Friday, October 20, 2023. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Carlos Rodriguez, Chair  
Technology Committee

AK:psc

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### **Committee Members**

Present: Supervisor Andrew Do  
Mayor Patricia Lock Dawson  
Councilmember Carlos Rodriguez, Committee Chair  
Supervisor Curt Hagman  
Mayor Larry McCallon  
Board Member Veronica Padilla-Campos

### **Call to Order**

Committee Chair Carlos Rodriguez 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. Execute Contract to Replace Existing Hydrogen Refueling Station at South Coast AQMD Headquarters**  
This item was pulled by staff.

## **2. Execute Contract for Regional Medium- and Heavy-Duty Zero Emission Vehicle Infrastructure Analysis**

The University of California, Riverside (UCR) was awarded \$400,000 from CEC to conduct a technical planning study for Southern California's and the California-Mexico Border ZEV infrastructure deployment. The CEC Medium-Duty and Heavy-Duty (MD/HD) blueprint project focuses on ZEV infrastructure deployment planning. Consistent with CEC's blueprint and to expand the scope of the study, UCR proposes to expand the scope of the existing planning efforts to include a Medium-Duty and Heavy-Duty ZEV infrastructure deployment criteria and benefits analysis for Southern California. This action is to execute a contract with UCR in an amount not to exceed \$150,000 from the Clean Fuels Program Fund (31).

Mayor McCallon inquired about the outcome of the proposed analysis. Maryam Hajbabaei, Program Supervisor/Technology Advancement Office responded that UCR would expand the study, perform a cost analysis, streamline the plan, and standardize the development of the infrastructure. Aaron Katzenstein, Deputy Executive Officer/Technology Advancement Office added that UCR would help to standardize installations, evaluate the cost, and use best practices to support future projects. Mayor McCallon inquired if people in the industry and those involved in the infrastructure installation would be involved in the process. Ms. Hajbabaei responded that there will be coordination between different entities and confirmed that this study includes hydrogen refueling and charging infrastructure planning.

Board Member Padilla-Campos inquired about the expansion of the scope of work of the project. Ms. Hajbabaei responded that UCR will streamline the ongoing work with several entities developing the blueprints for different regions of California and performing a cost analysis.

Mayor Lock Dawson inquired about the project timeline. Ms. Hajbabaei responded that when the project receives Board approval, the work can commence, and that the project duration is one to two years. Mayor Lock Dawson also asked if there will be a map of the strategic locations of the charging and refueling stations. Ms. Hajbabaei responded that UCR is equipped with an in-house model and will include a map in the final report.

Ranji George, public member, commented that funds for the project should be distributed equally between hydrogen refueling stations and charging infrastructure. He also noted the need to study the application of used batteries and battery recycling.

Councilmember Rodriguez inquired if part of the scope of work includes providing strategic infrastructure locations and studying applications of used batteries. Staff responded that the application of used batteries is not part of the scope of work and that the study's objective is to augment the existing studies for developing the

infrastructure blueprint plan. For additional details, please refer to the [Webcast](#) beginning at 7:00.

Moved by Lock Dawson; seconded by Padilla-Campos; unanimously approved.

Ayes: Do, Hagman, Lock Dawson, McCallon, Padilla-Campos, Rodriguez

Noes: None

Abstain: None

Absent: None

### **INFORMATIONAL ITEM:**

#### **3. Clean Fuels Program Draft 2024 Plan Update**

The Clean Fuels Plan Update is submitted every year with the Clean Fuels Annual Report as required by legislation. As part of that process, staff provides the Clean Fuels Program Draft Plan Update to the Technology Committee to solicit input on the proposed priority technology areas and potential projects for the upcoming year before requesting final Board approval for the Plan Update in early spring. Staff proposes continued support for a wide portfolio of technologies emphasizing zero emission technologies for vehicles, off-road equipment, and supporting infrastructure.

Mayor McCallon inquired about the fee collected from stationary sources which was approximately \$400,000 per year allocated to the Clean Fuel Fund Program. Aaron Katzenstein, Deputy Executive Officer/Technology Advancement Office, responded that staff will follow up on this inquiry.

Board Member Padilla-Campos expressed her gratitude to staff for proposing increased AQMD funding support for the Health Impacts Studies category in the 2024 Clean Fuels Fund Plan.

Mr. George expressed support for the 2024 Clean Fuels Fund Plan Update and requested that more funding be allocated to study battery recycling which will also have a major health impact. He also commented that health impacts studies should look at how environmentally friendly and/or damaging the battery waste recycling plants would be to the public residing in environmental justice areas and that pilot studies should be conducted to demonstrate how long batteries can be used in stationary applications after they have been used in mobile applications.

Mark Abramovitz, Community Environmental Services, expressed concern and questioned the proposed funding support for hydrogen internal combustion engine technologies.

Councilmember Rodriguez asked for additional comments or thoughts on the scope of the health impacts studies category and about the use and disposal of batteries used in the electrification of vehicles. Wayne Nastri, Executive Officer, responded that a health impacts study is best handled by another agency. Mr. Nastri commented that South Coast AQMD can advocate for effective and safe use and the development of policies and programs that make sure that the disposal and recycling aspects are adequately addressed. Councilmember Rodriguez responded that he would like to bring this topic back early next year to hear about the latest best practices recommended for the increasing number of electric batteries that will no longer be viable for use.

Mayor Lock Dawson commented that there are many battery recycling operations that are run by private sector in Korea and inquired about battery recycling companies in Southern California. Aaron Katzenstein, Deputy Executive Officer, Technology Advancement Office, responded that there are differences between lead-acid and lithium-ion batteries. Earlier this year, Argonne National Laboratory did a presentation to the Technology Committee on the recycling process of electric vehicle batteries. Councilmember Rodriguez and Mayor Lock Dawson requested to have one of those companies come to a Technology Committee meeting early next year to present on electric vehicle battery recycling. For additional details, please refer to the [Webcast](#) beginning at 22:25.

#### **OTHER MATTERS:**

##### **4. Other Business**

There was no other business to report.

##### **5. Public Comment Period**

Mr. George respectfully disagreed with Mr. Nastri's comment regarding battery recycling. He stated that Technology Advancement Office helped build the battery program and urged South Coast AQMD to look into the battery recycling program. For additional details, please refer to the [Webcast](#) beginning at 46:32.

##### **6. Next Meeting Date**

The next regular Technology Committee meeting is scheduled for Friday, November 17, 2023, at noon.

#### **Adjournment**

The meeting adjourned at 1:10 p.m.

#### **Attachment**

Attendance Record

**ATTACHMENT**

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
TECHNOLOGY COMMITTEE MEETING  
Attendance Record – October 20, 2023**

Councilmember Carlos Rodriguez..... South Coast AQMD Board Member  
Supervisor Andrew Do ..... South Coast AQMD Board Member  
Supervisor Curt Hagman ..... South Coast AQMD Board Member  
Mayor Patricia Lock Dawson ..... South Coast AQMD Board Member  
Mayor Larry McCallon ..... South Coast AQMD Board Member  
Board Member Veronica Padilla-Campos..... South Coast AQMD Board Member

Debra Mendelsohn ..... Board Consultant (McCallon)  
Mark Taylor ..... Board Consultant (Rodriguez)  
Chris Wangsaporn ..... Board Consultant (Do)

Mark Abramowitz ..... Community Environmental Services  
Ramine Cromartie ..... Public Member  
Harvey Eder ..... Public Solar Power Coalition  
Ranji George ..... Public Member  
Bethmarie Quiambao..... SCE

Derrick Alatorre ..... South Coast AQMD Staff  
Cindy Bustillos..... South Coast AQMD Staff  
Phillip Crabbe III..... South Coast AQMD Staff  
Scott Gallegos ..... South Coast AQMD Staff  
De Groeneveld ..... South Coast AQMD Staff  
Maryam Hajbabaei ..... South Coast AQMD Staff  
Sheri Hanizavareh ..... South Coast AQMD Staff  
Alex Han ..... South Coast AQMD Staff  
Gillian Kass..... South Coast AQMD Staff  
Aaron Katzenstein ..... South Coast AQMD Staff  
Angela Kim ..... South Coast AQMD Staff  
Ruby Laity ..... South Coast AQMD Staff  
Howard Lee..... South Coast AQMD Staff  
Tom Lee ..... South Coast AQMD Staff  
Ron Moskowitz ..... South Coast AQMD Staff  
Susan Nakamura..... South Coast AQMD Staff  
Wayne Nastro..... South Coast AQMD Staff  
Vasileios Papapostolou..... South Coast AQMD Staff  
Penny Shaw Cedillo ..... South Coast AQMD Staff  
Walter Shen..... South Coast AQMD Staff  
Paul Wright..... South Coast AQMD Staff

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 19

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: The Mobile Source Air Pollution Reduction Review Committee held a hybrid meeting on Thursday, October 19, 2023. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Curt Hagman  
South Coast AQMD Representative  
to MSRC

AK:CR:me

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#### Exercise Option Clause of Technical Advisor's Contract

Following an open RFP process in 2021 to solicit Technical Advisor services to assist in the planning and implementation of the MSRC's Work Program, the MSRC selected Raymond Gorski. The contract was for \$385,700 for an initial two-year period and included an option clause for a two-year term extension. The option clause provided for a not-to-exceed contract amount of \$385,700. The MSRC evaluated Mr. Gorski's performance and approved exercising the option, extending the contract term to December 31, 2025 and increasing the contract value by \$385,700. Funding specifics for the option period are to be as follows:

- a. \$24,106 of the contract value increase to be allocated to the MSRC's FY 2023-24 Administrative Budget; and
- b. The remainder of the contract value increase (\$361,594) to be divided between the FYs 2021-24 (\$90,398) and subsequent Work Program(s) (\$271,195).

#### Advanced Technology Demonstration and Pilot Projects

CARB has released a solicitation seeking qualified bidders to implement and administer advanced technology projects in a variety of categories. South Coast AQMD and its project partners, which include San Joaquin Valley Air Pollution Control District,

Sacramento Metropolitan Air Quality Management District, San Diego County Air Pollution Control District, the Cities of Riverside, Los Angeles, Sacramento, and Clovis, as well as participating drayage fleets, are preparing proposals to deploy battery electric trucks, shuttle buses, fire trucks, construction equipment and supporting infrastructure in response to the Port/Drayage Vehicles and Municipal Green Zone categories of this solicitation. The project will demonstrate large-scale deployment, promote workforce training and development, engage communities through substantial outreach, and include data collection and analysis. The MSRC considered this partnership opportunity and approved an allocation of up to \$3,000,000 to augment the partners' contributions as an element of the FYs 2021-24 Work Program. If CARB does not select these proposals, the allocation would revert to the unallocated AB 2766 Discretionary Fund balance.

### **Contract Modification Requests**

The MSRC considered four contract modification requests and took the following actions:

1. City of Long Beach, Contract #ML18055 to install 50 Level II EV charging stations, approval of increased scope from 50 to 74 charging stations and a two-year no-cost term extension;
2. City of Torrance, Contract #ML18069 to purchase 4 heavy-duty near-zero emission vehicles and install EV charging infrastructure, approval of increased scope from six to 19 charging stations and 17-month no-cost term extension;
3. City of Los Angeles, Contract #ML18145 to purchase 11 heavy-duty zero emission vehicles and provide 100 ZEV taxi rebates, approval of 9-month term extension; and
4. City of Eastvale, Contract #MS18064 to purchase 2 light-duty and 1 medium-duty zero-emission vehicles and install EV charging infrastructure, approval of a 1-year term extension.

### **Contracts Administrator's Report**

The MSRC AB 2766 Contracts Administrator's report provides a written status report on all open contracts from FY 2011-12 to the present. The Contracts Administrator's Report for July 27 through September 27, 2023 is attached (*Attachment 1*).

### **Attachment**

July 27 through September 27, 2023 Contracts Administrator's Report



MSRC Agenda Item No. 3

**DATE:** October 19, 2023

**FROM:** Cynthia Ravenstein

**SUBJECT:** AB 2766 Contracts Administrator's Report

**SYNOPSIS:** This report covers key issues addressed by MSRC staff, status of open contracts, and administrative scope changes from July 27 to September 27, 2023.

**RECOMMENDATION:** Receive and file report

**WORK PROGRAM IMPACT:** None

**Contract Execution Status**

**2021-24 Work Program**

On September 2, 2022, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This contract is executed.

On February 3, 2023, the SCAQMD Governing Board approved an award under the Transformative Transportation Strategies & Mobility Solutions Program. This contract is with the prospective contractor for signature.

On June 2, 2023, the SCAQMD Governing Board approved six awards under the Microtransit Service RFP, for zero-emission shared mobility service. These contracts are under development or under internal review.

On September 1, 2023, the SCAQMD Governing Board approved two awards under the Publicly Accessible Goods Movement Zero Emission Infrastructure Request for Information. One of these contracts will be administered by SCAQMD on behalf of the MSRC, and the other award is conditional upon successful selection of a site developer and operator and securing co-funding commitments.

**Work Program Status**

Contract Status Reports for Work Program years with open and/or pending contracts are attached.

**FY 2011-12 Work Program Contracts**

2 contracts are in "Open/Complete" status, having completed all obligations except operations. One contract closed during this period: City of West Covina, Contract #ML12018 – Expansion of Existing CNG Station.

*FY 2011-12 Invoices Paid*

No invoices were paid during this period.

***FYs 2012-14 Work Program Contracts***

5 contracts from this Work Program year are open, and 9 are in “Open/Complete” status. 2 contracts closed during this period: Fullerton Joint Union High School District, Contract #MS14075 – Expansion of Existing CNG Infrastructure/Mechanic Training; and Hacienda La Puente Unified School District, Contract #MS14083 – New Limited Access CNG Station.

*FYs 2012-14 Invoices Paid*

No invoices were paid during this period.

***FYs 2014-16 Work Program Contracts***

14 contracts from this Work Program year are open, and 10 are in “Open/Complete” status. 4 contracts closed during this period: City of Cathedral City, Contract #ML16006 – Bicycle Outreach; City of Beverly Hills, Contract #ML16070 – Purchase 3 Heavy-duty Natural Gas Vehicles; Omnitrans, Contract #MS16117 – Expansion of CNG Infrastructure in San Bernardino; and Omnitrans, Contract #MS16118 – Expansion of CNG Infrastructure in Montclair.

*FYs 2014-16 Invoices Paid*

One invoice in the amount of \$196,967.55 was paid during this period.

***FYs 2016-18 Work Program Contracts***

52 contracts from this Work Program year are open, and 55 are in “Open/Complete” status. 3 contracts passed into “Open/Complete” status during this period: City of Glendale, Contract #ML18059 – Install EV Charging Infrastructure; City of Fontana, Contract #ML18144 – Install EV Charging Infrastructure; and Mountain View Unified School District, Contract #MS18110 – Install New Limited-Access CNG Infrastructure. 2 contracts closed during this period: City of La Quinta, Contract #ML18142 – Install EV Charging Infrastructure; and Riverside County Transportation Commission, Contract #MS18023 – Weekend Freeway Service Patrols.

*FYs 2016-18 Invoices Paid*

One invoice in the amount of \$196,967.55 was paid during this period.

***FYs 2018-21 Work Program Contracts***

15 contracts from this Work Program year are open. One contract closed during this period: Los Angeles County MTA, Contract #MS20114 – Clean Fuel Bus Service to Dodger Stadium.

*FYs 2018-21 Invoices Paid*

6 invoices totaling \$1,448,311.05 were paid during this period.

***FYs 2021-24 Work Program Contracts***

One contract from this Work Program year is open.

*FYs 2021-24 Invoices Paid*

No invoices were paid on MSRC contracts during this period. However, payment of \$2,796,390 in MSRC funds was authorized under the MSRC/SCAQMD Zero Emission Drayage Truck and Infrastructure Pilot Project Partnership.

***Administrative Scope Changes***

One administrative scope change was initiated during the period from July 27 to September 27, 2023:

- City of Los Angeles, Contract #ML18134 (Purchase 5 Zero Emission Medium-Duty Vehicles) – Reduce scope from 5 vehicles to 2, reduce value from \$290,000 to \$116,000, and one-year term extension

**Attachments**

- FY 2011-12 through FYs 2021-24 Contract Status Reports



## AB2766 Discretionary Fund Program Invoices

July 27 to September 27, 2023

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
<i>2012-2014 Work Program</i>							
9/8/2023	9/14/2023	9/21/2023		MS14059	Riverside County Transportation Commission	03477	\$310,375.00
<b>Total: \$310,375.00</b>							
<i>2016-2018 Work Program</i>							
9/27/2023				MS18024	Riverside County Transportation Commission	03476	\$22,552.00
9/27/2023				MS18024	Riverside County Transportation Commission	03437	\$6,114.00
9/14/2023	9/14/2023	9/21/2023		MS18015	Southern California Association of Governments	S18015-02-C	\$196,967.55
<b>Total: \$225,633.55</b>							
<i>2018-2021 Work Program</i>							
9/27/2023				C22177	Daimler Truck North America, LLC	1422123989	\$2,796,390.00
9/8/2023	9/14/2023	9/21/2023		MS21002	Better World Group Advisors	WG-MSRC4	\$4,154.70
8/31/2023	9/7/2023	9/14/2023		MS21006	Geographics	23-23370	\$373.00
9/6/2023	9/7/2023			MS21018	Pac Anchor Transportation, Inc.	258268-A	\$1,440,000.00
8/25/2023	9/7/2023	9/14/2023		MS21002	Better World Group Advisors	WG-MSRC3	\$3,325.85
8/8/2023				MS21006	Geographics	23-23339	\$84.50
8/8/2023				MS21006	Geographics	23-23338	\$373.00
<b>Total: \$4,244,701.05</b>							
<b>Total This Period: \$4,780,709.60</b>							



## FYs 2011-12 Through 2021-24 AB2766 Contract Status Report

9/28/2023

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b><i>FY 2011-2012 Contracts</i></b>									
<b><i>Declined/Cancelled Contracts</i></b>									
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-Access 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
<b>Total: 13</b>									
<b><i>Closed Contracts</i></b>									
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 - Public Works Ag	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
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
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
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
MS12001	Los Angeles County MTA	7/1/2012	4/30/2013		\$300,000.00	\$211,170.00	Clean Fuel Transit Service to Dodger Stadium	\$88,830.00	Yes
MS12002	Orange County Transportation 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 Stadium	\$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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS12064	Anaheim Transportation Network	3/26/2013	12/31/2014		\$127,296.00	\$56,443.92	Implement Anaheim Circulator Service	\$70,852.08	Yes
MS12065	Orange County Transportation Autho	7/27/2013	11/30/2013		\$43,933.00	\$14,832.93	Ducks Express Service to Honda Center	\$29,100.07	Yes
MS12068	Southern California Regional Rail Aut	3/1/2013	9/30/2013		\$57,363.00	\$47,587.10	Implement Metrolink Service to Autoclub Sp	\$9,775.90	Yes
MS12069	City of Irvine	8/11/2013	2/28/2014		\$45,000.00	\$26,649.41	Implement Special Transit Service to Solar	\$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
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
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: 73**

**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**

ML12045	City of Baldwin Park DPW	2/14/2014	12/13/2020	12/13/2026	\$400,000.00	\$400,000.00	Install New CNG Station	\$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: 2**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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### **FY 2012-2014 Contracts**

#### **Open Contracts**

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	8/1/2028	\$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	7/4/2023	\$1,250,000.00	\$1,209,969.08	Implement Various Signal Synchronization P	\$40,030.92	No
MS14072	San Bernardino County Transportatio	3/27/2015	3/26/2018	3/26/2024	\$1,237,500.00	\$1,148,376.17	Implement Various Signal Synchronization P	\$89,123.83	No

**Total: 5**

#### **Declined/Cancelled Contracts**

ML14063	City of Hawthorne				\$32,000.00	\$0.00	Expansion of Existing 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
ML14012	City of Santa Ana - Public Works Ag	2/13/2015	10/12/2021	10/12/2022	\$41,220.00	\$41,220.00	EV Charging and 1 H.D. CNG Vehicle	\$0.00	Yes
ML14014	City of Torrance	9/5/2014	12/4/2019		\$56,000.00	\$56,000.00	EV Charging Infrastructure	\$0.00	Yes
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
ML14019	City of Corona Public Works	12/5/2014	6/4/2020	3/6/2023	\$111,518.00	\$111,517.18	EV Charging, Bicycle Racks, Bicycle Locker	\$0.82	Yes
ML14022	County of Los Angeles Department o	10/2/2015	5/1/2022		\$270,000.00	\$270,000.00	Purchase 9 H.D. Nat. Gas Vehicles	\$0.00	Yes
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 Existing 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



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML14032	City of Rancho Cucamonga	1/9/2015	1/8/2022		\$113,990.00	\$104,350.63	Expansion of Existing CNG Infrac., Bicycle L	\$9,639.37	Yes
ML14033	City of Irvine	7/11/2014	2/10/2021	2/10/2022	\$60,000.00	\$60,000.00	Purchase 2 H.D. CNG Vehicles	\$0.00	Yes
ML14034	City of Lake Elsinore	9/5/2014	5/4/2021		\$56,700.00	\$56,700.00	EV Charging Stations	\$0.00	Yes
ML14049	City of Moreno Valley	7/11/2014	3/10/2021		\$105,000.00	\$101,976.09	One HD Nat Gas Vehicle, EV Charging, Bicy	\$3,023.91	Yes
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
MS14076	Rialto Unified School District	6/17/2015	2/16/2022	6/25/2023	\$225,000.00	\$225,000.00	New Public Access CNG Station	\$0.00	Yes
MS14077	County Sanitation Districts of L.A. Co	3/6/2015	5/5/2021		\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	Yes
MS14080	CR&R Incorporated	6/1/2015	8/31/2021	8/31/2022	\$200,000.00	\$200,000.00	Expansion of Existing CNG Infrastructure/Ma	\$0.00	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
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
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: 65**

#### 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
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
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
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

**Total: 9**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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### **FY 2014-2016 Contracts**

#### **Open Contracts**

ML16017	City of Long Beach	2/5/2016	8/4/2023	5/4/2029	\$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	6/4/2028	\$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	2/21/2025	\$130,000.00	\$0.00	Expand Existing CNG Infrastructure	\$130,000.00	No
ML16039	City of Torrance Transit Department	1/6/2017	9/5/2022	3/27/2026	\$32,000.00	\$0.00	Install Eight Level II EV Chargers	\$32,000.00	No
ML16040	City of Eastvale	1/6/2017	7/5/2022	11/5/2026	\$66,409.00	\$53,908.85	Install EV Charging Infrastructure	\$12,500.15	Yes
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
ML16057	City of Yucaipa	4/27/2016	1/26/2019	1/26/2024	\$380,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$380,000.00	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	\$218,708.00	Pedestrian Access Improvements, Bicycle L	\$244,508.00	No
MS16094	Riverside County Transportation Co	1/25/2017	1/24/2022	2/24/2024	\$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	10/5/2026	\$270,000.00	\$71,250.00	Expansion of Existing CNG Station and Main	\$198,750.00	No
MS16120	Omnitrans	4/7/2017	5/6/2025		\$945,000.00	\$870,000.00	Repower 63 Existing Buses	\$75,000.00	No
MS16121	Long Beach Transit	11/3/2017	4/2/2024	11/30/2028	\$600,000.00	\$570,000.00	Repower 39 and Purchase 1 New Transit Bu	\$30,000.00	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: 14**

#### **Declined/Cancelled Contracts**

ML16014	City of Dana Point				\$153,818.00	\$0.00	Extend an Existing Class 1 Bikeway	\$153,818.00	No
ML16065	City of Temple City				\$500,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$500,000.00	No
ML16067	City of South El Monte				\$73,329.00	\$0.00	Implement an "Open Streets" Event	\$73,329.00	No
ML16074	City of La Verne	7/22/2016	1/21/2023		\$365,000.00	\$0.00	Install CNG Fueling Station	\$365,000.00	No
MS16043	LBA Realty Company LLC				\$100,000.00	\$0.00	Install Limited-Access CNG Station	\$100,000.00	No
MS16080	Riverside County Transportation Co				\$1,200,000.00	\$0.00	Passenger Rail Service for Coachella and St	\$1,200,000.00	No
MS16098	Long Beach Transit				\$198,957.00	\$0.00	Provide Special Bus Service to Stub Hub Ce	\$198,957.00	No
MS16104	City of Perris				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16106	City of Lawndale	3/1/2019	11/30/2025		\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16107	Athens Services				\$100,000.00	\$0.00	Construct a Limited-Access CNG Station	\$100,000.00	No
MS16108	VNG 5703 Gage Avenue, LLC				\$150,000.00	\$0.00	Construct Public-Access CNG Station in Bell	\$150,000.00	No
MS16109	Sanitation Districts of Los Angeles C				\$275,000.00	\$0.00	Expansion of an Existing L/CNG Station	\$275,000.00	No
MS16111	VNG 925 Lakeview Avenue, LLC				\$150,000.00	\$0.00	Construct Public Access CNG Station in Pla	\$150,000.00	No

**Total: 13**

#### **Closed Contracts**

ML16006	City of Cathedral City	4/27/2016	4/26/2022	4/26/2023	\$25,000.00	\$25,000.00	Bicycle Outreach	\$0.00	Yes
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16011	City of Claremont	10/6/2015	6/5/2022		\$90,000.00	\$90,000.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	\$0.00	Yes
ML16012	City of Carson	1/15/2016	10/14/2022		\$60,000.00	\$60,000.00	Purchase 2 Heavy-Duty Nat. Gas Vehicles	\$0.00	Yes
ML16015	City of Yorba Linda	3/4/2016	11/3/2017		\$85,000.00	\$85,000.00	Install Bicycle Lanes	\$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
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
ML16020	City of Pomona	4/1/2016	2/1/2018	8/1/2018	\$440,000.00	\$440,000.00	Install Road Surface Bicycle Detection System	\$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
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
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
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
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
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
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
ML16071	City of Highland	5/5/2017	1/4/2020	1/4/2023	\$264,500.00	\$264,500.00	Implement a "Complete Streets" Pedestrian	\$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
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
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	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
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
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
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
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
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
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
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS16119	Omnitrans	4/21/2017	8/20/2022		\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
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
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: 81**

#### 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

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
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
ML16021	City of Santa Clarita	10/7/2016	6/6/2024		\$49,400.00	\$49,399.00	Install EV Charging Infrastructure	\$1.00	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
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
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

**Total: 10**

#### Terminated Contracts

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	Yes
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	Yes

**Total: 2**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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## FY 2016-2018 Contracts

### Open Contracts

ML18031	City of Diamond Bar	9/7/2018	11/6/2025	11/6/2027	\$58,930.00	\$38,930.00	Install EVSE, Purchase up to 2-LD Vehicles	\$20,000.00	No
ML18036	City of Indian Wells	8/8/2018	5/7/2023	5/7/2026	\$50,000.00	\$50,000.00	Install EV Charging Stations	\$0.00	No
ML18046	City of Santa Ana - Public Works Ag	11/9/2018	7/8/2026		\$385,000.00	\$285,000.00	Purchase 6 Light-Duty ZEVs, 9 Heavy-Duty	\$100,000.00	No
ML18047	City of Whittier	8/8/2018	4/7/2026	1/7/2029	\$113,910.00	\$68,346.00	Purchase 5 Heavy-Duty Near-Zero Emission	\$45,564.00	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	4/30/2027	\$91,500.00	\$72,500.00	Purchase 6 Light-Duty ZEVs, Install 3 Limite	\$19,000.00	No
ML18055	City of Long Beach	11/29/2018	11/28/2026		\$622,220.00	\$302,401.53	Install EV Charging Stations	\$319,818.47	No
ML18057	City of Carson	10/5/2018	7/4/2023	12/15/2026	\$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	11/11/2028	\$94,624.00	\$0.00	Purchase 1 Medium-Duty ZEV and EV Char	\$94,624.00	No
ML18060	County of Los Angeles Internal Servi	10/5/2018	8/4/2026	8/4/2028	\$1,367,610.00	\$724,868.96	Purchase 29 Light-Duty Zero Emission Vehi	\$642,741.04	No
ML18063	City of Riverside	6/7/2019	1/6/2027	3/6/2028	\$50,000.00	\$0.00	Expand Existing CNG Station	\$50,000.00	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	6/6/2026	\$83,500.00	\$0.00	Install EVSE	\$83,500.00	No
ML18068	City of Mission Viejo	7/31/2019	6/30/2027		\$86,940.00	\$10,000.00	Purchase 2 Light-Duty ZEVs & Install EVSE	\$76,940.00	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
ML18082	City of Los Angeles Bureau of Sanita	8/30/2019	8/29/2028	8/29/2029	\$900,000.00	\$0.00	Purchase Medium-Duty Vehicles and EV Ch	\$900,000.00	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	10/18/2028	\$50,760.00	\$0.00	Purchase a Heavy-Duty ZEV	\$50,760.00	No
ML18091	City of Temecula	1/19/2019	7/18/2023	3/18/2026	\$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	10/31/2028	\$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	10/11/2026	\$50,000.00	\$0.00	Install Two EV Charging Stations	\$50,000.00	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	9/13/2027	\$63,097.00	\$0.00	Install Six EV Charging Stations	\$63,097.00	No
ML18132	City of Montclair	4/5/2019	9/4/2023	9/4/2026	\$40,000.00	\$0.00	Install Eight EVSEs	\$40,000.00	No
ML18134	City of Los Angeles Dept of General	5/3/2019	5/2/2028		\$290,000.00	\$0.00	Purchase Five Medium-Duty ZEVs	\$290,000.00	No
ML18135	City of Azusa	12/6/2019	12/5/2029		\$55,000.00	\$0.00	Purchase Three Light-Duty ZEVs and One H	\$55,000.00	No
ML18141	City of Rolling Hills Estates	2/14/2020	1/13/2024	4/13/2026	\$40,000.00	\$10,000.00	Purchase One Light-Duty ZEV and Install Tw	\$30,000.00	No
ML18145	City of Los Angeles Dept of Transpor	1/10/2020	4/9/2027	4/9/2028	\$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	11/30/2026	\$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	5/20/2024	\$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	\$150,000.00	Purchase Eight Heavy-Duty Near Zero Emis	\$50,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18152	County of San Bernardino Flood Con	8/11/2020	10/10/2029		\$108,990.00	\$75,000.00	Purchase Five Heavy-Duty Near Zero Emissi	\$33,990.00	No
ML18159	City of Rialto	12/13/2019	5/12/2024	9/19/2025	\$135,980.00	\$106,597.86	Purchase Nine Light-Duty ZEVs and EV Cha	\$29,382.14	No
ML18163	City of San Clemente	3/8/2019	12/7/2024	12/7/2025	\$75,000.00	\$70,533.75	Purchase Three Light-Duty ZEVs and EV Ch	\$4,466.25	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
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	11/30/2028	\$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	11/30/2023	\$2,000,000.00	\$612,771.52	Southern California Future Communities Par	\$1,387,228.48	No
MS18024	Riverside County Transportation Co	6/28/2018	8/27/2021	8/31/2024	\$1,500,000.00	\$930,926.00	Vanpool Incentive Program	\$569,074.00	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	1/7/2029	\$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	3/28/2024	\$2,000,000.00	\$2,000,000.00	Implement Metrolink Line Fare Discount Pro	\$0.00	Yes
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	Yes
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	9/30/2026	\$111,750.00	\$111,750.00	Expansion of Existing Infrastructure	\$0.00	Yes
MS18180	Omnitrans	8/4/2022	8/3/2023		\$83,000.00	\$0.00	Modify Vehicle Maintenance Facility and Trai	\$83,000.00	No
MS18181	San Bernardino County Transportatio	4/10/2023	9/9/2030		\$1,662,000.00	\$0.00	Construct Hydrogen Fueling Station	\$1,662,000.00	No
MS18182	Air Products and Chemicals Inc.	3/8/2023	2/7/2031		\$1,000,000.00	\$0.00	Install Publicly Accessible Hydrogen Fueling	\$1,000,000.00	No
MS18183	Nikola-TA HRS 1, LLC	9/28/2022	1/27/2030		\$1,660,000.00	\$0.00	Install Publicly Accessible Hydrogen Fueling	\$1,660,000.00	No

**Total: 52**

#### Pending Execution Contracts

ML18185	City of Wildomar				\$25,000.00	\$0.00	Install Bicycle Trail	\$25,000.00	No
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**Total: 1**

#### 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
ML18053	City of Paramount	9/7/2018	3/6/2023		\$64,675.00	\$0.00	Install EV Charging Infrastructure	\$64,675.00	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
ML18165	City of Baldwin Park	2/1/2019	1/30/2024		\$49,030.00	\$0.00	Expand CNG Station	\$49,030.00	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 Near-Zero Emiss	\$25,000.00	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



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
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
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
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
MS18184	Clean Energy				\$1,000,000.00	\$0.00	Install Publicly Accessible Hydrogen Fueling	\$1,000,000.00	No

**Total: 27**

**Closed Contracts**

ML18019	City of Hidden Hills	5/3/2018	5/2/2022	5/2/2023	\$49,999.00	\$49,999.00	Purchase Two Light-Duty ZEVs and EVSE	\$0.00	Yes
ML18021	City of Signal Hill	4/6/2018	1/5/2022		\$49,661.00	\$46,079.31	Install EV Charging 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
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
ML18040	City of Agoura Hills	7/13/2018	6/12/2022		\$17,914.00	\$17,914.00	Install EV Charging Infrastructure	\$0.00	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
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
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
ML18077	City of Orange	11/2/2018	10/1/2022		\$59,776.00	\$59,776.00	Four Light-Duty ZEV and EV Charging Infr	\$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
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
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
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		\$32,589.00	\$32,588.07	Install Four EVSEs and Install Bicycle Racks	\$0.93	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
ML18142	City of La Quinta	4/24/2019	2/23/2023	8/23/2023	\$51,780.00	\$51,780.00	Install Two EV Charging Stations	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18160	City of Irwindale	3/29/2019	12/28/2022		\$14,263.00	\$14,263.00	Purchase Two Light-Duty ZEVs	\$0.00	Yes
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
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
MS18023	Riverside County Transportation Co	6/28/2018	6/27/2021	3/31/2023	\$500,000.00	\$500,000.00	Weekend Freeway Service Patrols	\$0.00	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: 42**

**Closed/Incomplete Contracts**

ML18083	City of San Fernando	11/2/2018	11/1/2022		\$20,000.00	\$0.00	Implement Traffic Signal Synchronization	\$20,000.00	No
ML18133	City of Rancho Mirage	12/7/2018	11/6/2020		\$50,000.00	\$0.00	Traffic Signal Synchronization	\$50,000.00	No
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
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
MS18026	Omnitrans	10/5/2018	1/4/2020		\$83,000.00	\$0.00	Modify Vehicle Maintenance Facility and Trai	\$83,000.00	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

**Total: 7**

**Open/Complete Contracts**

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
ML18030	City of Grand Terrace	6/28/2018	3/27/2022	3/27/2025	\$45,000.00	\$45,000.00	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
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
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
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
ML18056	City of Chino	3/29/2019	9/28/2023		\$103,868.00	\$103,868.00	Install EV Charging Infrastructure	\$0.00	Yes
ML18059	City of Glendale Water & Power	2/1/2019	7/31/2026	1/31/2028	\$260,500.00	\$232,315.70	Install Electric Vehicle Charging Infrastructur	\$28,184.30	No
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
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
ML18079	City of Pasadena	12/7/2018	11/6/2023		\$183,670.00	\$183,670.00	EV Charging Infrastructure	\$0.00	Yes
ML18080	City of Santa Monica	1/10/2019	12/9/2023	9/9/2025	\$44,289.00	\$44,288.92	Install EV Charging Stations	\$0.08	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
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
ML18099	City of Laguna Hills	3/1/2019	5/31/2023	9/30/2024	\$32,250.00	\$32,250.00	Install EV Charging Stations	\$0.00	Yes
ML18100	City of Brea	10/29/2020	12/28/2024	12/31/2025	\$56,500.00	\$56,500.00	Install Twenty-Four Level II EV Charging Sta	\$0.00	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
ML18136	City of Orange	4/12/2019	8/11/2024		\$40,000.00	\$40,000.00	Purchase Four Light-Duty Zero Emission Ve	\$0.00	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
ML18144	City of Fontana Public Works	10/4/2019	12/3/2023	12/31/2025	\$269,090.00	\$269,090.00	Install Twelve EVSEs	\$0.00	No
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
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
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
ML18169	City of Alhambra	6/14/2019	8/13/2024		\$111,980.00	\$111,980.00	Install EV Charging Infrastructure	\$0.00	Yes
ML18170	City of Laguna Niguel	1/10/2020	8/9/2028		\$75,100.00	\$75,100.00	Purchase One Light-Duty ZEV and EV Char	\$0.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
MS18110	Mountain View Unified School Distric	2/1/2019	3/31/2025		\$275,000.00	\$61,747.29	Install New Limited-Access CNG Infrastructu	\$213,252.71	No
MS18115	City of Commerce	6/7/2019	12/6/2025	7/6/2026	\$275,000.00	\$275,000.00	Expansion of Existing L/CNG Infrastructure	\$0.00	No
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
MS18122	Universal Waste Systems, Inc.	2/1/2019	3/31/2025	7/31/2027	\$195,000.00	\$195,000.00	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: 55**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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### FY 2018-2021 Contracts

#### Open Contracts

MS21002	Better World Group Advisors	11/1/2019	12/31/2022	12/31/2024	\$448,154.00	\$191,801.10	Programmatic Outreach Services	\$256,352.90	No
MS21005	Southern California Association of G	5/5/2021	1/31/2024	7/31/2025	\$16,751,000.00	\$53,504.51	Implement Last Mile Goods Movement Progr	\$16,697,495.49	No
MS21006	Geographics	4/1/2021	6/20/2023	6/20/2025	\$20,152.00	\$10,487.25	Hosting & Maintenance of the MSRC Websit	\$9,664.75	No
MS21007	Penske Truck Leasing Co., L.P.	4/1/2022	3/31/2028		\$1,000,000.00	\$957,812.40	Deploy 5 Zero-Emission Yard Tractors	\$42,187.60	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
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	8/30/2028	\$300,000.00	\$270,000.00	Deploy up to 3 Near Zero Emission Trucks	\$30,000.00	No
MS21015	Premium Transportation Services, In	9/22/2021	5/21/2027		\$1,500,000.00	\$1,334,758.50	Deploy up to 15 Near-Zero Emissions Truck	\$165,241.50	No
MS21016	Ryder Integrated Logistics, Inc.	12/7/2022	4/6/2029		\$3,169,746.00	\$0.00	Procure Two Integrated Power Centers and	\$3,169,746.00	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	8/16/2028	\$2,300,000.00	\$1,440,000.00	Deploy up to 23 Near Zero Emission Trucks	\$860,000.00	No
MS21019	Volvo Financial Services	3/31/2022	3/30/2030		\$3,930,270.00	\$1,095,869.15	Lease up to 14 Zero-Emission Trucks and Pr	\$2,834,400.85	No
MS21023	BNSF Railway Company	4/22/2022	4/21/2028	4/21/2029	\$1,313,100.00	\$0.00	Install EV Charging Infrastructure	\$1,313,100.00	No
MS21025	Costco Wholesale	12/9/2022	12/8/2028		\$160,000.00	\$0.00	Install Five EV Charging Units	\$160,000.00	No

**Total: 15**

#### 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
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
MS21012	Amazon Logistics, Inc.				\$4,157,710.00	\$0.00	Deploy up to 10 Zero-Emission and 100 Nea	\$4,157,710.00	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: 6**

#### Closed Contracts

MS21001	Los Angeles County MTA	8/30/2019	7/29/2020		\$613,752.87	\$613,752.87	Implement Special Transit Service to Dodger	\$0.00	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
MS21004	Los Angeles County MTA	1/7/2021	5/31/2023		\$814,822.00	\$326,899.00	Clean Fuel Bus Service to Dodger Stadium	\$487,923.00	Yes

**Total: 3**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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***FY 2021-2024 Contracts***

***Open Contracts***

MS24001	Los Angeles County MTA	1/26/2023	5/31/2028		\$1,200,248.00	\$0.00	Provide Clean Fuel Bus Service to Dodger S	\$1,200,248.00	No
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**Total: 1**

***Pending Execution Contracts***

MS24002	South Pasadena Police Department				\$499,789.00	\$0.00	Procure Zero-Emission Vehicles and Infrastr	\$499,789.00	No
MS24003	Omnitrans				\$315,278.00	\$0.00	Bloomington Microtransit Service Expansion	\$315,278.00	No
MS24004	City of Seal Beach				\$162,891.00	\$0.00	Circuit Transit Shared Mobility	\$162,891.00	No
MS24005	City of Huntington Beach				\$279,186.00	\$0.00	Circuit Transit Rideshare Program	\$279,186.00	No
MS24006	Anaheim Transportation Network				\$322,000.00	\$0.00	Old Towne Orange Microtransit Service	\$322,000.00	No
MS24007	City of Gardena				\$475,312.00	\$0.00	Gtrans Microtransit Service	\$475,312.00	No
MS24008	City of Long Beach				\$410,312.00	\$0.00	Circuit Transit Mobility Transit Expansion Pr	\$410,312.00	No

**Total: 7**

[↑ Back to Agenda](#)

BOARD MEETING DATE: November 3, 2023

AGENDA NO. 20

REPORT: California Air Resources Board Monthly Meeting

SYNOPSIS: The October Board meetings of the California Air Resources Board were held on October 20 and October 26, 2023. The following is a summary of the meetings.

RECOMMENDED ACTION:  
Receive and file.

Gideon Kracov, Member  
South Coast AQMD Governing Board

ft

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The October Board meetings of the California Air Resources Board (CARB or Board) were held on October 20, 2023 and October 26, 2023 in Sacramento, California at the California Environmental Protection Agency Headquarters Building. Key items presented are summarized below.

### **October 20, 2023**

#### **DISCUSSION ITEM**

#### **EO-23-1-1: Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation**

In Resolution 23-15, the Board delegated to the Executive Officer the authority to adopt, amend, and revoke emission standards, test procedures, compliance test procedures, and compliance flexibilities for new on-road motor vehicles. Using this authority, the Executive Officer adopted amendments to the legacy engine provisions and other minor revisions to the Heavy-Duty Engine and Vehicle Omnibus (Omnibus) regulation. The amendments will provide additional compliance flexibility while maintaining the emissions benefits of the program.

October 26, 2023

**DISCUSSION ITEMS**

**23-9-1: Public Meeting to Consider the Sacramento Region Ozone State Implementation Plan**

The Board adopted the 2023 Sacramento Region Ozone State Implementation Plan (Plan). To demonstrate attainment of the 0.070 part per million 8-hour ozone standard, the California Air Resources Board included a state commitment for emission reductions by 2032. The adopted Plan will be submitted to the U.S. Environmental Protection Agency for inclusion in the California State Implementation Plan.

**23-9-2: Public Meeting to Consider the California Smog Check Contingency Measure for the State Implementation Plan**

The Board adopted the California Smog Check Contingency Measure. The Clean Air Act establishes planning requirements for states that exceed the national ambient air quality standards. The requirements include developing contingency measures to be undertaken if the area fails to make reasonable further progress, or to attain the national ambient air quality standard by their attainment deadline. If a nonattainment area in California fails to meet attainment or make reasonable further progress, the California Smog Check Contingency Measure (Contingency Measure) will be triggered. If triggered, the Contingency Measure will remove the Smog Check exemption currently in place for 7- to 8-year-old vehicles, requiring those vehicles to now get inspections.

**23-9-3: Public Hearing to Consider Proposed Amendments to the Regulation for Small Containers of Automotive Refrigerant**

The Board adopted amendments to the Regulation for Small Containers of Automotive Refrigerant (Amendments). The Amendments remove the deposit and return program for small containers of automotive refrigerant and add requirements for the use of reclaimed refrigerant in future small containers. In 2025, manufacturers will be required to transition toward the use of recycled refrigerant, starting with 25% of their aggregate sales and moving toward 100% by 2027. The Amendments will decrease costs to consumers, achieve greenhouse gas emissions reductions, and incentivize the reclamation of refrigerant.



**23-9-4: Public Meeting to Consider the AB 617 Community Air Protection Program Statewide Strategy Update (Blueprint 2.0) and to Hear an Informational Update on the Community Air Protection Incentives Guidelines**

The Board adopted the first five-year update to the statewide strategy for the Community Air Protection Program. Since the Community Air Protection Program was launched in 2018, communities have implemented local actions to lower pollution that include replacing dirty diesel engines, installing zero-emission infrastructure, expanding the use of air filters in sensitive locations such as day cares and residences, and implementing land-use related projects such as truck rerouting studies and vegetative barrier projects. The updated strategy, known as Blueprint 2.0, adds three new tools to the program: the use of community air grants to support local emissions-reduction plans; flexibility in the use of incentives funds to meet community goals; and community-focused enforcement. Blueprint 2.0 both reinforces the commitment of the California Air Resources Board and air districts to reduce air pollution in the 19 communities currently in the program and creates new pathways to support the over 60 communities that have been consistently nominated for the program.

**South Cost AQMD Staff Comments/Testimony:** Dr. Cessa Heard-Johnson participated as a panelist and provided input to CARB Board Members in their consideration to approve the AB 617 Community Air Protection Program Statewide Strategy Update Blueprint 2.0. She addressed the Blueprint's value as a fundamental framework to uplift civil rights and the importance of acknowledging community expertise through the Diversity, Equity and Inclusion (DEI) lens. She recommended that metrics be established to measure program successes and the application of lessons learned. Further, Dr. Heard-Johnson urged CARB's Board to consider Blueprint 2.0 as a living document that elevates community engagement in the process of achieving emissions and exposure reduction goals.

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**Attachments**

CARB October 20, 2023 and October 26, 2023 Meeting Agendas

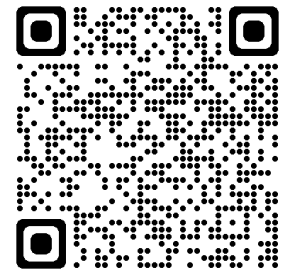
# Public Meeting Agenda

Friday, October 20, 2023 @ 10:00 a.m.

California Environmental Protection Agency  
1001 I Street, Sacramento, California 95814  
Coastal Hearing Room, 2nd Floor

*Webcast* (Livestream/Watch Only)  
Zoom Webinar [Register](#)

Phone Number: (669) 900-6833  
Webinar ID: 875 3554 5756



[arb.ca.gov/ma102023](http://arb.ca.gov/ma102023)

The October 20, 2023, California Air Resources Board (CARB) Executive Officer Hearing (Hearing) will be held at 1001 I Street in Sacramento, with remote participation available to the public. Due to limited seating capacity in the Coastal Hearing Room, remote participation is highly encouraged for members of the public. 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 Hearing 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

There will be a two-minute time limit on verbal comments; however, the amount of time could change at the Executive Officer's discretion.

In-person speakers signed up to comment will be called upon first, followed by public Zoom and phone participants wishing to comment.

The Executive Officer may close speaker sign-ups 30 minutes after the public comment portion of the item has begun.

Friday, October 20, 2023 @ 10:00 a.m.

## Discussion Item:

Hardcopies of the Public Agenda will be provided at the meeting; all other documents linked below will only be available upon request.

## EO-23-1-1: Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation

The Executive Officer will consider approving the proposed amendments to the legacy engine provisions and other minor revisions in the Omnibus regulation. This item is exempt from the California Environmental Quality Act.

- *Formal Rulemaking Page*
  - *Notice of Proposed Action*
  - *Staff Report*
  - *Public Hearing Notice*
- *Item Summary*
- *Meeting Presentation*
- *Submit Written Comments*
- *View Public Comments*

### 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 Hearing must be electronically submitted via email to the Clerks' Office at [cotb@arb.ca.gov](mailto:cotb@arb.ca.gov) no later than noon on the business day prior to the scheduled Hearing.

### If you have any questions, please contact the Clerks' Office:

1001 I Street, 23rd Floor, Sacramento, California 95814

[cotb@arb.ca.gov](mailto:cotb@arb.ca.gov) or (916) 322-5594

CARB Homepage: [www.arb.ca.gov](http://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](mailto:cotb@arb.ca.gov) or at (916) 322-5594 as soon as possible, but no later than 7 business days before the scheduled 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 alternativo 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 electrónico al [cotb@arb.ca.gov](mailto:cotb@arb.ca.gov) lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la reunión. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

# Public Meeting Agenda

**Thursday, October 26, 2023 @ 11:00 a.m.**

Zoom Webinar: [Register](#)  
Phone Number: (669) 900-6833  
Webinar ID: 836 0918 8358



[arb.ca.gov/ma102623](http://arb.ca.gov/ma102623)

## California Environmental Protection Agency

1001 I Street, Sacramento, California 95814

Byron Sher Auditorium, 2nd Floor

[Webcast](#) (Livestream/Watch Only)

The October 26, 2023, 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. 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](#)
- [Remote Public Participation](#)

The Board will set a two-minute time limit on verbal comments; however, the amount of time could change at the Chair's discretion.

In-person speakers signed up to comment will be called upon first, followed by public Zoom and phone participants wishing to comment.

The Chair may close speaker sign-ups 30 minutes after the public comment portion of an item has begun.

## Spanish interpretation will be available for the October 26, Board Meeting.

- [Agenda de la Reunión Pública](#)
- [Spanish Webcast](#)

**Thursday, October 26, 2023 @ 11:00 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.

### **23-9-1: Public Meeting to Consider the Sacramento Region Ozone State Implementation Plan**

The Board will consider adopting the 2023 Sacramento Region Ozone State Implementation Plan into the California State Implementation Plan, including a CARB emission reduction commitment. If adopted, the plan will be submitted to the U.S. Environmental Protection Agency for inclusion in the California State Implementation Plan.

- [\*More Information\*](#)
- [\*Public Meeting Notice\*](#)
- [\*Staff Report\*](#)
- [\*Item Summary\*](#)
- [\*Proposed Resolution\*](#)
- [\*Submit Written Comments\*](#)
- [\*View Public Comments\*](#)

### **23-9-2: Public Meeting to Consider the California Smog Check Contingency Measure for the State Implementation Plan**

The Board will consider approval of the California Smog Check Contingency Measure. If approved, CARB will submit the California Smog Check Contingency Measure to the U.S. Environmental Protection Agency as a revision to the California State Implementation Plan.

- [\*More Information\*](#)
- [\*Public Meeting Notice\*](#)
- [\*Staff Report\*](#)
- [\*Item Summary\*](#)
- [\*Meeting Presentation\*](#)
- [\*Proposed Resolution\*](#)
- [\*Submit Written Comments\*](#)
- [\*View Public Comments\*](#)

### **23-9-3: Public Hearing to Consider Proposed Amendments to the Regulation for Small Containers of Automotive Refrigerant**

The Board will consider the Proposed Amendments to the Regulation for Small Containers of Automotive Refrigerant and other minor revisions. The amendments propose removing the deposit and return program and requiring the use of reclaimed refrigerant in future small containers.

- *Formal Rulemaking Page*
  - *Public Meeting Notice*
  - *Staff Report*
- *Item Summary*
- *Meeting Presentation*
- *Proposed Resolution*
- *Submit Written Comments*
- *View Public Comments*

**The following Board Item will not be heard prior to 4:00 p.m.**

### **23-9-4: Public Meeting to Consider the AB 617 Community Air Protection Program Statewide Strategy Update (Blueprint 2.0) and to Hear an Informational Update on the Community Air Protection Incentives Guidelines**

The Board will consider staff's proposed revised Statewide Strategy contained in the Final Draft: Community Air Protection Blueprint 2.0. The statute requires the Statewide Strategy to be revised every 5 years. The Board will also hear an informational update on the staff's progress on amendments to the Community Air Protection Incentives Guidelines.

- *More Information*
- *Public Meeting Notice*
- *Draft Blueprint 2.0*
- *Item Summary*
- *Meeting Presentation*
  - *Community Air Protection Program Blueprint 2.0 Listening Workshops Community Voices (video)*
- *Proposed Resolution*
- *Submit Written Comments*
- *View Public Comments*

### **Closed Session**

The Board may hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation:

*Association of American Railroads et al. v. Randolph et al.* United States District Court, Eastern District of California, Sacramento, Case No. 2:23-cv-01154-JAM-JDP.

*Bobby Harris v. Nissan North America, Inc.* (U.S. District Court, Central District of California, Case No. 2:20 cv 06021 CJC GJS.)

*California Air Resources Board v. Best Energy Solutions & Technology Corp.* Los Angeles Superior Court, Case No. 22STCV32487.

*California Air Resources Board v. Daimler AG and Mercedes-Benz USA, LLC.* (United States District Court, District of Columbia, Civil Action No. 1:20 cv 2565.)

*California Air Resources Board v. Key Disposal, Inc. and John Katangian* Los Angeles Superior Court, Case No. BC650014.

*California Natural Gas Vehicle Coalition v. California Air Resources Board, et al.*, Fresno County Superior Court, Case No. 20CECG02250; industry appeal California Court of Appeal, Fifth District, Case No. F084229.

*California Trucking Association v. California Air Resources Board, et al.* Fresno County Superior Court, Case No. 22CECG00919.

*California Trucking Association v. South Coast Air Quality Mgmt. District* United States District Court, Central District of California, Case No. 2:21 cv 6341.

*Central California Environmental Justice Network, et al. v. Randolph, et al.*, United States District Court, Eastern District of California, Case No. 2:22 cv 01714 TLN CKD.

*Competitive Enterprise Inst. v. NHTSA*, United States Court of Appeals, District of Columbia Circuit, Case No. 20-1145, and consolidated cases *State of California v. Wheeler, et al.*, No. 20-1167, and Nos. 20 1168, 20-1169, 20-1173, 20-1174, 20-1176, and 20-1177.

*East Yard Communities for Environmental Justice, et al. v. South Coast Air Quality Management District, et al.* U.S. District Court, Central District of California, Los Angeles, Case 2:23-cv-06682.

*Environmental Defense Fund, et al., v. Andrew Wheeler, et al.*, United States Court of Appeals, District of Columbia Circuit, Case No. 20 1360.

Federal Energy Regulatory Commission Order 719, Docket No. RM21-14-000.

*Friends of Oceano Dunes, Inc. v. California Air Resources Board, et al.* (San Luis Obispo County Superior Court, Case No. 17CV-0576) and *Friends of Oceano Dunes, Inc. v. California Air Resources Board, et al.*, U.S. District Court for the Central District of California, Case No. 2:17-cv-0-8733.

*Natural Resources Defense Council v. National Highway Traffic Safety Admin., et al.*, United States Court of Appeal, District of Columbia Circuit, Case No. 22 1080, consolidated with Nos. 22 1144, 22 1145.

*People ex rel. California Air Resources Board v. Noil Energy Group, Inc. & Speedy Fuel, Inc.* Los Angeles Superior Court Case Nos. 20STCV30142/20STCV30292.

*People ex rel. California Air Resources Board v. Wholesale Harvest Supply, Inc.* Mendocino County Superior Court, Case No. 22CV00491.

*People v. Southern California Gas Company.* (Los Angeles Superior Court, Case No. BC602973.)

*South Coast Air Quality Management District v. City of Los Angeles, et al.*, Los Angeles County Superior Court, Case No. 20STCP02985; transferred to San Diego County Superior Court, Case No. 37-2021-00023385-CU-TT-CTL.

Possible litigation challenging U.S. Environmental Protection Agency's grant of waivers of preemption under the Clean Air Act to the California Air Resources Board.



*State of California v. Andrew Wheeler et. al.*, District of Columbia Circuit, Case No. 19 1239, consolidated under No. 19 1230 along with other cases.

*State of California v. Andrew Wheeler, et al.*, United States Court of Appeals, District of Columbia Circuit, Case No. 20-1167.

*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 for the District of Columbia Circuit – Case No. 21-1034, consolidated with *California Communities Against Toxics et al. v. EPA*, Case No. 21-1024.

*State of California, et al. v. United States Environmental Protection Agency, et al.*, United States Court of Appeals, District of Columbia Circuit, Case No. 21-1014.

*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 California, et al. v. United States Environmental Protection Agency*, United States Court of Appeals, District of Columbia Circuit, Case No. 23-1020.

*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. 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 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-RBW.

*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 Ohio, et al., v. Environmental Protection Agency, et al.*, United States Court of Appeals, District of Columbia Circuit, Case No. 22 1081, consolidated with Case Nos. 22 1083, 22 1084, and 22 1085.

*State of Texas, et al., v. Environmental Protection Agency, et al.* United States Court of Appeals, District of Columbia Circuit, Case No. 22 1031.

*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. 2:16-cv-00285-SWS.

*The Two Hundred for Homeownership, et al. v. California Air Resources Board, et al.* United States District Court, Eastern District of California, Fresno, Case No. 1:22 cv 01474-ADA-BAM.

*The Two Hundred, et al. v. California Air Resources Board, et al.*, Fresno County Superior Court, Case No. 18CECG1494.

*Western States Petroleum Association v. California Air Resources Board, et al.*, Superior Court of the State of California for the County of Fresno, Case No. 22CECG03603.

*Western States Petroleum Association v. California Air Resources Board*, Los Angeles County Superior Court, Case No. 20STCP03138x.

*Western States Petroleum Association v. California Air Resources Board*, Fresno County Superior Court, Case No. 23CECG02976.

*Western States Trucking Association, Inc. v. California Air Resources Board*, Fresno County Superior Court, Case No. 23CECG02964.

*Western States Trucking Association, Inc., et al. v. United States Environmental Protection Agency, et al.*, United States Court of Appeals, District of Columbia Circuit, Case No. 23-1148.

*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 two 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](mailto: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](mailto:cotb@arb.ca.gov) or (916) 322-5594

CARB Homepage: [www.arb.ca.gov](http://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](mailto: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 alternativo 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 electrónico al [cotb@arb.ca.gov](mailto: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.

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BOARD MEETING DATE: November 3, 2023

AGENDA NO. 22

**PROPOSAL:** Determine that Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines, are Exempt from CEQA; and Adopt Rule 1110.3 and Amend Rule 1110.2

**SYNOPSIS:** Proposed Rule 1110.3 will establish NO<sub>x</sub>, CO, and VOC emission limits for linear generators, as well as provisions for source testing, monitoring, reporting, and recordkeeping. Proposed Amended Rule 1110.2 will be amended to exclude linear generators from the applicability and requirements.

**COMMITTEE:** Stationary Source, February 17, September 15 and October 20, 2023, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Determining that Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines, are exempt from the requirements of the California Environmental Quality Act; and
2. Adopting Rule 1110.3 – Emissions from Linear Generators and Amending Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines

Wayne Natri  
Executive Officer

SR:MK:MM:IS:HL

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**Background**

Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines is a source-specific rule which applies to engines greater than 50 rated brake horsepower and was last amended in 2019. During the rule amendment process, emission limits for linear generators were included and stakeholders commented on the unique characteristics of

linear generators. Unlike internal combustion engines (ICEs), linear generators produce electricity by driving magnets through copper coils in a linear motion. One unique feature of linear generators is that the thermochemical reaction takes place at lower temperatures than ICEs, which results in lower NOx emissions without an add-on control device such as selective catalytic reduction. In response to stakeholder comments, Proposed Rule 1110.3 – Emissions from Linear Generators (PR 1110.3), was developed to allow for specific considerations of the technology and capabilities of linear generators.

### **Public Process**

The development of PR 1110.3 and Proposed Amended Rule 1110.2 (PAR 1110.2) was conducted through a public process. A Working Group was formed that included facility representatives, equipment manufacturers, other agencies, community and environmental groups, and other interested parties. Three Working Group meetings were held to discuss rule concepts on November 9, 2022, December 8, 2022, and February 23, 2023. A Public Workshop was held on January 25, 2023.

### **Proposal**

PR 1110.3 applies to linear generators fueled solely by natural gas and establishes NOx, CO, and VOC emission limits for linear generators as well as source testing, monitoring, reporting, and recordkeeping requirements. PR 1110.3 contains a reduced source testing frequency that will reduce source testing costs by approximately 60 percent compared to Rule 1110.2. In addition, facilities with six or more units may elect to conduct pooled source testing to further alleviate costs. PAR 1110.2 will be amended to exclude linear generators from the applicability and requirements.

### **Key Issues**

Throughout the rulemaking process, staff worked with stakeholders to resolve key issues. Staff is not aware of any remaining key issues.

### **California Environmental Quality Act**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (PR 1110.3 and PAR 1110.2) 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 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 Impact Assessment**

Implementation of PR 1110.3 and PAR 1110.2 will not result in any significant changes in air quality or emission limitations. Therefore, a socioeconomic impact assessment per Health and Safety Code Sections 40440.8 and 40728.5 is not required. PR 1110.3 and PAR 1110.2 would result in a cost savings to affected facilities due to a reduced source testing frequency and are not expected to result in any adverse socioeconomic impacts.

### **Resource Impacts**

Based on current trends, staff estimates that approximately 400 new and additional permit applications are expected to be submitted in the next two years due to the expected growth of the linear generator industry. Conservative estimates of increased workload would require at least one additional full-time Air Quality Engineer which is being requested in the upcoming budget.

### **Attachments**

- A. Summary of Proposal
- B. Key Issues and Responses
- C. Rule Development Process
- D. Key Contacts List
- E. Resolution
- F. Proposed Rule 1110.3
- G. Proposed Amended Rule 1110.2
- H. Final Staff Report
- I. Notice of Exemption from CEQA
- J. Board Presentation

**ATTACHMENT A**  
**SUMMARY OF PROPOSAL**

**Proposed Rule 1110.3**  
**Emissions from Linear Generators**

Applicability

- Linear generators fueled solely by natural gas are subject to this rule

Emission Limits

- Establishes NO<sub>x</sub>, CO, and VOC concentration limits for linear generators

Maintenance Requirements

- Maintenance per manufacturer's recommendations
- Requires a copy of the operating and maintenance manual to be kept and made available

Monitoring, Recordkeeping, and Reporting

- Requires a net output meter and parametric monitoring system
- Establishes requirements for inspection and maintenance of parametric monitoring system per manufacturer's recommendations
- Requires records to be kept for a period of five years and made available to staff
- Source tests required every five years
- Option for pooled source testing every three years for facilities with six or more units
- Diagnostic emissions checks required every two years
- Source test results must be submitted to Executive Officer

Exemptions

- Exemptions for laboratory units, emergency units, and units used for fire-fighting and flood control

**Proposed Amended Rule 1110.2  
Emissions from Gaseous- and Liquid-Fueled Engines**

Definitions

- Modifies the definition of engine to exclude linear generators
- Creates a definition for linear generators

Requirements

- Removes NO<sub>x</sub>, CO, and VOC concentration limits from Table IV, which were included for linear generators
- Removes interim provision allowing 25 ppmvd VOC for linear generators

Inspection and Monitoring (I&M) Requirements

- Remove accommodations for I&M Plan flexibility, which were included for linear generators

Exemptions

- Clarify language for equipment located at landfills or publicly owned treatment works



## **ATTACHMENT B**

### **KEY ISSUES AND RESPONSES**

Proposed Rule 1110.3 – Emissions from Linear Generators

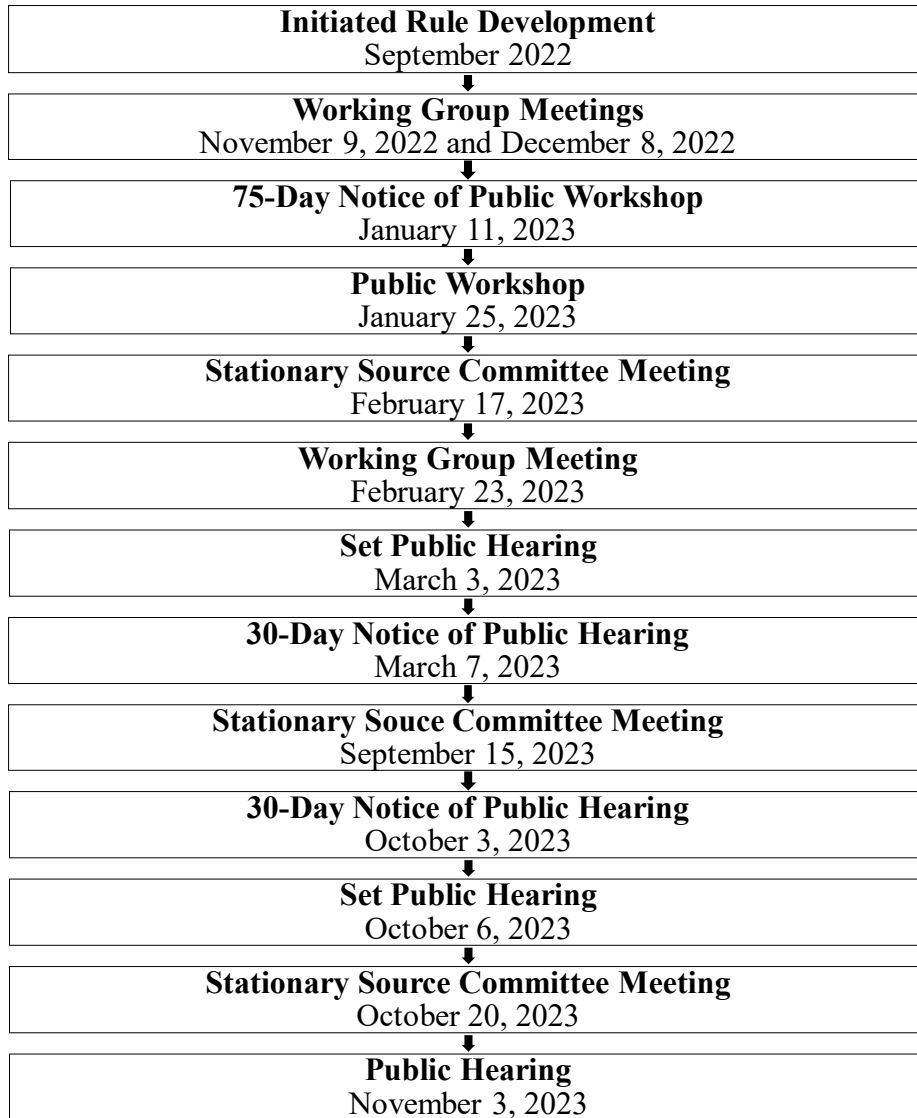
Proposed Amended Rule 1110.2 – Emissions from Gaseous- And Liquid Fueled Engines

Throughout the rulemaking process, staff worked with stakeholders to resolve key issues. Staff is not aware of any remaining key issues.

**ATTACHMENT C**  
**RULE DEVELOPMENT PROCESS**

**Proposed Rule 1110.3**  
**Emissions from Linear Generators**

**Proposed Amended Rule 1110.2**  
**Emissions from Gaseous- and Liquid-Fueled Engines**



Thirteen (13) months spent in rule development  
One (1) Public Workshop  
Three (3) Stationary Source Committee Meetings  
Three (3) Working Group Meetings

**ATTACHMENT D**

**KEY CONTACTS LIST**

**Proposed Rule 1110.3  
Emissions from Linear Generators**

**Proposed Amended Rule 1110.2  
Emissions from Gaseous- And Liquid-Fueled Engines**

Benz Air Engineering Co.

Bioenergy Association of California

California Hydrogen Business Council

Clean Water SoCal

Coalition for Clean Air

Hyllion Inc

Mainspring Energy, Inc.

Prologis

Southern California Alliance of Publicly Owned Treatment Works

Southern California Gas Company

Yorke Engineering

**ATTACHMENT E**

RESOLUTION NO. 23-\_\_\_\_\_

**A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) determining that Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines, are exempt from the requirements of the California Environmental Quality Act (CEQA).**

**A Resolution of the South Coast AQMD Governing Board adopting Rule 1110.3 – Emissions from Linear Generators and amending Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines.**

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 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 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 transfers existing requirements from Rule 1110.2 into Proposed Rule 1110.3, and contains other revisions in Proposed Amended Rule 1110.2 to improve clarity and enforceability without requiring 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 staff has prepared a Notice of Exemption for the proposed project that is completed in compliance with CEQA Guidelines Section 15062 – Notice of Exemption; and

**WHEREAS**, Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 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 no modifications have been made to the proposed project since the Notice of Public Hearing was published that are so substantial as to significantly affect the meaning of Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 within the meaning of Health and Safety Code Section 40726 because: (a) the changes do not significantly 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 Rule 1110.3 and Proposed Amended Rule 1110.2 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 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 Rule 1110.3 and Proposed Amended Rule 1110.2 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 Rule 1110.3 to establish oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compound (VOC) emission limits for linear generators, as well as provisions for source testing, monitoring, reporting, and recordkeeping; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that a need exists to amend Rule 1110.2 to exclude linear generators from applicability and requirements; 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, and 40725 through 40728; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 are written and 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 Rule 1110.3 and Proposed Amended Rule 1110.2 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 Rule 1110.3 and Proposed Amended Rule 1110.2 do not impose the same requirements as any existing state or federal regulations, and Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 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, in adopting Proposed Rule 1110.3 and Proposed Amended Rule 1110.2, 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; 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 Rule 1110.3 and Proposed Amended Rule 1110.2 are included in the Final Staff Report; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that no socioeconomic impact assessment for Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 is required per Health and Safety Code Sections 40440.8 and 40728.5 because no adverse socioeconomic impacts are expected and the proposed project will not significantly affect air quality or emission limitations; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 will result in a cost savings to affected facilities and thus, no adverse socioeconomic impacts are expected; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 neither 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 January 25, 2023 regarding Proposed Rule 1110.3 and Proposed Amended Rule 1110.2; 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 state and federal law; and

**WHEREAS**, the South Coast AQMD specifies the Planning and Rules Manager overseeing the rule development for Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 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**, the South Coast AQMD Governing Board directs staff to begin the development of a South Coast AQMD certification program for linear generators within 90 days of the adoption of Proposed Rule 1110.3 and Proposed Amended Rule 1110.2, and initiate a rule development process after finalizing a South Coast AQMD certification program for linear generators; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board does hereby determine, pursuant to the authority granted by law, that the proposed project (Proposed Rule 1110.3 and Proposed Amended Rule 1110.2) is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) – Common Sense Exemption. 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 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 Rule 1110.3 and Proposed Amended Rule 1110.2 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 Rule 1110.3 and Proposed Amended Rule 1110.2 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 Rule 1110.3 and Proposed Amended Rule 1110.2, 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 TBD)

### **PROPOSED RULE 1110.3 EMISSIONS FROM LINEAR GENERATORS**

*[RULE INDEX TO BE ADDED AFTER RULE ADOPTION]*

- (a) Purpose  
The purpose of this rule is to reduce emissions of Oxides of Nitrogen (NO<sub>x</sub>), Volatile Organic Compounds (VOCs), and carbon monoxide (CO) from linear generators.
- (b) Applicability  
All linear generators fueled solely by natural gas are subject to this rule.
- (c) Definitions  
For the purpose of this rule, the following definitions shall apply:
  - (1) EMERGENCY STANDBY UNIT means any Linear Generator which operates as a temporary replacement for primary power during periods of fuel or energy shortage or while the primary power supply is under repair.
  - (2) FACILITY means any source or group of sources or other air contaminant emitting activities which are located on one or more contiguous properties within South Coast AQMD, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in Section 55.2 of Title 40, Part 55 of the Code of Federal Regulations (40 CFR Part 55). Such above-described groups, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one facility. Sources or installations involved in crude oil and gas production in Southern California Coastal or OCS Waters and transport of such crude oil and gas in Southern California Coastal or OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore.
  - (3) IDENTICAL UNITS means any Units with the same manufacturer, model, and output rating.

- (4) LINEAR GENERATOR means any power generation technology that uses a thermochemical reaction to create linear motion that is directly converted into electricity.
  - (5) NATURAL GAS means a mixture of gaseous hydrocarbons, with at least 80 percent methane by volume, and of pipeline quality, such as the gas sold or distributed by any utility company regulated by the California Public Utilities Commission.
  - (6) OXIDES OF NITROGEN (NO<sub>x</sub>) means the sum of nitric oxides and nitrogen dioxides emitted, collectively expressed as nitrogen dioxide emissions.
  - (7) TUNING means adjusting, optimizing, rebalancing, or other similar operations to a Unit or an associated control device or as otherwise defined in the Permit to Operate. Tuning does not include automatic adjustments made by a Unit’s control system or normal operations to meet load fluctuations.
  - (8) UNIT means any single linear generator core.
  - (9) VOLATILE ORGANIC COMPOUND (VOC) as defined in Rule 102 – Definition of Terms.
- (d) Emission Limits  
 An owner or operator of a Unit with a Permit to Operate issued on or after [*Date of Adoption*] shall not operate the Unit in a manner that exceeds the NO<sub>x</sub>, CO, and VOC emission limits listed in Table 1.

**Table 1: Concentration Limits for Linear Generators  
 Units with a Permit to Operate Issued on or after  
 [*Date of Adoption*]**

Fuel Type	NO <sub>x</sub> (ppmv) <sup>1</sup>	CO (ppmv) <sup>1</sup>	VOC (ppmv) <sup>2</sup>
Natural Gas	2.5	12	10

<sup>1</sup> Parts per million by volume, corrected to 15% oxygen on a dry basis and averaged over 15 minutes.

<sup>2</sup> Parts per million by volume, measured as carbon, corrected to 15% oxygen on a dry basis, and averaged over the sampling time required by the test method.

- (e) Maintenance Requirements
  - (1) An owner or operator of a Unit shall perform maintenance per manufacturer’s recommendations as specified in the operating and maintenance manual.
  - (2) An owner or operator of a Unit shall keep a copy of the manufacturer’s operating and maintenance manual and make it available to the Executive Officer within 48 hours upon request.
  
- (f) Source Testing
  - (1) An owner or operator of a Unit that is not pooled pursuant to paragraph (f)(10) shall conduct source testing for NOx, VOC reported as carbon, and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis):
    - (A) Initially, within six months of installation of a Unit or within six months of not meeting the eligibility requirements for pooled source testing in paragraph (f)(10); and
    - (B) Subsequently, at least once every five years from the date of the previous source test, no later than the last day of the calendar month that the test is due.
  - (2) An owner or operator of a Unit shall conduct the source test by using a contractor that is approved under South Coast AQMD’s Laboratory Approval Program (LAP) for the test methods specified in Table 2, or any test methods approved by CARB and U.S. EPA, and authorized by the Executive Officer.

**Table 2: Testing Methods**

<b>Pollutant</b>	<b>Method</b>
NOx	South Coast AQMD Method 100.1
CO	South Coast AQMD Method 100.1
VOC	South Coast AQMD Method 25.1* or Method 25.3*

\*Excluding ethane and methane

- (3) An owner or operator of a Unit without an approved generic source test protocol shall submit a source test protocol to the Executive Officer for written approval at least 60 days before the scheduled date of the test. The source test protocol shall include, but is not limited to the following:

- (A) Name, address, and phone number of the Unit operator and a South Coast AQMD-approved source testing contractor that will conduct the test;
  - (B) All relevant application number(s), permit number(s), and emission limits;
  - (C) Description of the Unit(s) to be tested and the test methods and procedures to be used;
  - (D) Number of tests to be conducted and under what loads; and
  - (E) Required minimum sampling time for the VOC test, based on the analytical detection limit and expected VOC levels.
- (4) An owner or operator of a Unit with an approved generic source test protocol or other valid approved source test protocol shall conduct the source test within 90 days after a written approval of the source test protocol by the Executive Officer is electronically distributed.
- (5) An owner or operator of a Unit with an approved generic protocol, or with a previously approved source test protocol, shall submit a subsequent protocol if the Unit has been altered in a manner that requires a permit modification, if emission limits for the Unit have changed since the previous source test, or if requested by the Executive Officer.
- (6) An owner or operator of a Unit shall provide the Executive Officer at least 30 days prior notice of any source test to afford the Executive Officer the opportunity to have an observer present. If, after the 30 days prior notice is given, there is a delay (due to operational problems, etc.) in conducting the scheduled source test, the owner or operator of a Unit shall notify the Executive Officer as soon as possible of any delay in the original test date, either by providing notice of the rescheduled date of the source test at least seven days prior, or by arranging a rescheduled date mutually agreed upon with the Executive Officer.
- (7) An owner or operator of a Unit shall provide source testing facilities as follows:
- (A) Sampling ports adequate for the applicable test methods. This includes constructing the air pollution control system and stack or duct such that pollutant concentrations can be accurately determined by applicable test methods;
  - (B) Safe sampling platform(s), scaffolding or mechanical lifts, including safe access, that comply with California General Safety Orders; and
  - (C) Utilities for sampling and testing equipment.

- (8) The LAP contractor shall not conduct a source test within 1 week of any Unit servicing or Tuning.
- (9) The LAP contractor shall conduct source testing for at least 30 mins during normal operation (actual duty cycle). This test shall not be conducted under a steady-state condition unless it is a normal operation. The LAP contractor shall not conduct any pre-tests for compliance.
- (10) In lieu of meeting the requirements in paragraph (f)(1), an owner or operator of six or more Identical Units located at the same Facility may elect to conduct pooled source testing for NO<sub>x</sub>, VOC reported as carbon, and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis), pursuant to the following:
  - (A) At least one-third of the Units shall be source tested during the initial source test and all subsequent source testing shall be conducted on a different one-third of the Units. Source testing of pooled Units shall be conducted at least once every three years from the date of the previous source test, no later than the last day of the calendar month that the test is due;
  - (B) Identical Units installed after the initial source test has been performed shall be included with the Units subject to the pooled subsequent emissions testing pursuant to subparagraph (f)(10)(A);
  - (C) If any Unit subject to the pooled source testing exceeds any emissions standards in Table 1, the owner or operator shall repair the Unit that failed, repeat the source test within 60 days of repair, and conduct source testing on an additional one-third Units; and
  - (D) All pooled Units at a Facility shall be source tested at least once every nine years.
- (g) Monitoring, Recordkeeping, and Reporting
  - (1) Monitoring
    - (A) An owner or operator of a Unit shall conduct diagnostic emission checks by a portable NO<sub>x</sub>, CO, and oxygen analyzer at least once every two years from the date of the previous emission check, no later than the last day of the calendar month that the test is due, and comply with the following requirements:

- (i) No Unit or control system maintenance or Tuning may be conducted within 1 week prior to the diagnostic emission check, unless it is an unscheduled, required repair;
  - (ii) The portable analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations and in accordance with South Coast AQMD's Combustion Gas Periodic Monitoring Protocol of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Combustion Sources subject to South Coast Air Quality Management District Rules 1110.2, 1146, and 1146.1, or subsequent protocol approved by U.S. EPA and the Executive Officer;
  - (iii) The portable analyzer tests required in subparagraph (g)(1)(A) shall only be conducted by a person who has completed an appropriate South Coast AQMD-approved training program in the operation of portable analyzers and has received a certification issued by South Coast AQMD; and
  - (iv) A source test pursuant to paragraphs (f)(1) and (f)(10) shall be an acceptable substitute diagnostic emission check to satisfy subparagraph (g)(1)(A).
- (B) If a diagnostic emission check results in finding emissions in excess of rule or permit limits, an owner or operator shall correct the exceedance as soon as possible and demonstrate compliance with another diagnostic emission check pursuant to (g)(1)(A).
  - (C) An owner or operator of a Unit shall maintain a net output meter that meets ANSI C12.20 or an equivalent standard.
  - (D) An owner or operator of a Unit shall maintain an operational parametric monitoring system including the associated components necessary to maintain a system that measures air-to-fuel ratio.
  - (E) An owner or operator of a Unit shall inspect and maintain all sensors and meters used by the parametric monitoring system per manufacturer's recommendations as specified in the operating manual.
  - (F) An owner or operator of a Unit shall develop and implement procedures for at least daily monitoring of the parametric monitoring system.

(2) Recordkeeping

An owner or operator of a Unit shall retain all data logs, source test reports, and other records required by this rule for at least five years and be made available to the Executive Officer upon request.

(A) The owner or operator of a Unit shall maintain records, on a monthly basis, for the following parameters(s) or item(s):

- (i) Quantity of fuel consumption (e.g., cubic feet of gas);
- (ii) Date of last emissions test required in subdivision (f) and subparagraph (g)(1)(A);
- (iii) Megawatt-hours of electricity produced; and
- (iv) Air-to-Fuel system faults, alarms, and any other related emission control malfunctions.

(B) An owner or operator of a Unit shall keep records to demonstrate compliance with paragraphs (e)(1), (f)(1), (f)(8), (f)(10), and (g)(1).

(3) Reporting

An owner or operator of a Unit shall submit all source test reports to the Executive Officer within 60 days of completion of the test.

(h) Exemptions

(1) The provisions of subdivision (d) and subparagraph (g)(1)(A) shall not apply to Laboratory Units used for testing and research purposes.

(2) The provisions of subdivision (f) and subparagraph (g)(1)(A) shall not apply to Emergency Standby Units, Units used for fire-fighting and flood control, or any other emergency Unit approved by the Executive Officer, which have permit conditions that limit operation to 200 hours or less per year as determined by an operational non-resettable totalizing time meter.

## ATTACHMENT G

(Adopted August 3, 1990)(Amended September 7, 1990)(Amended August 12, 1994)  
(Amended December 9, 1994)(Amended November 14, 1997)(Amended June 3, 2005)  
(Amended February 1, 2008)(Amended July 9, 2010)(Amended September 7, 2012)  
(Amended December 4, 2015)(Amended June 3, 2016)(Amended November 1, 2019)  
(Amended TBD)

**PROPOSED    EMISSIONS FROM GASEOUS- AND LIQUID-FUELED**  
**AMENDED    ENGINES**  
**RULE**  
**1110.2**

(a) Purpose

The purpose of Rule 1110.2 is to reduce Oxides of Nitrogen (NO<sub>x</sub>), Volatile Organic Compounds (VOCs), and Carbon Monoxide (CO) from engines.

(b) Applicability

All stationary and portable engines over 50 rated brake horsepower (bhp) are subject to this rule.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

- (1) AGRICULTURAL STATIONARY ENGINE is a non-portable engine used for the growing and harvesting of crops of the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. An engine used for the processing or distribution of crops or fowl or animals is not an agricultural engine.
- (2) APPROVED EMISSION CONTROL PLAN is a control plan, submitted on or before December 31, 1992, and approved by the Executive Officer prior to November 14, 1997, that was required by subdivision (d) of this rule as amended September 7, 1990.
- (3) BREAKDOWN is a physical or mechanical failure or malfunction of an engine, air pollution control equipment, or related operating equipment that is not the result of operator error, neglect, improper operation or improper maintenance procedures, which leads to excess emissions beyond rule related emission limits or equipment permit conditions.
- (4) CERTIFIED SPARK-IGNITION ENGINE means engines certified by California Air Resources Board (CARB) to meet emission standards in accordance with Title 13, Chapter 9, Article 4.5 of the California Code of Regulations (CCR).
- (5) COMPRESSOR GAS LEAN-BURN ENGINE is a stationary gaseous-fueled two-stroke or four-stroke lean-burn engine used to compress natural



gas or pipeline quality natural gas for delivery through a pipeline or into storage.

- (c) (6) EMERGENCY STANDBY ENGINE is an engine which operates as a temporary replacement for primary mechanical or electrical power during periods of fuel or energy shortage or while the primary power supply is under repair.
- (7) ENGINE is any spark- or compression-ignited internal combustion engine, including engines used for control of VOC's, but not including Linear Generators or engines used for self-propulsion.
- (8) ESSENTIAL PUBLIC SERVICE includes any facility or operator as defined in Rule 1302.
- (9) EXEMPT COMPOUNDS are defined in South Coast AQMD Rule 102 – Definition of Terms.
- (10) FACILITY means any source or group of sources or other air contaminant emitting activities which are located on one or more contiguous properties within the South Coast AQMD, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in Section 55.2 of Title 40, Part 55 of the Code of Federal Regulations (40 CFR Part 55). Such above-described groups, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one facility. Sources or installations involved in crude oil and gas production in Southern California Coastal or OCS Waters and transport of such crude oil and gas in Southern California Coastal or OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore.
- (11) FORMER 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, that has received a final determination notification, and is no longer in the RECLAIM program.
- (12) LEAN-BURN ENGINE means an engine that operates with high levels of excess air and an exhaust oxygen concentration of greater than 4 percent.
- (13) LINEAR GENERATOR means any power generation technology that uses a thermochemical reaction to create linear motion that is directly converted into electricity.

- (143 ) LOCATION means any single site at a building, structure, facility, or installation. For the purpose of this definition, a site is a space occupied or to be occupied by an engine. For engines which are brought to a facility to perform maintenance on equipment at its permanent or ordinary location, each maintenance site shall be a separate location.
- (c) (154 ) NET ELECTRICAL ENERGY means the electrical energy produced by a generator, less the electrical energy consumed by any auxiliary equipment necessary to operate the engine generator and, if applicable, any heat recovery equipment, such as heat exchangers.
- (165 ) NON-RECLAIM FACILITY means a facility, or any of its successors, that was not in the Regional Clean Air Incentives Market as of January 5, 2018, as established in Regulation XX.
- (176 ) NON-ROAD ENGINE is any engine, defined under 40 CFR Part 89, that does not remain or will not remain at a location for more than 12 consecutive months, or a shorter period of time where such period is representative of normal annual source operation at a stationary source that resides at a fixed location for more than 12 months (e.g., seasonal operations such as canning facilities), and meets one of the following:
- (A) Is used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as a mobile crane); or
  - (B) Is used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawn mowers and string trimmers); or
  - (C) By itself, or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Transportability includes, but is not limited to, wheels, skids, carrying handles, dolly, trailer, platform or mounting.
- (187 ) OPERATING CYCLE means a period of time within which a round of regularly recurring events is completed, and cannot be stopped without the risk of endangering public safety or health, causing material damage to the equipment or product, or cannot be stopped due to technical constraints. Economic reasons alone will not be sufficient to extend this time period. The operating cycle includes batch processes that may start and finish

several times within a twenty-four hour period, in which case each start to finish interval is considered a complete cycle.

(198 ) OXIDES OF NITROGEN (NO<sub>x</sub>) means nitric oxide and nitrogen dioxide.

(204 9) PORTABLE ENGINE is an engine that, by itself or in or on a piece of equipment, is designed to be and capable of being carried or moved from one location to another. Indications of portability include, but are not

(c) limited to, wheels, skids, carrying handles, dolly, trailer, platform or mounting. The operator must demonstrate the necessity of the engine being periodically moved from one location to another because of the nature of the operation.

An engine is not portable if:

(A) The engine or its replacement remains or will reside at the same location for more than 12 consecutive months. Any engine, such as a back-up or stand-by engine, that replaces an engine at a location and is intended to perform the same function as the engine being replaced, will be included in calculating the consecutive time period. In that case, the cumulative time of both engines, including the time between the removal of the original engine and installation of the replacement engine, will be counted toward the consecutive time period; or

(B) The engine remains or will reside at a location for less than 12 consecutive months where such a period represents the full length of normal annual source operations such as a seasonal source; or

(C) The engine is removed from one location for a period and then it or its equivalent is returned to the same location thereby circumventing the portable engine residence time requirements.

The period during which the engine is maintained at a designated storage facility shall be excluded from the residency time determination.

(210 ) RATED BRAKE HORSEPOWER (bhp) is the rating specified by the manufacturer, without regard to any derating, and listed on the engine nameplate.

(224 ) 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.

- (c) (232 RICH-BURN ENGINE WITH A THREE-WAY CATALYST means an engine designed to operate near stoichiometric conditions with a catalytic control device that simultaneously reduces emissions of NO<sub>x</sub>, CO and VOC.)
- (243 STATIONARY ENGINE is an engine which is either attached to a foundation or if not so attached, does not meet the definition of a portable or non-road engine and is not a motor vehicle as defined in Section 415 of the California Vehicle Code.)
- (254 TIER 2 AND TIER 3 DIESEL ENGINES mean engines certified by CARB to meet Tier 2 or Tier 3 emission standards in accordance with Title 13, Chapter 9, Article 4 of the CCR.)
- (265 USEFUL HEAT RECOVERED means the waste heat recovered from the engine exhaust and/or cooling system that is put to productive use. The waste heat recovered may be assumed to be 100% useful unless the hot water, steam or other medium is vented to the atmosphere, or sent directly to a cooling tower or other unproductive use.)
- (276 VOLATILE ORGANIC COMPOUND (VOC) is as defined in Rule 102.)

(d) Requirements

(1) Stationary Engines:

(A) Operators of stationary engines with an amended Rule 1110.1 Emission Control Plan submitted by July 1, 1991, or an Approved Emission Control Plan, designating the permanent removal of engines or the replacement of engines with electric motors, in accordance with subparagraph (d)(1)(B), shall do so by December 31, 1999, or not operate the engines on or after December 31, 1999 in a manner that exceeds the emission concentration limits listed in Table I:

<b>TABLE I ALTERNATIVE TO ELECTRIFICATION CONCENTRATION LIMITS</b>		
<b>NO<sub>x</sub> (ppmvd)<sup>1</sup></b>	<b>VOC (ppmvd)<sup>2</sup></b>	<b>CO (ppmvd)<sup>1</sup></b>
11	30	70

- 1 Parts per million by volume, corrected to 15% oxygen on a dry basis and averaged over 15 minutes.
  - 2 Parts per million by volume, measured as carbon, corrected to 15% oxygen on a dry basis and averaged over the sampling time required by the test method.
- (B) The operator of any other stationary engine not covered by subparagraph (d)(1)(A) shall:
- (i) Remove such engine permanently from service or replace the engine with an electric motor, or alternatively comply with the following, if applicable:
  - (ii) Comply with the applicable emission concentration limits listed in either Table II or Table III-A or B, or technologically achievable case-by-case VOC or CO emission concentration limits approved by the Executive Officer pursuant to clause (d)(1)(B)(vii), averaged over 15 minutes or other averaging time period allowed by clauses (d)(1)(B)(iii) through (d)(1)(B)(v);
  - (iii) Use an averaging time approved by the Executive Officer for an engine that uses non-pipeline quality natural gas that has demonstrated that due to the varying heating value of the gas a longer averaging time was necessary. The fixed-interval averaging time shall not exceed six hours for any of the concentration limits of Table II, unless an engine is subject to an existing permit condition allowing for an averaging time greater than six hours. Non-pipeline quality natural gas is a gas that does not meet the gas specifications of the local gas utility and is not supplied to the local gas utility;
  - (iv) Use a fixed-interval averaging time of one hour for engines equipped with a Continuous Emissions Monitoring System (CEMS), to demonstrate compliance with the emission concentration limits of Table II or Table III-B;
  - (v) Use a fixed-interval averaging time of three hours for compressor gas lean-burn engines equipped with selective catalytic reduction pollution control equipment and a
- (d)

CEMS, to demonstrate compliance with the NOx emission concentration limit of Table II;

- (vi) Comply with the emission concentration limits listed in Table II for Low-Use Engines. A Low-Use engine is an engine that operates less than 500 hours per year or uses less than 1 x 10<sup>9</sup> British Thermal Units (Btus) per year (higher heating value) of fuel;
  - (vii) Comply with any technologically achievable case-by-case CO and VOC limits that were approved by the Executive Officer in lieu of the concentration limits in Table II effective on and after July 1, 2011 for a two-stroke engine equipped with an oxidation catalyst and insulated exhaust ducts and catalyst housing that has demonstrated that the CO and VOC limits effective on and after July 1, 2011 were not achievable. The case-by-case limits shall not exceed 250 ppmvd VOC and 2000 ppmvd CO, but must comply with the applicable NOx concentration limit in Table II.
- (d)

<b>TABLE II</b>		
<b>CONCENTRATION LIMITS FOR LOW-USE ENGINES</b>		
<b>NO<sub>x</sub></b> <b>(ppmvd)<sup>1</sup></b>	<b>VOC</b> <b>(ppmvd)<sup>2</sup></b>	<b>CO</b> <b>(ppmvd)<sup>1</sup></b>
bhp ≥ 500: 36 bhp < 500: 45	250	2000
<b>CONCENTRATION LIMITS</b>		
<b>EFFECTIVE JULY 1, 2011</b>		
<b>NO<sub>x</sub></b> <b>(ppmvd)<sup>1</sup></b>	<b>VOC</b> <b>(ppmvd)<sup>2</sup></b>	<b>CO</b> <b>(ppmvd)<sup>1</sup></b>
11	30	250

<sup>1</sup> Parts per million by volume, corrected to 15% oxygen on a dry basis.

<sup>2</sup> Parts per million by volume, measured as carbon, corrected to 15% oxygen on a dry basis and averaged over the sampling time required by the test method.

- (C) The operator of any stationary engine fired by landfill or digester gas (biogas) shall not operate the engine in a manner that exceeds the emission concentration limits of Table III-A, provided that the

- (d) facility monthly average biogas usage by the biogas engine is 90% or more, based on the higher heating value of the fuels used. The calculation of the monthly facility biogas use percentage may exclude natural gas fired during: any electrical outage at the facility; a Stage 2 or higher electrical emergencies called by the California Independent System Operator Corporation; and when a sewage treatment plant activates an Emergency Operations Center or Incident Command System, as part of an emergency response plan, because of either high influent flows caused by precipitation or a disaster.

<b>TABLE III-A                      CONCENTRATION LIMITS FOR LANDFILL                      AND DIGESTER GAS (BIOGAS)-FIRED LOW-USE                      ENGINES</b>		
NO <sub>x</sub> (ppmvd) <sup>1</sup>	VOC (ppmvd) <sup>2</sup>	CO (ppmvd) <sup>1</sup>
bhp ≥ 500: 36 x ECF <sup>3</sup> bhp < 500: 45 x ECF <sup>3</sup>	Landfill Gas: 40 Digester Gas: 250 x ECF <sup>3</sup>	2000
<b>TABLE III-B                      CONCENTRATION LIMITS FOR LANDFILL AND                      DIGESTER GAS (BIOGAS)-FIRED ENGINES                      EFFECTIVE JANUARY 1, 2017</b>		
NO <sub>x</sub> (ppmvd) <sup>1</sup>	VOC (ppmvd) <sup>2</sup>	CO (ppmvd) <sup>1</sup>
11	30	250

<sup>1</sup> Parts per million by volume, corrected to 15% oxygen on a dry basis.

<sup>2</sup> Parts per million by volume, measured as carbon, corrected to 15% oxygen on a dry basis and averaged over the sampling time required by the test method.

<sup>3</sup> ECF is the efficiency correction factor.

The ECF shall be 1.0 unless:

- (i) The engine operator has measured the engine’s net specific energy consumption (q<sub>a</sub>), in compliance with ASME Performance Test Code PTC 17 -1973, at the average load of the engine; and

- (ii) The ECF-corrected emission limit is made a condition of the engine's permit to operate.

The ECF is as follows:

$$\text{ECF} = \frac{9250 \text{ Btus/hp-hr}}{\text{Measured } q_a \text{ in Btus/hp-hr}}$$

Measured  $q_a$  shall be based on the lower heating value of the fuel. ECF shall not be less than 1.0.

- (d) The Executive Officer may approve the burning of more than 10% natural gas in a landfill or digester gas-fired engine, when it is necessary, if: the only alternative to limiting natural gas to 10% would be shutting down the engine and flaring more landfill or digester gas; or the engine requires more natural gas in order for a waste heat recovery boiler to provide enough thermal energy to operate a sewage treatment plant, and other boilers at the facility are unable to provide the necessary thermal energy.
- (D) Notwithstanding the provisions of subparagraph (d)(1)(B), the operator of any stationary engine fired by landfill or digester gas (biogas) shall not operate the engine in a manner that exceeds the emission concentration limits of Table III.
- (E) Biogas engine operators that establish to the satisfaction of the Executive Officer that they have complied with the emissions limits of Table III-B by January 1, 2015 will have their respective engine permit application fees refunded.
- (F) For the City of San Bernardino, Orange County Sanitation District, and Eastern Municipal Water District that commenced and implemented technology demonstration projects prior to January 1, 2015, all their biogas engines shall have until January 1, 2018 to comply with the requirements of Table III-B.
- (G) Once an engine complies with the concentration limits as specified in Table III-B, there shall be no limit on the percentage of natural gas burned.
- (H) The concentration limits effective as specified in Table III-A shall apply to engines that are biogas-fired Low-Use engines. A biogas-fired Low-Use engine is an engine that operates fewer than 500



hours per year or uses less than  $1 \times 10^9$  Btus per year (higher heating value) of fuel.

- (I) An operator of a biogas engine with a CEMS shall meet either:
  - (i) The NO<sub>x</sub> and CO limits of Table III-B, averaged pursuant to the specified averaging provisions in subparagraph (d)(1)(B);
  - (ii) The emission limits at or below 11 ppmvd for NO<sub>x</sub> and 250 ppmvd for CO (if CO is selected for averaging), each corrected to 15% O<sub>2</sub> and averaged over a 24-hour fixed interval, with the emission limits and averaging time specified as a condition in the engine's permit to operate on or before November 1, 2019; or
  - (iii) The emission limits at or below 9.9 ppmvd for NO<sub>x</sub> and 225 ppmvd for CO (if CO is selected for averaging), each corrected to 15% O<sub>2</sub> and averaged over a 48-hour fixed interval, with emission limits and averaging time specified as a condition in the engine's permit to operate.
- (d)
  - (J) The operator of any new engine subject to subparagraph (e)(1)(B) shall:
    - (i) Comply with the requirements of Best Available Control Technology in accordance with Regulation XIII if the engine requires a South Coast AQMD permit; or
    - (ii) Not operate the engine in a manner that exceeds the emission concentration limits in Table I if the engine does not require a South Coast AQMD permit.
  - (K) By February 1, 2009, the operator of a spark-ignited engine without a Rule 218-approved continuous emission monitoring system (CEMS) or a Regulation XX (RECLAIM)-approved CEMS shall equip and maintain the engine with an air-to-fuel ratio controller with an oxygen sensor and feedback control, or other equivalent technology approved by the Executive Officer, CARB and EPA.
  - (L) New Non-Emergency Electrical Generators

- (i) All new non-emergency engines driving electrical-generators shall comply with the following emission standards in lbs/MW-hr:

(d)

<b>TABLE IV EMISSION STANDARDS FOR NEW ELECTRICAL GENERATION DEVICES</b>		
<b>Pollutant</b>	<b>Emission Standard (lbs/MW-hr)<sup>1</sup></b>	<b>Concentration Limit<sup>3</sup> (ppmvd)<sup>4</sup></b>
NO <sub>x</sub>	0.070	<del>2.5</del>
CO	0.20	<del>12</del>
VOC	0.10 <sup>2</sup>	<del>10</del>

- <sup>1</sup> The averaging time of the emission standard for VOC is the sampling time required by the test method.
- <sup>2</sup> Mass emissions of VOC shall be calculated using a ratio of 16.04 pounds of VOC per lb-mole of carbon.
- <sup>3</sup> ~~Concentration limit is calculated using a 40% engine efficiency and no applied thermal credit.~~
- <sup>4</sup> ~~Parts per million by volume, corrected to 15% oxygen on a dry basis.~~

- (ii) Engines subject to this subparagraph that produce combined heat and electrical power may include one megawatt-hour (MW-hr) for each 3.4 million Btus of useful heat recovered (MW<sub>th</sub>-hr), in addition to each MW-hr of net electricity produced (MW<sub>e</sub>-hr). The compliance of such engines shall be based on the following equation:

$$\frac{\text{Lbs}}{\text{MW-hr}} = \frac{\text{Lbs}}{\text{MW}_e\text{-hr}} \times \text{Electrical Energy Factor (EEF)}$$

Where:

Lbs/MW-hr = The calculated emissions standard.

Lbs/MW<sub>e</sub>-hr = The short-term engine emission limit in pounds per MWe-hr of net electrical energy produced.

EEF = The annual MW<sub>e</sub>-hrs of net electrical energy produced divided by the sum of

annual  $MW_e$ -hrs plus annual  $MW_{th}$ -hrs  
of useful heat recovered.

- (d)
- (iii) For combined heat and power engines, the short-term emission limits in lbs/ $MW_e$ -hr and the maximum allowed annual EEF must be selected by operator and stated on the operating permit.
  - (iv) The requirements of this subparagraph shall apply to NO<sub>x</sub> emissions from new non-emergency engines driving electrical-generators subject to Regulation XX (RECLAIM).
  - (v) This subparagraph does not apply to: engines installed prior to February 1, 2008; engines issued a permit to construct prior to February 1, 2008 and installed within 12 months of the date of the permit to construct; engines for which an application is deemed complete by October 1, 2007; engines installed by an electric utility on Santa Catalina Island; engines installed at remote locations without access to natural gas and electric power; engines used to supply electrical power to ocean-going vessels while at berth, prior to January 1, 2014; or landfill or digester gas-fired engines that meet the requirements of subparagraph (d)(1)(C).
  - (vi) For engines driving electrical generators and operating with a CEMS, a fixed-interval averaging time of one hour shall be used to demonstrate compliance with the NO<sub>x</sub> and CO emission standard requirements of Table IV in lbs/MW-hr. For engines driving electrical generators and operating without a CEMS, the NO<sub>x</sub> and CO emission standard requirements of Table IV in lbs/MW-hr shall be averaged over 15 minutes.
  - ~~(vii) Owners and operators of new engines installed prior to January 1, 2024 with no ammonia emissions from add-on control equipment and where NO<sub>x</sub> emissions meet the concentration limit of Table IV at all times may elect to apply for and comply with the concentration limits of Table IV, expressed in ppmvd, except an alternative VOC concentration limit that is equal to or less than 25 ppmvd~~

(d) ~~may be complied with. The Executive Officer shall accumulate daily VOC emissions in excess of the concentration limit of Table IV based on the permitted VOC limits from each such engine and shall not approve any additional permit for such engine that will cause the total accumulated daily VOC emissions to exceed 45 lbs per day. Any new installation on or after January 1, 2024 shall comply with the VOC concentration limit in Table IV in ppmvd.~~

(2) Portable Engines:

(A) The operator of any portable engine generator subject to this rule shall not use the portable generator for:

(i) Power production into the electric grid, except to maintain grid stability during an emergency event or other unforeseen event that affects grid stability; or

(ii) Primary or supplemental power to a building, facility, stationary source, or stationary equipment, except during unforeseen interruptions of electrical power from the serving utility, maintenance and repair operations, and remote operations where grid power is unavailable. For interruptions of electrical power, the operation of a portable generator shall not exceed the time of the actual interruption of power.

This subparagraph shall not apply to a portable generator that complies with emission concentration limits of Table I and the other requirements in this rule applicable to stationary engines.

(B) The operator of any portable diesel engine shall comply with the applicable requirements of the Subchapter 7.5 Airborne Toxic Control Measures for diesel particulate matter in Chapter 1, Division 3, Title 17 of the California Code of Regulations.

(C) The operator of any portable spark-ignited engine shall comply with the applicable requirements of the Large Spark Ignition Engine Fleet Requirements, Article 2, Chapter 15, Division 3, Title 13 of the California Code of Regulations.

(e) Compliance

- (1) Agricultural Stationary Engines:
  - (A) The operator of any agricultural stationary engine subject to this rule and installed or issued a permit to construct prior to June 3, 2005 shall comply with subparagraph (d)(1)(B) and the other applicable provisions of this rule in accordance with the compliance schedules in Table V:

<b>TABLE V COMPLIANCE SCHEDULES FOR STATIONARY AGRICULTURAL ENGINES</b>		
<b>Action Required</b>	<b>Tier 2 and Tier 3 Diesel Engines, Certified Spark-Ignition Engines, and All Engines at Facilities with Actual Emissions Less Than the Amounts in the Table of Rule 219(q)</b>	<b>Other Engines</b>
Submit notification of applicability to the Executive Officer	January 1, 2006	January 1, 2006
Submit to the Executive Officer applications for permits to construct engine modifications, control equipment, or replacement engines	March 1, 2009	September 1, 2007
Initiate construction of engine modifications, control equipment, or replacement engines	September 30, 2009, or 30 days after the permit to construct is issued, whichever is later	March 30, 2008, or 30 days after the permit to construct is issued, whichever is later
Complete construction and comply with applicable requirements	January 1, 2010, or 60 days after the permit to construct is issued, whichever is later	July 1, 2008, or 60 days after the permit to construct is issued, whichever is later
Complete initial source testing	March 1, 2010, or 120 days after the permit to	September 1, 2008, or 120 days after the permit

	construct is issued, whichever is later	to construct is issued, whichever is later
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- (e) The notification of applicability shall include the following for each engine:
  - (i) Name and mailing address of the operator
  - (ii) Address of the engine location
  - (iii) Manufacturer, model, serial number, and date of manufacture of the engine
  - (iv) Application number
  - (v) Engine type (diesel, rich-burn spark-ignition or lean-burn spark-ignition)
  - (vi) Engine fuel type
  - (vii) Engine use (pump, compressor, generator, or other)
  - (viii) Expected means of compliance (engine replacement, control equipment installation, or electrification)
- (B) The operator of any new agricultural stationary engine that is not subject to the compliance schedule of subparagraph (e)(1)(A) for existing engines shall comply with the requirements of subparagraph (d)(1)(J) immediately upon installation.
- (2) Non-Agricultural Stationary Engines:
  - (A) The operator of any stationary engine not meeting the requirements of subparagraph (d)(1)(B) or (d)(1)(C) that go into effect in 2010 or later, shall comply with the compliance schedule in Table VI.
  - (B) The operator of any stationary engine that elects to amend a permit to operate to incorporate ECF-adjusted emission limits shall submit to the Executive Officer an application for a change of permit conditions by August 1, 2008, and comply with emission limits of the previous version of this rule until February 1, 2009 when the engine shall be in compliance with the emission limits of this rule.
  - (C) The operator of any stationary engine that is required to add operating restrictions to a permit to operate to meet the requirements of this rule shall submit to the Executive Officer an application for a change of permit conditions by August 1, 2008.

(e)

<b>TABLE VI COMPLIANCE SCHEDULE FOR NON -AGRICULTURAL STATIONARY ENGINES</b>	
<b>Action Required</b>	<b>Applicable Compliance Date</b>
Submit to the Executive Officer applications for permits to construct engine modifications, control equipment, or replacement engines	Twelve months before the final compliance date
Initiate construction of engine modifications, control equipment, or replacement engines	Three months before the final compliance date, or 60 days after the permit to construct is issued, whichever is later
Complete construction and comply with applicable requirements	The final compliance date, or 120 days after the permit to construct is issued, whichever is later
Complete initial source testing	60 days after the final compliance date in subparagraph (d)(1)(B) or (d)(1)(C), or 180 days after the permit to construct is issued, whichever is later

(3) Stationary Engine CEMS

- (A) The operator of any stationary engine with an existing CEMS shall commence the reporting required by Rule 218 Subdivision (f) on January 1, 2008. The first summary report for the six months ending June 30, 2008 shall be due on July 30, 2008.
- (B) The operator of any stationary engine that is required to modify an existing CEMS or install a CEMS on an existing engine shall comply with the compliance schedule in Table VII. Public agencies shall be allowed one year more than the dates in Table VII, except for biogas engines.
- (C) The operator of any stationary engine that is located at a RECLAIM or former RECLAIM facility that is required to modify an existing CEMS or install a CEMS on an existing engine that is subject to paragraph (f)(1) shall comply with the compliance schedule in Table VII except that the operator shall submit to the Executive

- (e) Officer applications for a new or modified CEMS within 90 days of becoming a former RECLAIM facility.
  - (i) For engines at a RECLAIM or former RECLAIM facility, installation of a CEMS is required concurrently with the installation of retrofit control technologies or new engine replacements to meet the requirements of paragraph (d)(1).

<b>TABLE VII COMPLIANCE SCHEDULE FOR NEW OR MODIFIED CEMS ON EXISTING ENGINES</b>			
<b>Action Required</b>	<b>Applicable Compliance Dates For:</b>		
	<b>Non-Biogas Engines Rated at 750 bhp or More</b>	<b>Non-Biogas Engines Rated at Less than 750 bhp</b>	<b>Biogas Engines*</b>
Submit to the Executive Officer applications for new or modified CEMS	August 1, 2008	August 1, 2009	January 1, 2011
Complete installation and commence CEMS operation, calibration, and reporting requirements	Within 180 days of initial approval	Within 180 days of initial approval	Within 180 days of initial approval
Complete certification tests	Within 90 days of installation	Within 90 days of installation	Within 90 days of installation
Submit certification reports to Executive Officer	Within 45 days after tests are completed	Within 45 days after tests are completed	Within 45 days after tests are completed
Obtain final approval of CEMS	Within 1 year of initial approval	Within 1 year of initial approval	Within 1 year of initial approval

\* A biogas engine is one that is subject to the emission limits of Table III.

- (e) (4) Stationary Engine Inspection and Monitoring (I&M) Plans:



The operator of stationary engines subject to the I&M plan provisions of subparagraph (f)(1)(D) shall:

- (A) By August 1, 2008, submit an initial I&M plan application to the Executive Officer for approval;
- (B) By December 1, 2008, implement an approved I&M plan or the I&M plan as submitted if the plan is not yet approved.

Any operator of 15 or more stationary engines subject to the I&M plan provisions shall comply with the above schedule for at least 50% of engines, and for the remaining engines shall:

- (C) By February 1, 2009, submit an initial I&M plan application to the Executive Officer for approval;
- (D) By June 1, 2009, implement an approved I&M plan or the I&M plan as submitted if the plan is not yet approved.

(5) Stationary Engine Air-to-Fuel Ratio Controllers

- (A) The operator of any stationary engine that does not have an air-to-fuel ratio controller, as required by subparagraph (d)(1)(K), shall comply with those requirements in accordance with the compliance schedule in Table V, except that the application due date is no later than May 1, 2008 and the initial source testing may be conducted at the time of the testing required by subparagraph (f)(1)(C).
- (B) The operator of any stationary engine that has the air-to-fuel ratio controller required by subparagraph (d)(1)(K), but it is not listed on the permit to operate, shall submit to the Executive Officer an application to amend the permit by April 1, 2008.
- (C) The operator of more than five engines that do not have air-to-fuel ratio controllers may take an additional three months, to May 1, 2009, to install the equipment on up to 50% of the affected engines.

(6) New Stationary Engines

The operator of any new stationary engine issued a permit to construct after February 1, 2008 shall comply with the applicable I&M or CEMS requirements of this rule when operation commences. If applicable, the operator shall provide the required information in subparagraph (f)(1)(D) to the Executive Officer prior to the issuance of the permit to construct so that the I&M procedures can be included in the permit. A separate I&M plan application is not required.

- (e) (7) **Biogas Engines**

For any biogas engine for which the operator applies to the Executive Officer by April 1, 2008 for a change of permit conditions for ECF-corrected emission limits, or the approval to burn more than 10 percent natural gas in accordance with subparagraph (d)(1)(C), the biogas engine shall not be subject to the initial concentration limits of Tables II or III until August 1, 2008, provided the operator continues to comply with all emission limits in effect prior to February 1, 2008.
- (8) **Compliance Schedule Exception**

If an engine operator submits to the Executive Officer an application for an administrative change of permit conditions to add a permit condition that causes the engine permit to expire by the effective date of any requirement of this rule, then the operator is not required to comply with the earlier steps required by this subdivision for that requirement. The effective date for the CEMS requirements shall be one year after the date that a CEMS application is due.
- (9) **Exceedance of Usage Limits**
  - (A) If an engine was initially exempt from the new concentration limits in subparagraph (d)(1)(B) or subparagraph (d)(1)(C) that take effect on or after July 1, 2011 because of low engine use but later exceeds the low-use criteria, the operator shall bring the engine into compliance with the rule in accordance with the schedule in Table VI with the final compliance date in Table VI being twelve months after the conclusion of the first twelve-month period for which the engine exceeds the low-use criteria.
  - (B) If engines that were initially exempt from new CEMS by the low-use criterion in subclause (f)(1)(A)(ii)(I) later exceed that criterion, the operator shall install CEMS on those engines in accordance with the schedule in Table VII, except that the date for submitting the CEMS application in Table VII shall be six months after the conclusion of the first twelve-month period for which the engines exceed the criterion.
- (10) **RECLAIM or Former RECLAIM Facilities**

The owner or operator of a RECLAIM or former RECLAIM facility with any unit(s) subject to subdivision (d) shall meet the applicable NOx

emission limit in Table II or III-B in accordance with the schedule specified in Rule 1100 – Implementation Schedule for NO<sub>x</sub> Facilities.

(f) Monitoring, Testing, Recordkeeping and Reporting

(1) Stationary engines:

The operator of any engine subject to the provisions of paragraph (d)(1) of this rule shall meet the following requirements:

(A) Continuous Emission Monitoring

(i) For engines of 1000 bhp and greater and operating more than two million bhp-hr per calendar year, a NO<sub>x</sub> and CO CEMS shall be installed, operated and maintained in calibration to demonstrate compliance with the emission limits of this rule.

(ii) (I) For facilities with engines subject to paragraph (d)(1), having a combined rating of 1500 bhp or greater at the same location, and having a combined fuel usage of more than 16 x 10<sup>9</sup> Btus per year (higher heating value), CEMS shall be installed, operated and maintained in calibration to demonstrate compliance of those engines with the applicable NO<sub>x</sub> and CO emission limits of this rule.

(II) Any engine that as of October 1, 2007 is located within 75 feet of another engine (measured from engine block to engine block) is considered to be at the same location. Operators of new engines shall not install engines farther than 75 feet from another engine unless the operator demonstrates to the Executive Officer that operational needs or space limitations require it.

(III) The following engines shall not be counted toward the combined rating or required to have a CEMS by this clause: engines rated at less than 500 bhp; standby engines that are limited by permit conditions to only operate when other primary engines are not operable; engines that are limited by permit conditions to operate less than 1000 hours per year

or a fuel usage of less than  $8 \times 10^9$  Btus per year (higher heating value of all fuels used); engines that are used primarily to fuel public natural gas transit vehicles and that are required by a permit condition to be irreversibly removed from service by December 31, 2014; and engines required to have a CEMS by the previous clause. A CEMS shall not be required if permit conditions limit the simultaneous use of the engines at the same location in a manner to limit the combined rating of all engines in simultaneous operation to less than 1500 bhp.

- (f)
  - (IV) For engines rated below 1000 bhp, the CEMS may be time shared by multiple engines.
  - (V) Operation of engines by the electric utility in the Big Bear Lake area during the failure of a transmission line to the utility may be excluded from an hours-per-year or fuel usage limit that is elected by the operator pursuant to subclause (f)(1)(A)(ii)(III).
  - (VI) In lieu of complying with subclause (f)(1)(A)(ii)(I), an operator that is a public agency, or is contracted to operate engines solely for a public agency, may comply with the Inspection and Monitoring Plan requirements of subparagraph (f)(1)(D), except that the operator shall conduct diagnostic emission checks at least weekly or every 150 operating hours, whichever occurs later. If any such engine is found to exceed an applicable NO<sub>x</sub> or CO limit by a source test required by subparagraph (f)(1)(C) or South Coast AQMD test using a portable analyzer on three or more occasions in any 12-month period, the operator shall comply with the CEMS requirements of this subparagraph for such engine in accordance with the compliance schedule of Table VII, except that the operator shall submit a CEMS application to

the Executive Officer within six months of the third exceedance.

- (iii) All CEMS required by this rule shall:
  - (I) Comply with the applicable requirements of Rules 218 and 218.1, including equipment specifications and certification, operating, recordkeeping, quality assurance and reporting requirements, except as otherwise authorized by this rule;
  - (II) Include equipment that measures and records exhaust gas concentrations, both uncorrected and corrected to 15 percent oxygen on a dry basis; and
  - (III) Have data gathering and retrieval capability approved by the Executive Officer
- (iv) The operator of an engine that is required to install CEMS may request the Executive Officer to approve an alternative monitoring device (or system components) to demonstrate compliance with the emission limits of this rule. The applicant shall demonstrate to the Executive Officer that the proposed alternative monitoring device is at a minimum equivalent in relative accuracy, precision, reliability, and timeliness to a CEMS for that engine, according to the criteria specified in 40 CFR Part 75 Subpart E. In lieu of the criteria specified in 40 CFR Part 75 Subpart E, substitute criteria is acceptable if the applicant demonstrates to 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 engine. Upon approval by the Executive Officer, the substitute criteria shall be submitted to EPA as an amendment to the State Implementation Plan (SIP).  
If the alternative monitoring device is denied or fails to be recertified, a CEMS shall be required.
- (v) Notwithstanding the requirements of Rules 218 and 218.1, operators of engines that are required to install a CEMS by clause (f)(1)(A)(ii) may:

- (I) Store data electronically without a strip chart recorder, but there shall be redundant data storage capability for at least 15 days of data. The operator must demonstrate that both sets of data are equivalent.
  - (II) Conduct relative accuracy testing on the same schedule for source testing in clause (f)(1)(C)(i), instead of annually. The minimum sampling time for each test is 15 minutes.
- (f) (vi) Notwithstanding the requirements of Rules 218 and 218.1, operators of engines that are required to install a CEMS by clause (f)(1)(A)(ii), and that are to be monitored by a timeshared CEMS, may:
- (I) Monitor an engine with the CEMS for 15 consecutive minutes, purge for the minimum required purge time, then monitor the next engine for 15 consecutive minutes. The CEMS shall operate continuously in this manner, except for required calibrations.
  - (II) Record the corrected and uncorrected NO<sub>x</sub>, CO and diluent data at least once per minute and calculate and record the 15-minute average corrected concentrations for each sampling period.
  - (III) Have sample lines to each engine that are not the same length. The purge time will be based on the sample line with the longest response time. Response times shall be checked during cylinder gas audits. Sample lines shall not exceed 100 feet in length.
  - (IV) Conduct a minimum of five tests for each engine during relative accuracy tests.
  - (V) Perform a cylinder gas audit every calendar quarter on each engine, except for engines for which relative accuracy testing was conducted that quarter.
  - (VI) Exclude monitoring of nitrogen dioxide (NO<sub>2</sub>) for rich-burn engines, unless source testing

demonstrates that NO<sub>2</sub> is more than 10 percent of total NO<sub>x</sub>.

- (VII) Conduct daily calibration error (CE) tests by injecting calibration gases at the analyzers, except that at least once per week the CE test shall be conducted by injecting calibration gases as close to the probe tip as practical.
- (VIII Stop operating and calibrating the CEMs during any ) period that the operator has a continuous record that the engine was not in operation.
- (vii) A CO CEMS shall not be required for lean-burn engines or an engine that is subject to Regulation XX (RECLAIM), and not required to have a NO<sub>x</sub> CEMS by that regulation.
- (viii) Notwithstanding the requirements of this paragraph and paragraph (c)(2) of Rule 2012, an operator may take an existing NO<sub>x</sub> CEMS out of service for up to two weeks (cumulative) in order to modify the CEMS to add CO monitoring.
- (ix) In lieu of clause (f)(1)(A)(i), an Essential Public Service or a contractor for an Essential Public Service that is operating a biogas engine of 1000 bhp and greater and less than 1200 bhp, may alternatively comply with the Inspection and Monitoring Plan requirements of subparagraph (f)(1)(D), provided the operator conducts diagnostic emission checks at least weekly or every 150 operating hours, whichever occurs later.
- (x) If an Essential Public Service or a contractor for an Essential Public Service has elected to comply with the Inspection and Monitoring Plan provisions pursuant to clause (f)(1)(A)(ix) for biogas engines is found to exceed an applicable NO<sub>x</sub> or CO limit by a source test required by subparagraph (f)(1)(C) or South Coast AQMD test using a portable analyzer on three or more occasions in any 12-month period, the operator shall comply with the CEMS requirements of clause (f)(1)(A)(i) for such biogas engine in accordance with the compliance schedule of Table VII except that the

operator shall submit a CEMS application to the Executive Officer within six months of the third exceedance.

- (f) (B) Elapsed Time Meter  
Maintain an operational non-resettable totalizing time meter to determine the engine elapsed operating time.
- (C) Source Testing
  - (i) Effective August 1, 2008, conduct source testing for NO<sub>x</sub>, VOC reported as carbon, and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis) at least once every two years from the date of the previous source test, no later than the last day of the calendar month that the test is due, or every 8,760 operating hours, whichever occurs first. Relative accuracy tests required by Rule 218.1 or 40 CFR Part 75 Subpart E shall satisfy this requirement for those pollutants monitored by a CEMS. The above source test frequency may be reduced to once every three years if the engine has operated less than 2,000 hours since the last source test. If the engine has not been operated before the date a source test is due, the source test shall be conducted by the end of seven consecutive days or 15 cumulative days of resumed operation. The operator of the engine shall keep sufficient operating records to demonstrate that it meets the requirements for extension of the source testing deadlines.
  - (ii) Conduct source testing for at least 30 minutes during normal operation (actual duty cycle). This test shall not be conducted under a steady-state condition unless it is the normal operation. In addition, conduct source testing for NO<sub>x</sub> and CO emissions for at least 15 minutes at: an engine's actual peak load, or the maximum load that can be practically achieved during the test, and; at actual minimum load, excluding idle, or the minimum load that can be practically achieved during the test. These additional two tests are not required if the permit limits the engine to operating at one defined load,  $\pm 10\%$ . No pre-tests for compliance are permitted. The emission test shall be



conducted at least 40 operating hours, or at least 1 week, after any engine servicing or tuning. If an emission exceedance is found during any of the three phases of the test, that phase shall be completed and reported. The operator shall correct the exceedance, and the source test may be immediately resumed. Relative accuracy tests required by Rule 218.1 or 40 CFR Part 75 Subpart E shall satisfy this requirement for those pollutants monitored by a CEMS for all applicable operating loads specified in this clause (f)(1)(C)(ii).

- (iii) Use a contractor to conduct the source testing that is approved by the Executive Officer under the Laboratory Approval Program for the necessary test methods.
- (iv) Submit a source test protocol to the Executive Officer for written approval at least 60 days before the scheduled date of the test. The source test protocol shall include the name, address and phone number of the engine operator and a South Coast AQMD-approved source testing contractor that will conduct the test, the application and permit number(s), emission limits, a description of the engine(s) to be tested, the test methods and procedures to be used, the number of tests to be conducted and under what loads, the required minimum sampling time for the VOC test, based on the analytical detection limit and expected VOC levels, and a description of the parameters to be measured in accordance with the I&M plan required by subparagraph (f)(1)(D). The source test protocol shall be approved by the Executive Officer prior to any testing. The operator is not required to submit a protocol for approval if: there is a previously approved protocol that meets these requirements; the engine has not been altered in a manner that requires a permit alteration; and emission limits have not changed since the previous test. If the operator submits the protocol by the required date, and the Executive Officer takes longer than 60 days to approve the protocol, the operator shall be allowed the additional time needed to conduct the test.

(f)

- (v) Provide the Executive Officer at least 30 days prior notice of any source test to afford the Executive Officer the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the engine operator shall notify the Executive Officer as soon as possible of any delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Executive Officer by mutual agreement.
  - (vi) Submit all source test reports, including a description of the equipment tested, to the Executive Officer within 60 days of completion of the test.
  - (vii) By February 1, 2009, provide, or cause to be provided, source testing facilities as follows:
    - (I) Sampling ports adequate for the applicable test methods. This includes constructing the air pollution control system and stack or duct such that pollutant concentrations can be accurately determined by applicable test methods;
    - (II) Safe sampling platform(s), scaffolding or mechanical lifts, including safe access, that comply with California General Safety Orders. Agricultural stationary engines are excused from this subclause if they are in remote locations without electrical power;
    - (III) Utilities for sampling and testing equipment. Agricultural stationary engines are exempt from this subclause if they are on wheels and moved to storage during the off season.
  - (D) Inspection and Monitoring (I&M) Requirements
    - (i) I&M Plan. The operator shall:
      - (I) Submit to the Executive Officer for written approval an I&M plan. One plan application is required for each facility that does not have a NO<sub>x</sub> and CO
- (f)

CEMS for each engine. The I&M plan shall include all items listed in Attachment 1. ~~The owner or operator may request an alternative item(s) in Attachment 1 that is determined by the Executive Officer to be equivalent in meeting the same objectives.~~

- (II) Upon written approval by the Executive Officer, implement the I&M plan as approved.
  - (III) Submit an I&M plan for approval to the Executive Officer for a plan revision before any change in I&M plan operations can be implemented. The operator shall apply for a plan revision prior to any change in emission limits or control equipment.
- (ii) Diagnostic emission checks by a portable NO<sub>x</sub>, CO, and oxygen analyzer shall be conducted at least weekly or every 150 engine operating hours, whichever occurs later.
- (I) If an engine is in compliance for three consecutive diagnostic emission checks, without any adjustments to the oxygen sensor set points, then the engine may be checked monthly or every 750 engine operating hours, whichever occurs later, until there is a noncompliant diagnostic emission check or, for rich-burn engines with three-way catalysts, until the oxygen sensor is replaced. When making adjustments to the oxygen sensor set points that are not within 72 hours prior to the diagnostic emission check, returning to a more frequent diagnostic emission check schedule is not required if the engine is in compliance with the applicable emission limits prior to and after the set point adjustments.
  - (II) For diesel engines and other lean-burn engines that operate at a RECLAIM or former RECLAIM facility or have a NO<sub>x</sub> CEMS, and that are subject to a CO limit more stringent than the 2000 ppmvd limit of Tables II or III, a CO diagnostic emission check shall
- (f)

be performed at least quarterly, or every 2,000 engine operating hours, whichever occurs later.

- (III) For diesel engines and other lean-burn engines that operate at a RECLAIM or former RECLAIM facility or have a NOx CEMS, and that are not subject to a CO limit more stringent than the 2000 ppmvd limit of Tables II or III, diagnostic emission checks are not required.
  - (IV) No engine or control system maintenance or tuning may be conducted within 72 hours prior to the diagnostic emission check, unless it is an unscheduled, required repair.
  - (V) The portable analyzer shall be calibrated, maintained and operated in accordance with the manufacturer's specifications and recommendations and in accordance with the South Coast AQMD's Combustion Gas Periodic Monitoring Protocol for the Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Combustion Sources Subject to Rules 1110.2, 1146, and 1146.1, or any subsequent protocol approved by U.S. EPA and the Executive Officer.
- (iii) Requirements for responding to, diagnosing and correcting breakdowns, faults, malfunctions, alarms, diagnostic emission checks finding emissions in excess of rule or permit limits, and parameters out-of-range.
- (I) For any diagnostic emission check or breakdown that results in emissions in excess of those allowed by this rule or a permit condition, the operator shall correct the problem as soon as possible and demonstrate compliance with another diagnostic emission check, or shut down an engine by the end of an operating cycle, or within 24 hours from the time the operator knew of the breakdown or excess emissions, or reasonably should have known, whichever is sooner.
- (f)

- (II) For excess emissions due to breakdowns that result in NO<sub>x</sub> or CO emissions greater than the concentrations specified in Table VIII, the operator shall not be considered in violation of this rule if the operator demonstrates the all of the following: (1) compliance with subclause (f)(1)(D)(iii)(I), (2) compliance with the reporting requirements of subparagraph (f)(1)(H), and (3) the engine with excess emissions has no more than three incidences of breakdowns with emissions exceeding Table VIII limits in the calendar quarter.

<b>TABLE VIII EXCESS EMISSION CONCENTRATION THRESHOLDS FOR BREAKDOWNS</b>		
	NO <sub>x</sub> (ppmvd) <sup>1</sup>	CO (ppmvd) <sup>1</sup>
Lean-Burn Engines	45	250
Rich-Burn Engines	150	2000
Biogas Engines <sup>2</sup>	185	2000

<sup>1</sup> Corrected to 15% oxygen.

<sup>2</sup> Effective up to the time of compliance with the limits specified in Table III-B, after which the thresholds revert to the applicable lean or rich-burn engine limits.

- (III) Any emission check conducted by South Coast AQMD staff that finds excess emissions will be treated as a violation.
  - (IV) For other problems, such as parameters out-of-range, an operator shall correct the problem and demonstrate compliance with another diagnostic emission check within 48 hours of the operator first knowing of the problem.
  - (iv) If an engine has a NO<sub>x</sub> CEMS and does not have a CO CEMS, it is subject to this subparagraph (f)(1)(D) as it pertains to CO only.
- (f)

(E) Operating Log

Maintain a monthly engine operating log that includes:

- (i) Total hours of operation;
- (ii) Type of liquid and/or type of gaseous fuel;
- (iii) Fuel consumption (cubic feet of gas and gallons of liquid);  
and
- (iv) Cumulative hours of operation since the last source test required in subparagraph (f)(1)(C).

Facilities subject to Regulation XX may maintain a quarterly log for engines that are designated as a process unit on the facility permit until such time that the facility becomes a former RECLAIM facility. The facility shall maintain a monthly engine log starting in the month that it has become a former RECLAIM facility.

(F) New Non-Emergency Electrical Generating Engines

Operators of engines subject to the requirements of subparagraph (d)(1)(L) shall also meet the following requirements.

- (i) The engine generator shall be monitored with a calibrated electric meter that measures the net electrical output of the engine generator system, which is the difference between the electrical output of the generator and the electricity consumed by the auxiliary equipment necessary to operate the engine generator.
- (ii) For engines monitored with a CEMS, the emissions of the monitored pollutants in ppmvd corrected to 15% O<sub>2</sub>, lbs/hr, and lbs/MW<sub>e</sub>-hr and the net MW<sub>e</sub>-hrs produced shall be calculated and recorded for the four 15-minute periods of each hour of operation. The mass emissions of NO<sub>x</sub> shall be calculated based on the measured fuel flow and one of the F factor methods of 40 CFR Part 60, Appendix A, Method 19, or other method approved by the Executive Officer. Mass emissions of CO shall be calculated in the same manner as NO<sub>x</sub>, except that the ppmvd CO shall be converted to lb/scf using a conversion factor of  $0.727 \times 10^{-7}$ .
- (f) (iii) For NO<sub>x</sub> and CO emissions from engines not monitored with a CEMS and VOC emissions from all engines, the

emissions of NO<sub>x</sub>, CO and VOC in lbs/MW<sub>e</sub>-hr shall be calculated and recorded whenever the pollutant is measured by a source test or diagnostic emission check. Mass emissions of NO<sub>x</sub> and CO shall be calculated in the same manner as the previous clause. Mass emissions of VOC shall be calculated in the same manner, except that the ppmvd VOC as carbon shall be converted to lb/scf using a conversion factor of  $0.415 \times 10^{-7}$ .

- (iv) For engines generating combined heat and power that rely on the EEF to comply with Table IV emission standards, the daily and annual useful heat recovered (MW<sub>th</sub>-hrs), net electrical energy generated (MW<sub>e</sub>-hrs) and EEF shall be monitored and recorded.
- (v) Other methods of calculating mass emissions than those specified, such as by direct measurement of exhaust volume, may be used if approved by the Executive Officer. All monitoring, calculation, and recordkeeping procedures must be approved by the Executive Officer.
- (vi) Operators of combined heat and power engines shall submit to the Executive Officer the reports of the following information within 15 days of the end of the first year of operation, and thereafter within 15 days of the end of each calendar year: the annual net electrical energy generated (MW<sub>e</sub>-hrs); the annual useful heat recovered (MW<sub>th</sub>-hrs), the annual EEF calculated in accordance with clause (d)(1)(L)(ii); and the maximum annual EEF allowed by the operating permit. If the actual annual EEF exceeds the allowed EEF, the report shall also include the time periods and emissions for all instances where emissions exceeded any emission standard in Table IV.

**(G) Portable Analyzer Operator Training**

- (f) The portable analyzer tests required by the I&M Plan requirements of subparagraph (f)(1)(D) shall only be conducted by a person who has completed an appropriate South Coast AQMD-approved training program in the operation of portable analyzers and has received a certification issued by the District.

(H) Reporting Requirements

- (i) The operator shall report to the Executive Officer, by telephone (1-800-CUT-SMOG or 1-800-288-7664) or other South Coast AQMD-approved method, any breakdown resulting in emissions in excess of rule or permit emission limits within one hour of such noncompliance or within one hour of the time the operator knew or reasonably should have known of its occurrence. Such report shall identify the time, specific location, equipment involved, responsible party to contact for further information, and to the extent known, the causes of the noncompliance, and the estimated time for repairs. In the case of emergencies that prevent a person from reporting all required information within the one-hour limit, the Executive Officer may extend the time for the reporting of required information provided the operator has notified the Executive Officer of the noncompliance within the one-hour limit.
  - (ii) Within seven calendar days after the reported breakdown has been corrected, but no later than thirty calendar days from the initial date of the breakdown, unless an extension has been approved in writing by the Executive Officer, the operator shall submit a written breakdown report to the Executive Officer which includes:
    - (I) An identification of the equipment involved in causing, or suspected of having caused, or having been affected by the breakdown;
    - (II) The duration of the breakdown;
    - (III) The date of correction and information demonstrating that compliance is achieved;
    - (IV) An identification of the types of excess emissions, if any, resulting from the breakdown;
    - (V) A quantification of the excess emissions, if any, resulting from the breakdown and the basis used to quantify the emissions;
- (f)



- (VI) Information substantiating whether the breakdown resulted from operator error, neglect or improper operation or maintenance procedures;
  - (VII) Information substantiating that steps were immediately taken to correct the condition causing the breakdown, and to minimize the emissions, if any, resulting from the breakdown;
  - (VIII) A description of the corrective measures undertaken ) and/or to be undertaken to avoid such a breakdown in the future; and
  - (IX) Pictures of any equipment which failed, if available.
- (iii) Within 15 days of the end of each calendar quarter, the operator shall submit to the Executive Officer a report that lists each occurrence of a breakdown, fault, malfunction, alarm, engine or control system operating parameter out of the acceptable range established by an I&M plan or permit condition, or a diagnostic emission check that finds excess emissions. Such report shall be in a South Coast AQMD-approved format, and for each incident shall identify the time of the incident, the time the operator learned of the incident, specific location, equipment involved, responsible party to contact for further information, to the extent known the causes of the event, the time and description of corrective actions, including shutting an engine down, and the results of all portable analyzer NOx and CO emissions checks done before or after the corrective actions. The operator shall also report if no incidents occurred.
- (2) Portable engines:  
The operator of any portable engine shall maintain a monthly engine operating log that includes:
- (i) Total hours of operation; or
  - (ii) Type of liquid and/or type of gaseous fuel; and
  - (iii) Fuel consumption (cubic feet of gas and gallons of liquid).
- Facilities subject to Regulation XX may maintain a quarterly log for engines that are designated as a process unit on the facility permit until such time that the facility becomes a former RECLAIM facility.
- (f)

shall maintain a monthly engine log starting in the month that it has become a former RECLAIM facility.

(3) Recordkeeping for All Engines

All data, logs, test reports and other information required by this rule shall be maintained for at least five years and made available for inspection by the Executive Officer.

(g) Test Methods

Testing to verify compliance with the applicable requirements shall be conducted in accordance with the test methods specified in Table IX, or any test methods approved by CARB and EPA, and authorized by the Executive Officer.

<b>TABLE IX TESTING METHODS</b>	
<b>Pollutant</b>	<b>Method</b>
NO <sub>x</sub>	South Coast Air Quality Management District Method 100.1
CO	South Coast Air Quality Management District Method 100.1
VOC	South Coast Air Quality Management District Method 25.1* or Method 25.3*

\* Excluding ethane and methane

A violation of any standard of this rule established by any of the specified test methods, or any test methods approved by the CARB or EPA, and authorized by the Executive Officer, shall constitute a violation of this rule.

(h) Alternate Compliance Option

(1) In lieu of complying with the applicable emission limits by the effective date specified in Table III-B or subparagraph (d)(1)(F), owners or operators of biogas-fired units may elect to defer compliance in quarterly increments up to one additional year, provided the owner or operator:

(A) Submits an alternate compliance plan and pays a Compliance Flexibility Fee, as provided for in paragraph (h)(2), to the Executive Officer at least 60 days prior to the applicable compliance date in either Table III-B or subparagraph (d)(1)(F) for qualified biogas technology demonstration project engines, and

(B) Maintains on-site a copy of verification of Compliance Flexibility Fee payment and South Coast AQMD approval of the alternate compliance plan that shall be made available upon request to South Coast AQMD staff.

(2) Plan Submittal

The alternate compliance plan submitted pursuant to paragraph (h)(1) shall include:

- (A) A completed South Coast AQMD Form 400A with company name, South Coast AQMD Facility ID, identification that application is for a compliance plan (Section 7a of form), and identification that request is for Rule 1110.2 Compliance Flexibility Fee option (Section 9 of form);
- (B) Attached documentation of unit permit ID, unit rated brake horsepower (bhp), and fee calculation;
- (C) Filing Fee payment; and
- (D) Compliance Flexibility Fee payment as calculated by the following equation:

$$CFF = bhp \times R \times Q$$

Where,

CFF = Compliance Flexibility Fee, \$

bhp = rated brake horsepower of unit

R = Fee Rate = \$11.75 per brake horsepower per quarter

Q = Number of quarters (up to four)

(3) Usage of Compliance Flexibility Fee funds

The funds collected from the Compliance Flexibility Fee will be applied to South Coast AQMD NOx reduction programs pursuant to protocols approved under South Coast AQMD rules.

(i) Exemptions

(1) The provisions of subdivision (d) shall not apply to:

- (A) All orchard wind machines powered by an internal combustion engine.
- (B) Emergency standby engines, engines used for fire-fighting and flood control, and any other emergency engines approved by the Executive Officer, which have permit conditions that limit operation to 200 hours or less per year as determined by an

elapsed operating time meter, and agricultural emergency standby engines that are exempt from a South Coast AQMD permit and operate 200 hours or less per year as determined by an elapsed operating time meter.

- (C) Laboratory engines used in research and testing purposes.
- (D) Engines operated for purposes of performance verification and testing of engines.
- (E) Auxiliary engines used to power other engines or gas turbines during start-ups.
- (F) Portable engines that are registered under the state registration program pursuant to Title 13, Article 5 of the CCR.
- (G) Nonroad engines, with the exception that subparagraph (d)(2)(A) shall apply to portable generators.
- (H) Engines operating on San Clemente Island.
- (I) Agricultural stationary engines provided that:
  - (i) The operator submits documentation to the Executive Officer by the applicable date in Table V when permit applications are due that the applicable electric utility has rejected an application for an electrical line extension to the location of the engines, or the Executive Officer determines that the operator does not qualify, due to no fault of the operator, for funding authorized by California Health and Safety Code Section 44229; and
  - (ii) The operator replaces the engines, in accordance with the compliance schedule of Table X, with engines certified by CARB to meet the Tier 4 emission standards of 40 CFR Part 1039 Section 1039.101, Table 1. These Tier 4 replacement engines shall be considered to comply with Best Available Control Technology; and
  - (iii) The operator does not operate the Tier 4 engines in a manner that exceeds the not-to-exceed standards of 40 CFR Part 1039 Section 1039.101(e), as determined by the test methods of subdivision (g) of this rule.

(i)

<b>TABLE X COMPLIANCE SCHEDULE FOR INSTALLATION OF NEW TIER 4 STATIONARY AGRICULTURAL ENGINES</b>	
<b>Action Required</b>	<b>Due Date</b>
Submit to the Executive Officer applications for permits to construct engine modifications, control equipment, or replacement engines	March 1, 2013
Initiate construction of engine modifications, control equipment, or replacement engines	September 30, 2013, or 30 days after the permit to construct is issued, whichever is later
Complete construction and comply with applicable requirements	January 1, 2014, or 60 days after the permit to construct is issued, whichever is later
Complete initial source testing	March 1, 2014, or 120 days after the permit to construct is issued, whichever is later

- (J) An engine start-up, until sufficient operating temperatures are reached for proper operation of the emission control equipment or for the tuning of the engine and/or emission control equipment, and an engine shutdown period. The periods shall not exceed 30 minutes, unless the Executive Officer approves in writing a longer period not exceeding two hours for an engine and makes it a condition of the engine permit.
- (K) An engine start-up, after an engine overhaul or major repair requiring removal of a cylinder head or for the installation or the replacement of catalytic emission control equipment, for a period not to exceed four operating hours.
- (L) The initial commissioning of a new engine for a period specified by permit conditions, provided the operator takes measures to reduce emissions and the duration of the commissioning to the extent possible. The commissioning period shall not exceed 150 operating hours.

- (i) (M) An engine used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity, or natural gas is available within a ½ mile radius, has a manufacturer’s rating of 100 bhp or less, and is fired exclusively on diesel #2, compressed natural gas, or liquefied petroleum gas.
- (N) Any engine at a RECLAIM or former RECLAIM facility that is subject to a NOx emission limit in a different rule for an industry-specific category defined in Rule 1100 – Implementation Schedule for NOx facilities.
- (O) An engine operated in either the Southern California Coastal Waters or Outer Continental Shelf Waters provided:
  - (i) The engine is used to power a crane;
  - (ii) The engine is certified by CARB to meet the Tier 4 – Final emission standards of 40 CFR Part 1039 Section 1039.101 Table 1;
  - (iii) The engine is operated per the specifications of the engine manufacturer; and
  - (iv) The operator submits an I&M Plan to the Executive Officer for approval and implementation, pursuant to the requirements of subparagraph (f)(1)(D).
- (2) The facility operator of MM PRIMA DESHECHA ENERGY, LLC, or any of its successors, shall not be required to meet the emissions requirements specified in Table III-B if they submit a detailed retirement plan that is approved by the Executive Officer for the permanent shutdown of all equipment subject to Rule 1110.2 by October 1, 2022. The plan shall describe in detail the steps and schedule that will be taken to remove the equipment or render the equipment permanently inoperable by October 1, 2022 and shall require the surrendering of the permits for the equipment by that date. The plan shall be submitted before July 1, 2016 and include:
  - (A) South Coast AQMD Form 400A with company name, South Coast AQMD Facility ID, and permit number(s) for the subject equipment; and
  - (B) Filing Fee payment pursuant to Rule 306.The Executive Officer shall act on the plan before January 1, 2017.

- (i) (3) The provisions of this rule shall not apply to engines~~units~~ located at landfills or publicly owned treatment works that are subject to a NOx emission limit in a Regulation XI rule adopted or amended after November 1, 2019.

**ATTACHMENT 1**

An I&M Plan submitted to the Executive Officer for approval and implementation, pursuant to the requirements of paragraphs (e)(4) and (e)(6), and subparagraph (f)(1)(D) of the rule, shall include:

- A. Identification of engine and control equipment operating parameters necessary to maintain pollutant concentrations within the rule and permit limits. This shall include, but not be limited to:
  - 1. Procedures for using a portable NO<sub>x</sub>, CO and oxygen analyzer to establish the set points of the air-to-fuel ratio controller (AFRC) at 25%, 60% and 95% load (or fuel flow rate),  $\pm 5\%$ , or the minimum, midpoint and maximum loads that actually occur during normal operation,  $\pm 5\%$ , or at any one load within the  $\pm 10\%$  range that an engine permit is limited to in accordance with clause (f)(1)(C)(ii) of the rule;
  - 2. Procedures for verifying that the AFRC is controlling the engine to the set point during the daily monitoring required by subdivision D of this attachment;
  - 3. Procedures for reestablishing all AFRC set points with a portable NO<sub>x</sub>, CO and oxygen analyzer whenever a set point must be readjusted, within 24 hours of an oxygen sensor replacement, and, for rich-burn engines with three way catalysts, between 100 and 150 engine operating hours after an oxygen sensor replacement;
  - 4. For engines with catalysts, the maximum allowed exhaust temperature at the catalyst inlet, based on catalyst manufacturer specifications;
  - 5. For lean-burn engines with selective catalytic control devices, the minimum exhaust temperature at the catalyst inlet required for reactant flow (ammonia or urea), and procedures for using a portable NO<sub>x</sub> and oxygen analyzer to establish the acceptable range of reactant flow rate, as a function of load.

Parameter monitoring is not required for diesel engines without exhaust gas recirculation and catalytic exhaust control devices.

- B. Procedures for alerting the operator to emission control malfunctions. Engine control systems, such as air-to-fuel ratio controllers, shall have a malfunction indicator light and audible alarm.
- C. Procedures for diagnostic emission checks conducted by a portable NO<sub>x</sub>, CO, and oxygen analyzer per the requirements of clause (f)(1)(D)(ii) of the rule.
- D. Procedures for at least daily monitoring, inspection and recordkeeping of:



1. engine load or fuel flow rate;
2. the set points, maximums and acceptable ranges of the parameters identified by subdivision A of this attachment, and the actual values of the same parameters;
3. the engine elapsed time meter operating hours;
4. the operating hours since the last diagnostic emission check required by clause (f)(1)(D)(ii) of the rule;
5. for rich-burn engines with three-way catalysts, the difference of the exhaust temperatures ( $\Delta T$ ) at the inlet and outlet of the catalyst (changes in the  $\Delta T$  can indicate changes in the effectiveness of the catalyst);
6. engine control system and AFRC system faults or alarms that affect emissions.

The daily monitoring and recordkeeping may be done in person by the operator, or by remote monitoring.

- E. Procedures for responding to, diagnosing and correcting breakdowns, faults, malfunctions, alarms, diagnostic emission checks finding emissions in excess of rule or permit limits, and parameters out-of-range, per the requirements of clause (f)(1)(D)(iii) of the rule.
- F. Procedures and schedules for preventive and corrective maintenance.
- G. Procedures for reporting noncompliance to the Executive Officer in accordance with subparagraph (f)(1)(H) of the rule.
- H. Procedures and format for the recordkeeping of monitoring and other actions required by the plan.

## ATTACHMENT H

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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### Final Staff Report

### Proposed Rule 1110.3 – Emissions from Linear Generators

### Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines

November 2023

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Senator (Ret.)  
Senate Rules Committee Appointee

Vice-Chair: MICHAEL A. CACCIOTTI  
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WAYNE NASTRI

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**EXECUTIVE SUMMARY**

Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines is a source-specific rule which applies to non-RECLAIM facilities and RECLAIM facilities with engines greater than 50 rated brake horsepower. The rule was last amended in 2019 to implement Control Measure CMB-05 of the Final 2016 Air Quality Management Plan. During the rule development process, linear generators were introduced as an alternative technology to reduce emissions and stakeholders commented on the unique characteristics of linear generators. Unlike internal combustion engines (ICEs), linear generators produce electricity by driving magnets through copper coils in a linear motion. One unique feature of linear generators is that the thermochemical reaction takes place at lower temperatures than ICE, which results in lower emissions without add-on control devices (e.g., selective catalytic reduction). In addition, linear generators utilize a parametric monitoring system that monitors performance and controls emission levels. Linear generators are currently being used for prime power applications but can also be used for emergency backup power, and are considered a technology that can potentially assist in implementing Control Measure L-CMB-04 of the Final 2022 Air Quality Management Plan. In response to stakeholder comments, Proposed Rule 1110.3 – Emissions from Linear Generators (PR 1110.3), is being developed to allow for specific considerations of the technology and capabilities of linear generators.

Currently, a total of six units with Permits to Operate and 82 Permits to Construct will be affected by PR 1110.3. It is possible that the number of units subject to PR 1110.3 in the future might be considerably more as the technology matures. PR 1110.3 establishes emission limits for linear generators as well as source testing, reporting, and recordkeeping requirements. Proposed Amended Rule 1110.2 (PAR 1110.2) will remove provisions currently applicable to linear generators.

PR 1110.3 and PAR 1110.2 were developed through a public process. Staff held three Working Group Meetings on November 9, 2022, December 8, 2022, and February 23, 2023. In addition, a Public Workshop was held on January 25, 2023.

## **CHAPTER 1: BACKGROUND**

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**INTRODUCTION**

**BACKGROUND**

**REGULATORY HISTORY**

**AFFECTED FACILITIES AND EQUIPMENT**

**PUBLIC PROCESS**

## INTRODUCTION

Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines (Rule 1110.2) is source-specific rule which applies to facilities with engines greater than 50 rated brake horsepower. Rule 1110.2 currently regulates linear generators and specifies emission limits and other requirements applicable to linear generators. In response to stakeholder comments, PR 1110.3 is being developed to allow for specific considerations of the technology and capabilities of linear generators. PR 1110.3 will establish emission limits for linear generators, as well as testing, monitoring and reporting, and recordkeeping requirements. In addition, Rule 1110.2 will be amended to remove provisions currently applicable to linear generators.

## BACKGROUND

Rule 1110.2 applies to all stationary and portable engines greater than 50 rated brake horsepower. Rule 1110.2 was last amended in 2019 to implement Control Measure CMB-05 of the Final 2016 Air Quality Management Plan (2016 AQMP). During the rule development process, linear generator technology was introduced as an option to further reduce NOx emissions. At that time, it was estimated that emissions from linear generators would approach California Air Resources Board's (CARB) Distributed Generation (DG) levels.

Staff is aware of two manufacturers of linear generators. Unlike ICEs, linear generators produce electricity by driving magnets through copper coils in a linear motion (see Figures 1 and 2). In this process, a mixture of fuel and air are compressed, causing a chemical reaction that drives the linear motion. One of the features that makes linear generators unique is that this thermochemical reaction occurs at lower temperatures than internal combustion engines, resulting in lower NOx and CO emissions. Linear generators also do not need add-on control technologies such as selective catalytic reduction (SCR) to reduce NOx to near-zero emissions. Although some may be equipped with an oxidation catalyst, they are not dependent on this catalyst to reach a destruction temperature and thus, start-up emissions are low. For those linear generators that are equipped with an oxidation catalyst, due to the lower reaction temperatures, the oxidation catalyst's ability to control VOC emissions is limited and its main function is to reduce CO emissions. In addition, linear generators utilize a parametric monitoring system to maintain proper fuel and air injection to meet energy demands. The parametric monitoring system works by monitoring and adjusting air and fuel flow to ensure proper air-to-fuel ratio is achieved, which also ensures emissions are under control. Finally, linear generators have the ability to operate on different fuels without any hardware changes to the equipment. However, staff has only received source test data for natural gas fueled units; source test data was not provided for other fuel types.

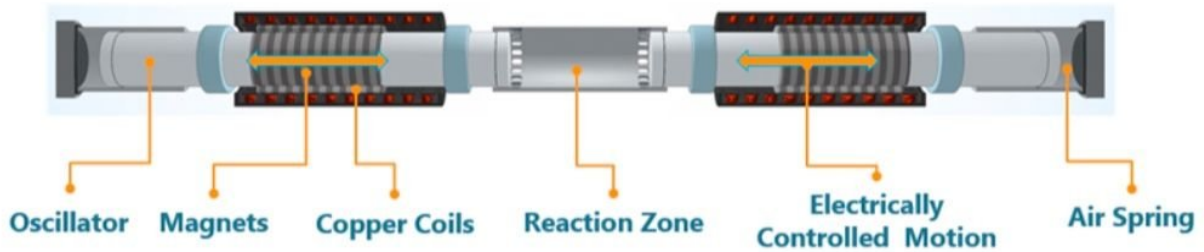


Figure 1. Mainspring Linear Generator Components<sup>1</sup>

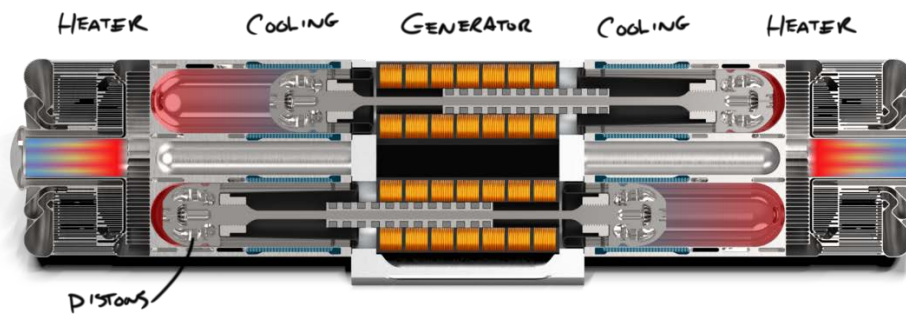


Figure 2. Hyliion Karno Linear Generator Components<sup>2</sup>

At the time of its introduction, linear generators were being used as a stationary prime power source at facilities, but it is anticipated that they can be configured as portable units and can also be used for emergency applications. In response to stakeholder comments highlighting the unique characteristics of linear generators, PR 1110.3 is being developed to allow for specific considerations of linear generator technology running solely on natural gas. PR 1110.3 establishes emission limits for linear generators as well as testing, reporting, and recordkeeping requirements. PAR 1110.2 will remove provisions currently applicable to linear generators.

## REGULATORY HISTORY

### *Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines*

South Coast AQMD Rule 1110.2 was adopted on August 3, 1990 and was last amended on November 1, 2019. Rule 1110.2 applies to stationary and portable engines greater than 50 rated brake horsepower. The 2019 amendment of Rule 1110.2 included concentration limits for new electrical generating devices in addition to the listed emission standards expressed as pounds of NO<sub>x</sub> per Megawatt-Hour. Additionally, the 2019 amendments added a provision which allowed new engines installed prior to January 1, 2024 that can achieve NO<sub>x</sub> concentration limits at all times with no ammonia emissions from add-on equipment to meet an interim VOC concentration

<sup>1</sup> <https://www.greentechmedia.com/articles/read/mainspring-energys-linear-generators-to-roll-out-through-150m-deal-with-nextera>

<sup>2</sup> <https://www.hyliion.com/karno/>



limit of 25 parts per million by volume, dry (ppmvd). This provision was added to Rule 1110.2 to account for the introduction of linear generator technology.

In addition to the emission limits, Rule 1110.2 included a cap on the number of units that can be installed while meeting the alternative VOC concentration limit of 25 ppmvd to ensure that the VOC emissions from such engines would not exceed South Coast AQMD's air quality significance threshold for operational VOCs (e.g., 55 pounds per day) under the California Environmental Quality Act (CEQA)<sup>3</sup>. Based on calculations, staff recommended a total VOC emission cap not to exceed 45 pounds per day of VOC which provided 10 pounds per day to allow for any differences in variables such as generator size and operational hours.

### **AFFECTED FACILITIES AND EQUIPMENT**

PR 1110.3 applies to all linear generators and based on permitting data and South Coast AQMD databases, staff identified 88 applications submitted at 22 facilities that meet the applicability requirements of PR 1110.3. Table 1 contains the facility applications and permits affected by PR 1110.3.

**TABLE 1**  
**PR 1110.3 AFFECTED FACILITY APPLICATIONS & PERMITS**

<b>Application Status</b>	
Permit to Construct Issued	82
Permit to Operate Granted	6
Applications Cancelled	6
Applications Rejected	2
<b>Total</b>	<b>96</b>

### **PUBLIC PROCESS**

The development of PR 1110.3 and PAR 1110.2 was conducted through a public process. Working Group Meetings were held on November 9, 2022, December 8, 2022, and February 23, 2023. The Working Group Meetings included representatives from affected facilities, environmental and community groups, other agencies, consultants, and interested parties. The purpose of the Working Group Meetings was to discuss details of PR 1110.3 and PAR 1110.2 and to listen to concerns and issues with the objective to build consensus and resolve key issues.

In addition, one Public Workshop was held on January 25, 2023. The purpose of the Public Workshop was to present the proposed amended rule language to the public and to stakeholders and to solicit comments.

<sup>3</sup> South Coast AQMD Air Quality Significance Thresholds, March 2023, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf>

## **CHAPTER 2: SUMMARY OF PROPOSAL**

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**INTRODUCTION**

**PROPOSED RULE 1110.3**

**PROPOSED AMENDED RULE 1110.2**

## INTRODUCTION

Linear generators were first considered by South Coast AQMD during the 2019 amendment of Rule 1110.2. Based on staff's evaluation of the technology, and in response to a manufacturer's request, regulatory provisions for linear generators were included in Rule 1110.2 at that time. As such, emissions from linear generators are currently regulated by Rule 1110.2. However, due to the unique characteristics of linear generators, a separate rule, PR 1110.3, will specifically address linear generator technology and establish concentration-based emission limits, as well as other requirements. In addition, Rule 1110.2 will be amended to remove the provisions applicable to linear generators. The following provides a discussion of the various changes proposed in PR 1110.3 and PAR 1110.2.

### PROPOSED RULE 1110.3

#### *Subdivision (a) – Purpose*

The purpose of PR 1110.3 is to reduce oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds (VOCs), and carbon monoxide (CO) from linear generators.

#### *Subdivision (b) – Applicability*

PR 1110.3 applies to all linear generators fueled solely by natural gas, both portable and stationary, regardless of size. Linear generators are currently being used as a stationary prime power source at facilities, but it is anticipated that they can be configured as portable units and can also be used for emergency applications.

PR 1110.3 only applies to linear generators fueled solely by natural gas because source test data has not been provided for other fuels. The narrowed applicability will allow the research and development of linear generator technology operating on other fuels like biogas, hydrogen, ammonia, or any other fuels. All existing linear generators in South Coast AQMD are operated solely on natural gas.

#### *Subdivision (c) – Definitions*

PR 1110.3 incorporates definitions from other South Coast AQMD rules to define types of facilities, equipment, and other rule terms. New or modified definitions added to PR 1110.3 include:

- **IDENTICAL UNITS** means any Units with the same manufacturer, model, and output rating.  
This definition provides clarification for the determination of units that can qualify for pooled source testing under paragraph (f)(10).
- **LINEAR GENERATOR** means any power generation technology that uses a thermochemical reaction to create linear motion that is directly converted into electricity.  
With input from stakeholders and South Coast AQMD engineering staff, this definition provides clarification and distinguishes linear generator technology from generators that utilize internal combustion engines to generate electricity.
- **TUNING** means adjusting, optimizing, rebalancing, or other similar action operations to an electric generating Unit or an associated control device or as otherwise defined in the Permit

to Operate. Tuning does not include automatic adjustments made by a unit's control system to meet load fluctuation.

This definition has been modified to provide clarification and address the specific operating conditions of linear generator technology due to the utilization of a parametric monitoring system to control and monitor its operation. For example, adjustments to meet load fluctuations or any adjustment made automatically by the control system would not be considered tuning.

- UNIT means any single linear generator core.

To date, linear generators in operation within South Coast AQMD were installed as a single packaged product that contains two individual identical cores within each package. Each core within the package has thus far been issued a separate Permit to Operate. Despite the current packaged product consisting of two cores, this definition is included to provide clarification that the term Unit refers to a single linear generator core for the purposes of this rule. Based on this definition, a manufacturer expressed interest in obtaining Permits to Operate based on the packaged product instead of individual cores. They also expressed concerns about permitting costs for current and future packaged products that might contain 3 or more cores, resulting in the necessity to obtain separate Permits to Operate for each core. The definition does not preclude South Coast AQMD from permitting linear generators differently in the future (e.g. a single permit for a packaged product with multiple cores).

#### *Subdivision (d) – Emission Limits*

Subdivision (d) specifies emission limits in Table 1 of PR 1110.3 (Table 2 in Staff Report) and applies to all natural gas fueled linear generators, both portable and stationary, regardless of size. During the 2019 amendment of Rule 1110.2, staff and stakeholders had concerns about the performance of the equipped oxidation catalyst and its ability to impactfully reduce VOC emissions. As a result, a limited number of linear generators were allowed to comply with a VOC limit of 25 ppmvd for an interim period. However, beginning January 1, 2024, all new units are required to meet the emission limits in Table IV of Rule 1110.2. During this phase-in period, VOC emissions in excess of 10 ppmvd are tabulated by South Coast AQMD staff and the total VOC emissions are not to exceed 45 pounds per day.

During the PR 1110.3 rule making process, staff held meetings with stakeholders to discuss Rule 1110.2 emission limits. Source test data for natural gas fueled units were provided by a manufacturer showing that linear generators are able to comply with the emission limits in Table 2 of the Staff Report. A manufacturer also indicated that the oxidation catalyst contribution to achieving VOC emission reductions were negligible due to the lower reaction temperatures, and VOC emissions are primarily controlled through the parametric monitoring system. After further discussion, it was determined that the 25 ppmvd VOC limit was not necessary and thus, those provisions were not carried over from Rule 1110.2. The emission limits in Table 2 of the Staff Report will take effect upon adoption of PR 1110.3 and will apply to all units with Permits to Operate issued on or after the date of adoption.

**TABLE 2  
CONCENTRATION LIMITS FOR LINEAR GENERATORS**

<b>Units with a Permit to Operate Issued on or after [Date of Adoption]</b>			
<b>Fuel Type</b>	<b>NO<sub>x</sub> (ppmv)<sup>1</sup></b>	<b>CO (ppmv)<sup>1</sup></b>	<b>VOC (ppmv)<sup>2</sup></b>
Natural Gas	2.5	12	10

<sup>1</sup> Parts per million by volume, corrected to 15% oxygen on a dry basis and averaged over 15 minutes.

<sup>2</sup> Parts per million by volume, measured as carbon, corrected to 15% oxygen on a dry basis, and averaged over the sampling time required by the test method.

In addition, emissions from various fuel types were also discussed and preliminary data provided by a manufacturer indicated that emissions from the different fuel types were compliant with the same emissions limits. However, staff has only received source test data for natural gas fueled units; source test data was not provided for other fuel types.

*Subdivision (e) – Maintenance Requirements*

Paragraphs (e)(1) and (e)(2) are intended to ensure that owners and operators of linear generators perform scheduled maintenance per manufacturer’s recommendations. In addition, a copy of the manufacturer’s operating and maintenance manual is required to be kept and made available for inspection to verify that maintenance is indeed being performed.

*Subdivision (f) – Source Testing*

Similar to Rule 1110.2, paragraph (f)(1) requires non-pooled units to be source tested periodically for NO<sub>x</sub>, VOC reported as carbon, and CO concentrations. Staff originally proposed a frequency of at least once every two years from the date of the previous test, or every 8,760 operating hours, whichever occurs first. Due to the low NO<sub>x</sub> and CO emissions from linear generators, the utilization of a parametric monitoring system to control emissions, and the cost of source testing, stakeholders questioned the necessity of the proposed frequency and requested a reduced source testing frequency of at least once every five years. Additionally, one manufacturer explained that the procedures for performing the emissions checks required them to override their safety protocol in order to access the testing ports. Source test data for natural gas fueled units was provided to substantiate their request. An initial source test will be required within six months of installation of a Unit or within six months of not meeting the eligibility requirements for pooled source testing. Subsequently, source testing shall be conducted once every five years from the date of the previous source test, no later than the last day of the calendar month that the test is due.

PR 1110.3 also references to a generic source test protocol in several rule provisions. A generic source testing protocol is one in which an owner or operator submits a protocol for review and once it has been reviewed and approved, can be used for subsequent source testing on identical units without the need to submit separate protocols for review.

Stakeholders also expressed concerns about the necessity, cost, and logistics of source testing multiple Units that are identical and located within the same facility. In response to these concerns, staff has proposed the allowance of pooled initial source testing for facilities with six or more identical units. The allowance for pooled testing reduces the source testing costs and logistical concerns.

Under the pooled testing schedule, specified in paragraph (f)(10), at least one-third of the units are required to be initially source tested. Subsequent source testing shall be conducted on a different one-third of the Units from the previous source test. Source testing for pooled units is required to be conducted at least once every three years from the date of the previous source test, no later than the last day of the calendar month that the test is due.

Subparagraph (f)(10)(B) specifies that units installed after the initial source test are subject to the subsequent pooled emission testing schedule. Units installed after the initial source test that are not identical to the units in the pool are required to be source tested separately as required in paragraph (f)(1). PR 1110.3 defines the term identical units. If additional identical units are installed, the required one-third of units to be source tested will be based on the new total number of units. For example, if a facility initially installed nine identical units, and later installed 15 more identical units, an owner or operator would be required to source test eight units out of 24 identical units total to comply with the requirement to source test at least one-third of pooled units. Furthermore, the source test schedule for additional identical units will be based on date of the last source test. For example, if a source test for pooled units was conducted in March 2023 and then new identical units were installed in 2024, then the next source test would be required by March 2026.

If any unit subject to the pooled source testing exceeds any of the emission limits, the owner or operator will be required to repair the unit and repeat the source test within 60 days of repair. In this event, additional source tests will also be required to be conducted on an additional one-third of the pooled units.

Based on the one-third testing schedule, staff expects all of the pooled units to be source tested within a period of nine years, at the latest. For example, a facility installing 10 identical units under this proposed testing schedule will be required to test four units during the initial source test in order to meet the one-third source testing criteria. The next pool of source tests is required to occur on four different units after three years. Then, after another three years, the remaining two units and two units that were source tested in the first pool are required to source test.

#### *Subdivision (g) – Monitoring, Recordkeeping, and Reporting*

Ensuring that the parametric monitoring system is functioning properly is of utmost importance, as its main function is to ensure that the unit is operating within specified parameters and that emissions are controlled. In order to ensure the performance and robustness of the parametric

monitoring system, staff is proposing diagnostic emissions checks by a portable NO<sub>x</sub>, CO, and oxygen analyzer at least once every two years from the date of the previous emissions test, no later than the last day of the calendar month that the test is due. A previous emissions test includes both source tests as well as diagnostic emission checks. The diagnostic emission testing would be conducted in accordance with South Coast AQMD's Combustion Gas Periodic Monitoring Protocol for the Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Combustion Sources Subject to Rules 1110.2, 1146, and 1146.1. This protocol for portable analyzer testing was first approved on February 1, 2008, and most recently updated on May 15, 2020. The portable analyzer testing shall also be conducted by a person who has completed an appropriate South Coast AQMD-approved training program and has received a certification issued by the South Coast AQMD.

Paragraph (g)(1) requires owners and operators of linear generators to maintain a revenue grade net output meter that meets ANSI C12.20 or an equivalent standard and a parametric monitoring system. It also requires the inspection and maintenance of the parametric monitoring system, as well as sensors and meters, per manufacturer's recommendations.

In response to comments from stakeholders, staff modified provisions in subparagraph (g)(1)(D), which requires the owner or operator to maintain a parametric monitoring system including the associated components necessary to maintain a proper air-to-fuel ratio. Lastly, owners or operators are required to monitor and record the parametric monitoring system at least daily. These provisions were added in lieu of requiring the submittal of a separate Inspection and Monitoring (I & M), as is required in Rule 1110.2.

Records play an important role in verifying compliance with PR 1110.3. Subparagraph (g)(2)(A) requires monthly records to be kept for various parameters. In addition, records to demonstrate compliance with other rule provisions are also required to be maintained for a period of five years and made available to the South Coast AQMD upon request for compliance verification.

Subparagraph (g)(3) requires owners and operators to submit source test results within 60 days of completion of the test.

In the normal course of operation, there is potential for complex equipment such as linear generators to experience malfunctions. Staff's primary concern during these events are emissions that exceed rule limits or permit conditions. South Coast AQMD Rule 430 – Breakdown Provisions contains requirements during breakdowns that units subject to PR 1110.3 would be required to comply with.

#### *Subdivision (h) – Exemptions*

This subdivision was created to capture future considerations and applications for linear generators. Staff anticipates that there will be expansion and adoption of linear generator technologies into various industrial sectors and these provisions will provide allowances for the research and development of linear generators that could ensure durability and robustness of the technology.

Paragraph (h)(1) provides an exemption from subdivision (d) and subparagraph (g)(1)(A) for linear generators used in a laboratory for testing and research purposes and paragraph (h)(2) provides an

exemption from subdivision (f) and subparagraph (g)(1)(A) for emergency standby units, units used for fire-fighting and flood control, or any other emergency unit approved by the Executive Officer, which have permit conditions that limit operation to 200 hours or less per year as determined by an operational non-resettable totalizing time meter.

## **PROPOSED AMENDED RULE 1110.2**

### *Subdivision (c) – Definitions*

PAR 1110.2 incorporates definitions from other South Coast AQMD rules to define types of facilities, equipment, and other rule terms. One existing definition was amended and a single new definition was added to PAR 1110.2:

- ENGINE is any spark- or compression-ignited internal combustion engine, including engines used for control of VOCs, but not including Linear Generators or engines used for self-propulsion.

This definition was amended to include “linear generators” as to exclude them from any applicability when the term “engine” is referenced in this rule.

- LINEAR GENERATOR means any power generation technology that uses a thermochemical reaction to create linear motion that is directly converted into electricity.

This definition was created with input from stakeholders and South Coast AQMD engineering staff and provides clarification and distinguishes linear generator technology from internal combustion engines.

### *Subdivision (d) – Requirements*

Clause (d)(1)(L)(i) subjects new non-emergency electrical generators to the NO<sub>x</sub>, CO, and VOC emission limits in Table IV. Table IV contains a column that reflects emission standards, in concentration limits, for new non-emergency electrical generators, which was specifically added for linear generators.

PAR 1110.2 will update Table IV to remove the concentration limit column, and applicable footnotes, as it was originally created for linear generators. The emission limits in Table 3 will take effect upon adoption of PAR 1110.2.



**TABLE 3  
UPDATED EMISSION STANDARDS**

<b>TABLE IV EMISSION STANDARDS FOR NEW ELECTRICAL GENERATION DEVICES</b>	
<b>Pollutant</b>	<b>Emission Standard (lbs/MW-hr)<sup>1</sup></b>
NO <sub>x</sub>	0.070
CO	0.20
VOC	0.10 <sup>2</sup>

<sup>1</sup> The averaging time of the emission standard for VOC is the sampling time required by the test method.

<sup>2</sup> Mass emissions of VOC shall be calculated using a ratio of 16.04 pounds of VOC per lb-mole of carbon.

Clause (d)(1)(L)(vii) allows units installed prior to January 1, 2024 that can achieve NO<sub>x</sub> concentration limits at all times with no ammonia emissions from add-on control equipment to meet an interim VOC concentration limit of 25 ppmvd. Additionally, Rule 1110.2 includes a cap on the number of units that can be installed meeting the alternative VOC concentration limit of 25 ppmvd. The total VOC emission cap from these units are not to exceed 45 pounds per day of VOC. This provision was included to ensure that the emissions from such engines would not exceed South Coast AQMD's Air Quality Significance Threshold under CEQA for operational VOC emissions.

PAR 1110.2 will remove this clause, as it will be obsolete and no longer applicable.

*Subdivision (f) – Monitoring, Testing, Recordkeeping and Reporting*

Subparagraph (f)(1)(D) requires operators to submit an I & M Plan to the Executive Officer for approval. Since linear generators utilize a parametric monitoring system to control emissions, it was proposed by stakeholders that this system would be a substitute for periodic portable analyzer testing. As a result, there were concerns from stakeholders as to how linear generator operators can meet the specific requirements of this subparagraph. In response to this request, subclause (f)(1)(D)(i)(1) was added to provide operators with flexibility and allowed them to submit an alternative I&M Plan for the Executive Officer's consideration.

PAR 1110.2 will be updated to remove the provision allowing for I&M plan flexibility, as it was an allowance added specifically for linear generator operators.

Subclause (f)(1)(D)(ii)(V) requires that the portable analyzer be calibrated, maintained and operated in accordance with the manufacturer's specifications and recommendations and the Protocol for the Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Stationary Engines Subject to South Coast Air Quality Management District Rules 1110.2, 2, 1146, and 1146.1. Since the protocol was amended on May 15, 2020, the reference to the protocol was updated to reflect the current title.

*Subdivision (i) – Exemptions*

This subdivision in Rule 1110.2 does not currently contain any exemptions specifically for linear generators. PAR 1110.2 will amend paragraph (i)(3) to change “units” to “engines” to provide clarification that the provisions of Rule 1110.2 do not apply to linear generators located at landfills or Publicly Owned Treatment Works, as those units would be subject to Rule 1110.3. The use of the term “engine” is deliberate and is intended to differentiate and distinguish linear generator technology from internal combustion engines.

## **CHAPTER 3: IMPACT ASSESSMENTS**

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**INTRODUCTION**

**COSTS**

**EMISSION REDUCTIONS**

**COST-EFFECTIVENESS**

**INCREMENTAL COST-EFFECTIVENESS**

**SOCIOECONOMIC IMPACT ASSESSMENT**

**CALIFORNIA ENVIRONMENTAL QUALITY ACT ANALYSIS**

**DRAFT FINDINGS UNDER HEALTH AND SAFETY CODE SECTION  
40727**

**COMPARATIVE ANALYSIS**

## INTRODUCTION

Impact assessments were conducted during PR 1110.3 and PAR 1110.2 rule development to assess the environmental and socioeconomic implications of these rules. Health and Safety Code requirements for cost-effectiveness analysis and incremental cost-effectiveness analysis were evaluated during rule development of PR 1110.3 and PAR 1110.2. Draft findings and comparative analyses were prepared pursuant to Health and Safety Code Sections 40727 and 40727.2, respectively. ~~Staff is currently reviewing PR 1110.3 and PAR 1110.2 to determine if it will result in any potential adverse environmental impacts. Appropriate CEQA documentation will be prepared based on this analysis.~~

## COSTS

The provisions in PR 1110.3 and PAR 1110.2 are not expected to impose additional costs. In comparison to current Rule 1110.2 source testing requirements, PR 1110.3 includes a new emission testing schedule to help alleviate costs associated with source testing. Based on the new emission testing schedule, and an estimated cost of \$10,000 per source test, staff calculates the cost of source testing each unit to be approximately \$30,000 over a 15-year period. The new emission testing schedule translates to over 60% cost savings over the originally proposed source test frequency for units currently subject to Rule 1110.2. Facilities with ~~three~~six or more units may elect to conduct pooled source testing to further alleviate costs.

## EMISSION REDUCTIONS

Any emission reductions from PR 1110.3 are expected to be negligible. Potentially, there could be a slight decrease in VOC emissions, as the interim VOC limit of 25 ppmvd for units installed prior to January 1, 2024 is proposed for removal from PAR 1110.2 and PR 1110.3 does not include an interim VOC limit for these units. All units with a Permit to Operate issued on and after *[Date of Adoption]* will be required to meet 10 ppmvd VOC under PR 1110.3.

## COST-EFFECTIVENESS

~~The Health and Safety Code Section 40920.6 requires a cost-effectiveness analysis when establishing BARCT requirements. However, PR 1110.3 and PAR 1110.2 does not~~neither include new BARCT requirements nor ~~is it~~are expected to impose any additional costs. Therefore, this provision ~~neither does not~~applies apply to PR 1110.3 ~~nor~~and PAR 1110.2.

## INCREMENTAL COST-EFFECTIVENESS

Health and Safety Code 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 PR 1110.3 and PAR 1110.2, relative to ozone, CO, SO<sub>x</sub>, NO<sub>x</sub>, and their precursors. PR 1110.3 and PAR 1110.2 neither include new BARCT requirements nor include any requirements for additional control options. Thus, there is no more

stringent control option upon which an incremental cost-effectiveness would be calculated. Therefore, this provision neither applies to PR 1110.3 nor PAR 1110.2.

### **SOCIOECONOMIC IMPACT ASSESSMENT**

Implementation of PR 1110.3 and PAR 1110.2 will not result in any significant changes in air quality or emission limitations. Therefore, a socioeconomic impact assessment per Health and Safety Code Sections 40440.8 and 40728.5 is not required. PR 1110.3 and PAR 1110.2 would result in a cost savings to affected facilities due to a reduced source testing frequency and are not expected to result in any adverse socioeconomic impacts. The “Costs” section on page 3-1 of this Staff Report includes a discussion about the net savings associated with PR 1110.3 and PAR 1110.2.

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT ANALYSIS**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (PR 1110.3 and PAR 1110.2) is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3). A Notice of Exemption ~~will be~~ has been prepared pursuant to CEQA Guidelines Section 15062, and 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.

### **DRAFT FINDINGS UNDER HEALTH AND SAFETY CODE SECTION 40727**

#### *Requirements to Make Findings*

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 draft findings are as follows:

#### *Necessity*

PR 1110.3 is needed to establish emission limits and other requirements for linear generators. PAR 1110.2 is needed provide non-duplication of South Coast AQMD requirements by exempting linear generators.

#### *Authority*

The South Coast AQMD obtains its authority to adopt, amend, or repeal rules and regulations pursuant to Health and Safety Code Sections 39002, 39616, 40000, 40001, 40440, 40702, 40725 through 40728, 40920.6, and 41508, as well as the federal Clean Air Act.

#### *Clarity*

PR 1110.3 and PAR 1110.2 are written or displayed so that its meaning can be easily understood by the persons directly affected by them.

*Consistency*

PR 1110.3 and PAR 1110.2 are in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

*Non-Duplication*

PR 1110.3 and PAR 1110.2 will not impose the same requirements as any existing state or federal regulations. PR 1110.3 and PAR 1110.3 are necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD.

*Reference*

In adopting PR 1110.3 and PAR 1110.2, the following statutes which the South Coast AQMD hereby implements, interprets or makes specific are referenced: Health and Safety Code Sections 39002, 40001, 40702, 40440(a), and 40725 through 40728.5, and the federal Clean Air Act.

**COMPARATIVE ANALYSIS**

Under Health and Safety Code Section 40727.2, the South Coast AQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal 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 in Table 3-1.

**TABLE 3-1  
PR 1110.3 & PAR 1110.2 COMPARATIVE ANALYSIS**

Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3
Applicability	All linear generators fueled solely by natural gas are subject to this rule.	All stationary and portable engines over 50 rated brake horsepower (bhp) are subject to this rule.	Any DG Unit manufactured after January 1, 2003, for sale, lease, use, or operation in the State of California or any new DG Unit sold or leased, or offered for sale or lease, for use or operation in the State of California after January 1, 2003, shall be certified by the Air Resources Board unless the DG Unit: (a) does not emit an air contaminant when operated, (b) is portable, (c) is used only when electrical or natural gas service fails or for emergency pumping of water for fire protection or flood relief, (d) is not exempt from an air pollution control district or air quality management district’s permitting requirements, (e) is part of a research operation that has been approved in writing by the Executive Officer prior to commencement of operations, or (f) is operated by the manufacturer at the manufacturing facility prior to sale or lease for the purpose of quality-assurance testing.
Requirements	<p>An owner or operator of a Unit with a Permit to Operate issued on or after [Date of Adoption] shall not operate it in a manner that exceeds the NOx, CO, and VOC emission limits listed in Table 1:</p> <ul style="list-style-type: none"> <li>• NOx: 2.5 ppmvd corrected to 15% oxygen and averaged over 15 minutes</li> <li>• CO: 12 ppmvd corrected to 15% oxygen and averaged over 15 minutes</li> <li>• VOC: 10 ppmvd corrected to 15% oxygen and averaged over sampling time required by test method</li> </ul> <p>Maintenance Requirements</p> <p>(1) An owner or operator of a Unit shall perform maintenance per manufacturer’s recommendations as specified in the operating and maintenance manual.</p> <p>(2) An owner or operator of a Unit shall keep a copy of the manufacturer’s operating and maintenance manual and make it available to South Coast AQMD upon request.</p> <p>Source Testing</p> <p>(1) An owner or operator of a Unit that is not pooled pursuant to paragraph (f)(10) shall conduct source testing for NOx, VOC reported as carbon, and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis):</p>	<p>(C) The operator of any stationary engine fired by landfill or digester gas (biogas) shall not operate the engine in a manner that exceeds the emission concentration limits of Table III-A, provided that the facility monthly average biogas usage by the biogas engine is 90% or more, based on the higher heating value of the fuels used. The calculation of the monthly facility biogas use percentage may exclude natural gas fired during: any electrical outage at the facility; a Stage 2 or higher electrical emergencies called by the California Independent System Operator Corporation; and when a sewage treatment plant activates an Emergency Operations Center or Incident Command System, as part of an emergency response plan, because of either high influent flows caused by precipitation or a disaster.</p> <p>Table IIIB- Concentration Limits for Landfill and Digester Gas (Biogas)-Fired Engines- Effective January 1, 2017 (Concentration limits @ 15% O2):</p> <ul style="list-style-type: none"> <li>• NOx: 11 ppmvd averaged over 15 minutes</li> <li>• VOC: 30 ppmvd averaged over sampling time required by test method</li> <li>• CO: 250 ppmvd averaged over 15 minutes</li> </ul> <p>(D) Notwithstanding the provisions of subparagraph (d)(1)(B), the operator of any stationary engine fired by landfill or digester gas (biogas) shall not operate the engine in a manner that exceeds the emission concentration limits of Table III.</p>	<p>(a) On or after January 1, 2003, any DG Unit subject to this regulation must be certified pursuant to section 94204 to one of the following sets of emission standards in Table 1.</p> <p>(1) DG Unit not integrated with combined heat and power, DG Unit not Integrated with Combined Heat and Power (1):</p> <ul style="list-style-type: none"> <li>• NOx: 0.5 lb/mW-hr</li> <li>• CO: 6.0 lb/MW-hr</li> <li>• VOC: 1.0 lb/MW-hr</li> <li>• PM: an emission limit corresponding to natural gas with fuel sulfur content of no more than 1 grain/100scf</li> </ul> <p>(b) On or after January 1, 2007, any DG Unit subject to this regulation fueled by a fossil fuel must be certified pursuant to section 94204 to the following set of emission standards in Table 2.</p> <ul style="list-style-type: none"> <li>• NOx: 0.07 lb/mW-hr</li> <li>• CO: 0.10 lb/MW-hr</li> <li>• VOC: 0.2 lb/MW-hr</li> </ul> <p>(c) Any DG Unit subject to this regulation and fueled by digester gas, landfill gas, or oil-field waste gas must be certified pursuant to section 94204 to the emission standards in Table 3.</p> <p>On or after January 1, 2008:</p> <ul style="list-style-type: none"> <li>• NOx: 0.5 lb/mW-hr</li> <li>• CO: 6.0 lb/MW-hr</li> </ul>

Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3								
	<p>(A) Initially, within six months of installation of a Unit or within six months of not meeting the eligibility requirements for pooled source testing in paragraph (f)(10); and</p> <p>(B) Subsequently, at least once every five years from the date of the previous source test, no later than the last day of the calendar month that the test is due.</p> <p>(2) An owner or operator of a Unit shall conduct the source test by using a contractor that is approved under South Coast AQMD's Laboratory Approval Program (LAP) for the test methods specified in Table 2, or any test methods approved by CARB and U.S. EPA, and authorized by the Executive Officer.</p> <p>Table 2: Testing Methods</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td>NOx</td> <td>South Coast AQMD Method 100.1</td> </tr> <tr> <td>CO</td> <td>South Coast AQMD Method 100.1</td> </tr> <tr> <td>VOC</td> <td>South Coast AQMD Method 25.1* or Method 25.3*</td> </tr> </tbody> </table> <p>*Excluding ethane and methane</p> <p>(3) An owner or operator of a Unit shall submit a source test protocol to the Executive Officer for written approval at least 60 days before the scheduled date of the test. The source test protocol shall include, but is not limited to the following:</p> <p>(A) Name, address, and phone number of the Unit operator and a South Coast AQMD-approved source testing contractor that will conduct the test;</p> <p>(B) Application number(s), permit number(s), and emission limits;</p> <p>(C) Description of the Unit(s) to be tested and the test methods and procedures to be used;</p> <p>(D) Number of tests to be conducted and under what loads; and</p> <p>(E) Required minimum sampling time for the VOC test, based on the analytical detection limit and expected VOC levels.</p> <p>(4) An owner or operator of a Unit with an approved generic source test protocol or other valid approved source test protocol shall conduct the source test within 90 days after a written approval of the source test protocol by the Executive Officer is electronically distributed.</p> <p>(5) An owner or operator of a Unit with an approved generic protocol, or with a previously approved source test protocol, shall submit a subsequent protocol if the Unit has been altered in a manner that requires a permit modification, if emission limits for the Unit have changed since the previous source test, or if requested by the Executive Officer.</p>	Pollutant	Method	NOx	South Coast AQMD Method 100.1	CO	South Coast AQMD Method 100.1	VOC	South Coast AQMD Method 25.1* or Method 25.3*	<p>(G) Once an engine complies with the concentration limits as specified in Table III-B, there shall be no limit on the percentage of natural gas burned.</p> <p>(L) New Non-Emergency Electrical Generators</p> <p>(i) All new non-emergency engines driving electrical-generators shall comply with the following emission standards in lbs/MW-hr:</p> <p>Table IV- Emissions Standards for New Electrical Generation Devices Concentration limits for low-use engines.</p> <p>(Concentration limits calculated using a 40% engine efficiency and no applied thermal credit, corrected to 15% O<sub>2</sub>):</p> <ul style="list-style-type: none"> <li>• NOx: 2.5 ppmvd</li> <li>• CO: 12 ppmvd</li> <li>• VOC: 10 ppmvd</li> </ul> <p>(vii) Owners and operators of new engines installed prior to January 1, 2024 with no ammonia emissions from add-on control equipment and where NOx emissions meet the concentration limit of Table IV at all times may elect to apply for and comply with the concentration limits of Table IV, expressed in ppmvd, except an alternative VOC concentration limit that is equal to or less than 25 ppmvd may be complied with. The Executive Officer shall accumulate daily VOC emissions in excess of the concentration limit of Table IV based on the permitted VOC limits from each such engine and shall not approve any additional permit for such engine that will cause the total accumulated daily VOC emissions to exceed 45 lbs per day. Any new installation on or after January 1, 2024 shall comply with the VOC concentration limit in Table IV in ppmvd.</p> <p>(e)(4) Stationary Engine Inspection and Monitoring (I&amp;M) Plans:</p> <p>The operator of stationary engines subject to the I&amp;M plan provisions of subparagraph (f)(1)(D) shall:</p> <p>(A) By August 1, 2008, submit an initial I&amp;M plan application to the Executive Officer for approval;</p> <p>(B) By December 1, 2008, implement an approved I&amp;M plan or the I&amp;M plan as submitted if the plan is not yet approved. Any operator of 15 or more stationary engines subject to the I&amp;M plan provisions shall comply with the above schedule for at least 50% of engines, and for the remaining engines shall:</p> <p>(C) By February 1, 2009, submit an initial I&amp;M plan application to the Executive Officer for approval;</p> <p>(D) By June 1, 2009, implement an approved I&amp;M plan or the I&amp;M plan as submitted if the plan is not yet approved.</p>	<ul style="list-style-type: none"> <li>• VOC: 1.0 lb/MW-hr</li> </ul> <p>On or after January 1, 2013:</p> <ul style="list-style-type: none"> <li>• NOx: 0.07 lb/mW-hr</li> <li>• CO: 0.10 lb/MW-hr</li> <li>• VOC: 0.2 lb/MW-hr</li> </ul> <p>(e) By July 2005, the ARB staff must complete an electrical generation technology review to evaluate if the requirements in (b) and (d) above and section 94207 should be modified and report its findings to the Board.</p>
Pollutant	Method										
NOx	South Coast AQMD Method 100.1										
CO	South Coast AQMD Method 100.1										
VOC	South Coast AQMD Method 25.1* or Method 25.3*										



Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3
	<p>(6) An owner or operator of a Unit shall provide the Executive Officer at least 30 days prior notice of any source test to afford the Executive Officer the opportunity to have an observer present. If, after the 30 days prior notice is given, there is a delay (due to operational problems, etc.) in conducting the scheduled source test, the owner or operator of a Unit shall notify the Executive Officer as soon as possible of any delay in the original test date, either by providing notice of the rescheduled date of the source test at least seven days prior, or by arranging a rescheduled date mutually agreed upon with the Executive Officer.</p> <p>(7) An owner or operator of a Unit shall provide source testing facilities as follows:</p> <p>(A) Sampling ports adequate for the applicable test methods. This includes constructing the air pollution control system and stack or duct such that pollutant concentrations can be accurately determined by applicable test methods;</p> <p>(B) Safe sampling platform(s), scaffolding or mechanical lifts, including safe access, that comply with California General Safety Orders; and</p> <p>(C) Utilities for sampling and testing equipment.</p> <p>(8) The LAP contractor shall not conduct a source test within 1 week of any Unit servicing or Tuning.</p> <p>(9) The LAP contractor shall conduct source testing for at least 30 minutes during normal operation (actual duty cycle). This test shall not be conducted under a steady-state condition unless it is the normal operation. The LAP contractor shall not conduct any pre-tests for compliance.</p> <p>(10) In lieu of meeting the requirements in paragraph (f)(1), an owner or operator of six or more Identical Units located at the same facility may elect to conduct pooled initial source testing, for NOx, VOC reported as carbon, and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis), pursuant to the following:</p> <p>(A) At least one-third of the Units shall be source tested during the initial source test and all subsequent source testing shall be conducted on a different one-third of the Units. Source testing of pooled Units shall be conducted at least once every three years from the date of the previous source test, no later than the last day of the calendar month that the test is due;</p> <p>(B) Identical Units installed after the initial source test has been performed shall be included with the Units subject to the</p>	<p>(6) New Stationary Engines The operator of any new stationary engine issued a permit to construct after February 1, 2008 shall comply with the applicable I&amp;M or CEMS requirements of this rule when operation commences. If applicable, the operator shall provide the required information in subparagraph (f)(1)(D) to the Executive Officer prior to the issuance of the permit to construct so that the I&amp;M procedures can be included in the permit. A separate I&amp;M plan application is not required.</p> <p>(7) Biogas Engines For any biogas engine for which the operator applies to the Executive Officer by April 1, 2008 for a change of permit conditions for ECF-corrected emission limits, or the approval to burn more than 10 percent natural gas in accordance with subparagraph (d)(1)(C), the biogas engine shall not be subject to the initial concentration limits of Tables II or III until August 1, 2008, provided the operator continues to comply with all emission limits in effect prior to February 1, 2008.</p>	

Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3
	<p>pooled subsequent emissions testing pursuant to subparagraph (f)(10)(A);</p> <p>(C) If any Unit subject to the pooled source testing exceeds any emissions standards in Table 1, the owner or operator shall repair the Unit that failed, repeat the source test within 60 days of repair, and conduct source testing on an additional one-third Units;</p> <p>(D) All pooled Units at a facility shall be source tested at least once every nine years.</p>		
Monitoring	<p>(A) An owner or operator of a Unit shall conduct diagnostic emission checks by a portable NOx, CO, and oxygen analyzer at least once every two years from the date of the previous emissions test, no later than the last day of the calendar month that the test is due and comply with the following requirements:</p> <p>(i) No Unit or control system maintenance or tuning may be conducted within 1 week prior to the diagnostic emission check, unless it is an unscheduled, required repair,</p> <p>(ii) The portable analyzer shall be calibrated, maintained and operated in accordance with the manufacturer’s specifications and recommendations and in accordance with South Coast AQMD’s Combustion Gas Periodic Monitoring Protocol of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Combustion Sources subject to South Coast Air Quality Management District Rules 1110.2, 1146, and 1146.1, or subsequent protocol approved by U.S. EPA and the Executive Officer,</p> <p>(iii) The portable analyzer tests required in subparagraph (g)(1)(A) shall only be conducted by a person who has completed an appropriate South Coast AQMD-approved training program in the operation of portable analyzers and has received a certification issued by South Coast AQMD, and</p> <p>(iv) A source test pursuant to paragraphs (f)(1) and (f)(10) shall be an acceptable substitute diagnostic emission check to satisfy subparagraph (g)(1)(A)..</p> <p>(B) If a diagnostic emission check results in finding emissions in excess of rule or permit limits, an owner or operator shall correct the exceedance as soon as possible and demonstrate compliance with another diagnostic emission check pursuant to (g)(1)(A).</p> <p>(C) An owner or operator of a Unit shall maintain a net output meter that is revenue grade compliant with ANSI C12.20 or equivalent.</p>	<p>(f) Monitoring, Testing, Recordkeeping and Reporting</p> <p>(1) Stationary engines: The operator of any engine subject to the provisions of paragraph (d)(1) of this rule shall meet the following requirements:</p> <p>(B) Elapsed Time Meter Maintain an operational non-resettable totalizing time meter to determine the engine elapsed operating time.</p> <p>(C) Source Testing</p> <p>(i) Effective August 1, 2008, conduct source testing for NOx, VOC reported as carbon, and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis) at least once every two years from the date of the previous source test, no later than the last day of the calendar month that the test is due, or every 8,760 operating hours, whichever occurs first. Relative accuracy tests required by Rule 218.1 or 40 CFR Part 75 Subpart E shall satisfy this requirement for those pollutants monitored by a CEMS. The above source test frequency may be reduced to once every three years if the engine has operated less than 2,000 hours since the last source test. If the engine has not been operated before the date a source test is due, the source test shall be conducted by the end of seven consecutive days or 15 cumulative days of resumed operation. The operator of the engine shall keep sufficient operating records to demonstrate that it meets the requirements for extension of the source testing deadlines.</p> <p>(ii) Conduct source testing for at least 30 minutes during normal operation (actual duty cycle). This test shall not be conducted under a steady-state condition unless it is the normal operation. In addition, conduct source testing for NOx and CO emissions for at least 15 minutes at: an engine’s actual peak load, or the maximum load that can be practically achieved during the test, and; at actual minimum load, excluding idle, or the minimum load that can be practically achieved during the test. These</p>	<p>(a) Sampling methodology used must conform to ARB testing procedures. Alternate or modified test methods may be used if approved in writing by the Executive Officer prior to use for certification. Testing shall be conducted in accordance with the following methods, which are incorporated by reference herein: NOx, CO, and Oxygen: ARB Test Method 100 (as adopted on July 28, 1997) VOC: South Coast AQMD Method 25.3 (as published in March 2000) Gas Velocity and Flow Rate: ARB Test Methods 1, 2, 3, and 4 (as adopted on July 1, 1999)</p> <p>(b) Only natural gas, LPG, digester gas, landfill gas, or oil-field waste gas, as defined in section 94202, meeting the requirements of section 94207(d)(7) shall be used for certification testing. Other fuels may be used upon the written approval of the Executive Officer.</p> <p>(c) The DG Unit shall be configured as it will be marketed, including any additional control equipment or other devices that affect emissions.</p> <p>(d) Testing parameters.</p> <p>(1) A minimum of three valid test runs must be conducted. Tests are to be run consecutively. Justification for invalid test runs or time gaps between runs must be included in the test report.</p> <p>(2) Testing commences after the DG Unit has reached stable operation.</p> <p>(3) Each run must be conducted at 100 percent of generator net output.</p> <p>(A) A load bank may be used to establish the load.</p> <p>(B) The DG Unit must be operated for a sufficient period of time to demonstrate stability in the emission readings at constant load and to ensure the collection of representative and quantifiable samples.</p>

Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3
	<p>(D) An owner or operator of a Unit shall maintain a parametric monitoring system and its associated components necessary to maintain a system that measures air-to-fuel ratio.</p> <p>(E) An owner or operator of a Unit shall inspect and maintain all sensors and meters used by the parametric monitoring system per manufacturer’s recommendations as specified in the operating manual.</p> <p>(F) An owner or operator of a Unit shall develop and implement procedures for at least daily monitoring of the parametric monitoring system.</p>	<p>additional two tests are not required if the permit limits the engine to operating at one defined load, ± 10%. No pre-tests for compliance are permitted. The emission test shall be conducted at least 40 operating hours, or at least 1 week, after any engine servicing or tuning. If an emission exceedance is found during any of the three phases of the test, that phase shall be completed and reported. The operator shall correct the exceedance, and the source test may be immediately resumed. Relative accuracy tests required by Rule 218.1 or 40 CFR Part 75 Subpart E shall satisfy this requirement for those pollutants monitored by a CEMS for all applicable operating loads specified in this clause (f)(1)(C)(ii).</p> <p>(iii) Use a contractor to conduct the source testing that is approved by the Executive Officer under the Laboratory Approval Program for the necessary test methods.</p> <p>(iv) Submit a source test protocol to the Executive Officer for written approval at least 60 days before the scheduled date of the test. The source test protocol shall include the name, address and phone number of the engine operator and a South Coast AQMD-approved source testing contractor that will conduct the test, the application and permit number(s), emission limits, a description of the engine(s) to be tested, the test methods and procedures to be used, the number of tests to be conducted and under what loads, the required minimum sampling time for the VOC test, based on the analytical detection limit and expected VOC levels, and a description of the parameters to be measured in accordance with the I&amp;M plan required by subparagraph (f)(1)(D). The source test protocol shall be approved by the Executive Officer prior to any testing. The operator is not required to submit a protocol for approval if: there is a previously approved protocol that meets these requirements; the engine has not been altered in a manner that requires a permit alteration; and emission limits have not changed since the previous test. If the operator submits the protocol by the required date, and the Executive Officer takes longer than 60 days to approve the protocol, the operator shall be allowed the additional time needed to conduct the test.</p> <p>(v) Provide the Executive Officer at least 30 days prior notice of any source test to afford the Executive Officer the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the engine operator shall notify the Executive Officer as soon as</p>	<p>(4) Generator output (MW-hr), based on net output, shall be measured during each valid test run. A calibrated electric meter shall be used for the measurements. The meter shall meet the American National Standards Institute’s Code for Electricity Metering (ANSI C12.1-as of July 9, 2001).</p> <p>(5) Recovered heat shall be measured using a water loop device, measuring the water flow rate, inlet temperature, and outlet temperature.</p> <p>(6) The emission rate shall be expressed in lb/MW-hr.</p> <p>(7) Certification Fuels                      (A) Natural gas.                      (B) LPG that meets the standards of HD-5 propane.                      (C) Surrogate digester gas that is composed of 60 to 65 percent methane and 35 to 40 percent CO<sub>2</sub>, by volume.                      (D) Surrogate landfill gas that is composed of 42 to 46 percent methane, 34 to 38 percent CO<sub>2</sub>, and 18 to 22 percent N<sub>2</sub>, by volume.                      (E) Surrogate oil-field waste gas that is composed of 63 to 71 percent methane, 6 to 8 percent ethane, 9 to 11 percent propane, 7 to 9 percent CO<sub>2</sub>, and 7 to 8 percent carbon compounds with four or more carbon atoms per molecule, by volume.                      (e) Alternative testing procedures may be used upon written approval of the Executive Officer, if alternative procedures are deemed to be equivalent or more accurate than the prescribed procedures.</p>

Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3
		<p>possible of any delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Executive Officer by mutual agreement.</p> <p>(vi) Submit all source test reports, including a description of the equipment tested, to the Executive Officer within 60 days of completion of the test.</p> <p>(vii) By February 1, 2009, provide, or cause to be provided, source testing facilities as follows:</p> <p>(I) Sampling ports adequate for the applicable test methods. This includes constructing the air pollution control system and stack or duct such that pollutant concentrations can be accurately determined by applicable test methods;</p> <p>(II) Safe sampling platform(s), scaffolding or mechanical lifts, including safe access, that comply with California General Safety Orders. Agricultural stationary engines are excused from this subclause if they are in remote locations without electrical power;</p> <p>(III) Utilities for sampling and testing equipment. Agricultural stationary engines are exempt from this subclause if they are on wheels and moved to storage during the off season.</p> <p>(D) Inspection and Monitoring (I&amp;M) Requirements</p> <p>(i) I&amp;M Plan. The operator shall:</p> <p>(I) Submit to the Executive Officer for written approval an I&amp;M plan. One plan application is required for each facility that does not have a NOx and CO CEMS for each engine. The I&amp;M plan shall include all items listed in Attachment 1. The owner or operator may request an alternative item(s) in Attachment 1 that is determined by the Executive Officer to be equivalent in meeting the same objectives.</p> <p>(II) Upon written approval by the Executive Officer, implement the I&amp;M plan as approved.</p> <p>(III) Submit an I&amp;M plan for approval to the Executive Officer for a plan revision before any change in I&amp;M plan operations can be implemented. The operator shall apply for a plan revision prior to any change in emission limits or control equipment.</p> <p>(f)(F) New Non-Emergency Electrical Generating Engines</p> <p>Operators of engines subject to the requirements of subparagraph (d)(1)(L) shall also meet the following requirements.</p> <p>(i) The engine generator shall be monitored with a calibrated electric meter that measures the net electrical output of the engine generator system, which is the difference between the electrical output of the generator and the electricity consumed by</p>	

Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3
		<p>the auxiliary equipment necessary to operate the engine generator.</p> <p>(g) Test Methods Testing to verify compliance with the applicable requirements shall be conducted in accordance with the test methods specified in Table IX, or any test methods approved by CARB and EPA, and authorized by the Executive Officer.</p> <p>TABLE IX- TESTING METHODS NOx- South Coast Air Quality Management District Method 100.1 CO- South Coast Air Quality Management District Method 100.1 VOC- South Coast Air Quality Management District Method 25.1* or Method 25.3* * Excluding ethane and methane</p> <p>A violation of any standard of this rule established by any of the specified test methods, or any test methods approved by the CARB or EPA, and authorized by the Executive Officer, shall constitute a violation of this rule.</p>	
Reporting	An owner or operator of a Unit shall submit all source test reports to the Executive Officer within 60 days of completion of the test..	<p>(f)(D)(iii) Requirements for responding to, diagnosing and correcting breakdowns, faults, malfunctions, alarms, diagnostic emission checks finding emissions in excess of rule or permit limits, and parameters out-of-range.</p> <p>(I) For any diagnostic emission check or breakdown that results in emissions in excess of those allowed by this rule or a permit condition, the operator shall correct the problem as soon as possible and demonstrate compliance with another diagnostic emission check, or shut down an engine by the end of an operating cycle, or within 24 hours from the time the operator knew of the breakdown or excess emissions, or reasonably should have known, whichever is sooner.</p> <p>(H) Reporting Requirements (i) The operator shall report to the Executive Officer, by telephone (1-800-CUT-SMOG or 1-800-288-7664) or other South Coast AQMD-approved method, any breakdown resulting in emissions in excess of rule or permit emission limits within one hour of such noncompliance or within one hour of the time the operator knew or reasonably should have known of its occurrence. Such report shall identify the time, specific location, equipment involved, responsible party to contact for further information, and to the extent known, the causes of the</p>	None

Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3
		<p>noncompliance, and the estimated time for repairs. In the case of emergencies that prevent a person from reporting all required information within the one-hour limit, the Executive Officer may extend the time for the reporting of required information provided the operator has notified the Executive Officer of the noncompliance within the one-hour limit.</p> <p>(ii) Within seven calendar days after the reported breakdown has been corrected, but no later than thirty calendar days from the initial date of the breakdown, unless an extension has been approved in writing by the Executive Officer, the operator shall submit a written breakdown report to the Executive Officer which includes:</p> <ul style="list-style-type: none"> <li>(I) An identification of the equipment involved in causing, or suspected of having caused, or having been affected by the breakdown;</li> <li>(II) The duration of the breakdown;</li> <li>(III) The date of correction and information demonstrating that compliance is achieved;</li> <li>(IV) An identification of the types of excess emissions, if any, resulting from the breakdown;</li> <li>(V) A quantification of the excess emissions, if any, resulting from the breakdown and the basis used to quantify the emissions;</li> <li>(VI) Information substantiating whether the breakdown resulted from operator error, neglect or improper operation or maintenance procedures;</li> <li>(VII) Information substantiating that steps were immediately taken to correct the condition causing the breakdown, and to minimize the emissions, if any, resulting from the breakdown;</li> <li>(VIII) A description of the corrective measures undertaken and/or to be undertaken to avoid such a breakdown in the future; and</li> <li>(IX) Pictures of any equipment which failed, if available.</li> </ul> <p>(iii) Within 15 days of the end of each calendar quarter, the operator shall submit to the Executive Officer a report that lists each occurrence of a breakdown, fault, malfunction, alarm, engine or control system operating parameter out of the acceptable range established by an I&amp;M plan or permit condition, or a diagnostic emission check that finds excess emissions. Such report shall be in a South Coast AQMD-approved format, and for each incident shall identify the time of the incident, the time the operator learned of the incident, specific location, equipment involved, responsible party to contact for further information, to the extent known the causes of</p>	

Rule Element	PR 1110.3	PAR 1110.2	CCR, Title 17, Division 3, Chapter 1, Subchapter 8, Article 3
		<p>the event, the time and description of corrective actions, including shutting an engine down, and the results of all portable analyzer NOx and CO emissions checks done before or after the corrective actions. The operator shall also report if no incidents occurred.</p>	
Recordkeeping	<p>An owner or an operator of a Unit shall retain all data logs, source test reports, and other records required by this rule for at least five years and be made available to the Executive Officer upon request.</p> <p>(A) The owner or operator of a Unit shall maintain records, on a monthly basis, for the following parameters(s) or item(s):</p> <ul style="list-style-type: none"> <li>(i) Quantity of fuel consumption (e.g., cubic feet of gas);</li> <li>(ii) Date of last emissions test required in subdivision (f) and subparagraph (g)(1)(A);</li> <li>(iii) Megawatt-hours of electricity produced; and</li> <li>(iv) Air-to-Fuel system faults, alarms, and any other related emission control malfunctions.</li> </ul> <p>(B) An owner or operator of a Unit shall keep records to demonstrate compliance with paragraphs (e)(1), (f)(1), (f)(8), (f)(10), and (g)(1).</p>	<p>(E) Operating Log Maintain a monthly engine operating log that includes:</p> <ul style="list-style-type: none"> <li>(i) Total hours of operation;</li> <li>(ii) Type of liquid and/or type of gaseous fuel;</li> <li>(iii) Fuel consumption (cubic feet of gas and gallons of liquid); and</li> <li>(iv) Cumulative hours of operation since the last source test required in subparagraph (f)(1)(C).</li> </ul>	<ul style="list-style-type: none"> <li>(a) The Applicant must retain all information used for the certification application.</li> <li>(b) Upon request of the Executive Officer, the Applicant will submit information to the ARB on the number and location of certified DG Units in California.</li> <li>(c) The Applicant shall maintain a log identifying the components listed pursuant to section 94204(a)(6) that are replaced, the date of replacement, and the hours of operation each replaced component was used.</li> <li>(d) All records maintained pursuant to this certification program must be retained for a period of five years after the certification has expired.</li> <li>(e) All records maintained pursuant to this certification program shall be submitted to the ARB upon request of the Executive Officer.</li> </ul>

**APPENDIX A: LIST OF AFFECTED FACILITIES**

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**Table A-1: Facilities Affected by PR 1110.3**

Facility ID	Facility Name
8582	Southern California Gas Company
189493	Mainspring Energy, Incorporated/Food 4 Less
193535	Mainspring Energy, Incorporated/Lineage Logistics
193650	Mainspring Energy, Incorporated/Ralphs
193671	Mainspring Energy, Incorporated/Ralphs
193675	Mainspring Energy, Incorporated/Food 4 Less
193716	Mainspring Energy, Incorporated/Ralphs
193748	Mainspring Energy, Incorporated/Ralphs
193871	Mainspring Energy, Incorporated/Ralphs
194969	Mainspring Energy, Incorporated/Ralphs
194970	Mainspring Energy, Incorporated/Ralphs
194986	Mainspring Energy, Incorporated/Food 4 Less
195671	Mainspring Energy, Incorporated/Ralphs
195672	Mainspring Energy, Incorporated/Food 4 Less
197093	Mainspring Energy, Incorporated/Ralphs
197094	Mainspring Energy, Incorporated/Food 4 Less
197144	Mainspring Energy, Incorporated/Food 4 Less
197710	Mainspring Energy, Incorporated/Lineage Logistics
197890	Mainspring Energy, Incorporated/Food 4 Less
197925	Mainspring Energy, Incorporated/Lineage Logistics
198042	Mainspring Energy, Incorporated/Lineage Logistics
198085	Mainspring Energy, Incorporated/Lineage Logistics
198227	Mainspring Energy, Incorporated/Ralphs
198228	Mainspring Energy, Incorporated/Ralphs
198645	Prologis Denker

**APPENDIX B – RESPONSES TO PUBLIC COMMENTS**

### **Public Workshop Comments**

#### **Public Workshop Commenter #1: Alison Torres- Southern California Alliance of Publicly Owned Treatment Works**

The commenter expressed the following:

- a) Concerned about linear generators fueled with biogas reliably meeting emissions limits over the life of the equipment due to the lack of emissions data.
- b) Concerned about the proposed rule emission limits potentially hindering the adoption of linear generator technology by publicly owner treatment works and requested the same emission limits as Rule 1179.1 for biogas fueled linear generators.

#### **Staff Response to Public Workshop Commenter #1:**

- a) Staff acknowledged the lack of emissions data for biogas fueled linear generators. Staff will continue to work with manufacturers to obtain emissions data as well as address concerns regarding durability of the equipment.
- b) Staff is narrowing the applicability of PR 1110.3 to units fueled solely by natural gas. Units fueled with biogas will be evaluated by South Coast AQMD engineering staff to determine the appropriate emission limits as emission data becomes available.

#### **Public Workshop Commenter #2: Dan McGivney- Southern California Gas Company**

The commenter expressed the following:

- a) Due to linear generator technology being fairly new, questioned the timing of submittal of PR 1110.3 to U.S. EPA for inclusion into the State Implementation Plan (SIP) and suggested that staff delay submittal until more emissions data for biogas fueled units was received.

#### **Staff Response to Public Workshop Commenter #2:**

- a) Staff narrowed the applicability of PR 1110.3 to only include natural gas fueled linear generators. PR 1110.3 will be submitted for inclusion into the SIP.

#### **Public Workshop Commenter #3: Adam Simpson- Mainspring Energy, Incorporated**

The commentor expressed looking forward to continued engagement on the rulemakings and thanked the Working Group.

#### **Staff Response to Public Workshop Commenter #3:**

Staff likewise looks forward to continued public engagement throughout this rule development.

#### **Public Workshop Commenter #4: Bipul Saraf- Yorke Engineering**

The commenter expressed the following:

- a) Asked if source tests were the only acceptable compliance test in PR 1110.3.

- b) Concern over linear generator technology meeting emission limits over the life of the equipment.

**Staff Response to Public Workshop Commenter #4:**

- a) PR 1110.3 contains both source testing and portable analyzer testing requirements. Staff updated the source test frequency and monitoring requirements in PR 1110.3. The proposed source test frequency is every five years.
- b) Staff is working with the technology manufacturers to determine the durability of the equipment over time as it relates to emissions.

**Email Comments****Email Comment #1: Corrie Zuppo- Mainspring Energy, Incorporated**

Attached are Mainspring Energy’s comments to South Coast AQMD Proposed Rule 1110.3.

(Adopted TBD)

V012023

**PROPOSED  
RULE 1110.3**

**EMISSIONS FROM LINEAR GENERATORS**

(a) Purpose

The purpose of this rule is to reduce emissions of Oxides of Nitrogen (NO<sub>x</sub>), Volatile Organic Compounds (VOCs), and Carbon Monoxide (CO) from linear generators.

(b) Applicability

This rule shall apply to linear generators fueled on natural gas, landfill gas, ~~or digester gas, or hydrogen or propane gas~~, with the exception of those units exempt under Section (h). ~~All linear generators are subject to this rule.~~

1-1

(c) Definitions

(1) BREAKDOWN means a physical or mechanical failure or malfunction of a linear generator, air pollution control equipment, or related operating equipment that is not the result of operator error, neglect, improper operation or improper maintenance procedures, which ~~results in~~ may lead to excess emissions beyond rule related emission limits or permit conditions.

1-2

(2) DAILY means the time period starting at 12 midnight and continuing through 11:59 p.m.

(3) DIGESTER GAS means gas that is produced by anaerobic decomposition of organic material.

(4) EMERGENCY STANDBY UNIT means any Linear Generator which operates as a temporary replacement for primary ~~mechanical or~~ electrical power during periods of fuel or energy shortage or while the primary power supply is under repair.

1-3

(5) FACILITY means any source or group of sources or other air contaminant emitting activities which are located on one or more contiguous properties within the South Coast AQMD, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in Section 55.2 of Title 40, Part 55 of the Code of Federal Regulations (40 CFR Part 55). Such above-described groups, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one

- facility. Sources or installations involved in crude oil and gas production in Southern California Coastal or OCS Waters and transport of such crude oil and gas in Southern California Coastal or OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore.
- (6) LANDFILL GAS means any gas derived through a natural process from the decomposition of waste deposited in an MSW Landfill.
- (7) LINEAR GENERATOR means any power generation technology that uses a thermochemical reaction to create linear motion that is directly converted into electricity.
- (8) MUNICIPAL SOLID WASTE or MSW LANDFILL means an entire disposal facility in a contiguous geographical space where solid waste is placed in or on land. An MSW Landfill may be active, inactive, or closed.
- (A) Active MSW Landfill means a Municipal Solid Waste Landfill that has received solid waste on or after November 8, 1987.
- (B) Inactive MSW Landfill means a Municipal Solid Waste Landfill that has not accepted solid waste after November 8, 1987 and subsequently no further solid waste disposal activity has been conducted within the disposal facility.
- (C) Closed MSW Landfill means a Municipal Solid Waste Landfill that has ceased accepting solid waste for disposal and the closure was conducted in accordance with all applicable federal, state and local statutes, regulations, and ordinances in effect at the time of closure.
- (9) NATURAL GAS means a mixture of gaseous hydrocarbons, with at least 80 percent methane by volume, and of pipeline quality, such as the gas sold or distributed by any utility company regulated by the California Public Utilities Commission.
- (10) ~~OPERATING CYCLE means a period of time within which a round of regularly recurring events is completed, and cannot be stopped without the risk of endangering public safety or health, causing material damage to the equipment or product, or cannot be stopped due to technical constraints. Economic reasons alone will not be sufficient to extend this time period. The Operating Cycle includes batch processes that may start and finish several times within a twenty-four hour period, in which case each start to finish interval is considered a complete cycle.~~

- (11) OXIDES OF NITROGEN (NO<sub>x</sub>) means the sum of nitric oxides and nitrogen dioxides emitted, collectively expressed as nitrogen dioxide emissions.
- (12) STANDARDIZED SOURCE TEST PROTOCOL means a source test protocol specific to the make and model of the equipment that is approved by the South Coast AQMD and may be used for all source tests on linear generators of the same make and model. 1-5
- (13) TUNING means adjusting, optimizing, rebalancing, or other similar operations to an electric generating Unit or an associated control device or as otherwise defined in the Permit to Operate. Tuning does not include normal operations to meet load fluctuations.
- (14) UNIT means, for purposes of this rule, any linear generator. 1-6
- (15) VOLATILE ORGANIC COMPOUND (VOC) as defined in Rule 102 – Definition of Terms.

(d) Emission Limits

- (1) An owner or operator of a Unit shall not operate the Unit in a manner that exceeds the NO<sub>x</sub>, CO, and VOC emission limits listed in Table 1: Concentration Limits for Linear Generators, pursuant to subdivision (f):

**Table 1: Concentration Limits for Linear Generators**

<b>Units with a Permit to Operate Issued on and after [Date of Adoption]</b>			
<b>Fuel Type</b>	<b>NO<sub>x</sub> (ppmv)<sup>1</sup></b>	<b>CO (ppmv)<sup>1</sup></b>	<b>VOC (ppmv)<sup>2</sup></b>
Natural Gas, <del>Propane Gas</del> , Hydrogen Gas, Landfill Gas, and Digester Gas	2.5	12	10

<sup>1</sup> Parts per million by volume, corrected to 15% oxygen on a dry basis and averaged over 15 minutes.

<sup>2</sup> Parts per million by volume, measured as carbon, corrected to 15% oxygen on a dry basis, and averaged over the sampling time required by the test method.

- (2) In the event of a potential breakdown that results in emissions in excess of those allowed by Table 1, the Unit’s Inspection and Monitoring Plan will be adhered to. 1-8
- (3) ~~An owner or operator shall shut down a Unit having a Breakdown that results in~~ 1-9

- ~~emissions in excess of those allowed by Table 1 by the end of an Operating Cycle, or within 24 hours from the time the owner or operator knew of the Breakdown or excess emissions, or reasonably should have known, whichever is sooner.~~
- (4) ~~Maintenance Requirements~~
- (5) An owner or operator of a Unit shall perform maintenance per manufacturer's recommendations as specified in the operating and maintenance manual.
- (6) An owner or operator of a Unit shall keep a copy of the manufacturer's operating manual and be made available to the Executive Officer upon request.
- (e) **Certification**
- (1) The manufacturer shall obtain confirmation from an independent testing laboratory prior to applying for certification that each unit model complies with the applicable requirements of subdivision (d). This confirmation shall be based upon emission tests of a randomly selected unit of each model, and the agreed upon **standardized** source test protocol shall be adhered to during the confirmation testing of all units subject to this rule.
- (2) When applying for unit(s) certification, the manufacturer shall submit to the Executive Officer the following:
- (A) A statement that the model is in compliance with subdivision (d). The statement shall be signed and dated, and shall attest to the accuracy of all statements;
- (B) General Information
- (i) Name and address of manufacturer,
- (ii) Brand name, and
- (iii) Model number
- (C) A description of each model being certified; and
- (D) A source test report verifying compliance with the emission limits in subdivision (d) for each model to be certified. The source test report shall be prepared by the confirming independent testing laboratory. The source test shall have been conducted no more than ninety (90) days prior to the date of submittal of a certification application to the Executive Officer.
- (3) When applying for unit certification, the manufacturer shall submit the items identified in paragraph (f)(2) no more than ninety (90) days after the date of the source test identified in subparagraph (f)(2)(D) and at least 120 days prior to the date of the proposed sale of the units.
- (4) The Executive Officer shall certify a unit model which complies with the

1-9 cont'd

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1-11



- provisions of subdivision (d) and of paragraphs (f)(1), (f)(2), and (f)(3) within 30 days of receipt of the items identified in paragraph (f)(2).
- (5) Certification status shall be valid for three years from the date of approval by the Executive Officer. After the third year, recertification may be required according to the requirements of paragraphs (f)(1) and (f)(2). 1-11 cont'd
- (f) Source Testing
  - (1) An owner or operator of a Unit shall conduct source testing for NOx, VOC reported as carbon, and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis) at least once every ~~three~~ ~~two~~ years from the date of the previous source test, no later than the last day of the calendar month that the test is due, ~~or every 8,760 operating hours, whichever occurs first.~~ The source test schedule may be changed under the following circumstances:
    - ~~An owner or operator of a Unit may elect to reduce the source test frequency to once every three years if the Unit has operated less than 2,000 hours since the last source test, or~~
    - (A) An owner or operator of a Unit that has not been operated before the date a source test is due, shall conduct a source test by the end of ~~90~~ ~~seven~~ ~~consecutive days or 15 cumulative days~~ of resumed operation. 1-14
    - (B) In lieu of a source test every three years, a diagnostic emission check for NOx and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis) may be conducted using a portable analyzer or equivalent measurement device. The operator shall measure NOx and CO concentrations as outlined in an approved Inspection and Monitoring Plan. If emissions are found to exceed the emissions limits in Table 1, the operator shall conduct a source test. 1-15
  - (2) An owner or operator of a Unit shall conduct the source test by using a contractor that is approved under the South Coast AQMD’s Laboratory Approval Program (LAP) for the test methods specified in Table 2: Testing Methods, or any test methods approved by CARB and EPA, and authorized by the Executive Officer.

**Table 2: Testing Methods**

Pollutant	Method
NOx	South Coast AQMD Method 100.1

CO	South Coast AQMD Method 100.1
VOC	South Coast AQMD Method 25.1* or Method 25.3*

\*Excluding ethane and methane

- (3) An owner or operator of a Unit shall submit a source test protocol to the Executive Officer for written approval at least 60 days before the scheduled date of the test. The source test protocol shall include, but not limited to the following:
  - (A) Name, address, and phone number of the Unit operator and a South Coast AQMD-approved source testing contractor that will conduct the test;
  - (B) Application number(s), permit number(s), and emission limits;
  - (C) Description of the Unit(s) to be tested and the test methods and procedures to be used;
  - (D) Number of tests to be conducted and under what loads; and
  - (E) Required minimum sampling time for the VOC test, based on the analytical detection limit and expected VOC levels.
- (4) An owner or operator of a Unit shall conduct the source test within 90 days after a written approval of the source test protocol by the Executive Officer is electronically distributed.
- (5) An owner or operator of a Unit subject to a previously approved **standardized** source test protocol shall submit a subsequent protocol if the Unit has been altered in a manner that requires a permit alteration, if emission limits for the Unit have changed since the previous source test, or if requested by the Executive Officer.
- (6) An owner or operator of a Unit shall provide the Executive Officer at least 30 days prior notice of any source test to afford the Executive Officer the opportunity to have an observer present. If, after the 30 days prior notice is given, there is a delay (due to operational problems, etc.) in conducting the scheduled source test, the owner or operator of a Unit shall notify the Executive Officer as soon as possible of any delay in the original test date, either by providing notice of the rescheduled date of the source test at least seven days prior, or by arranging a rescheduled date mutually agreed upon with the Executive Officer.
- (7) An owner or operator of a Unit shall provide source testing facilities as follows:
  - (A) Sampling ports adequate for the applicable test methods. This includes constructing the air pollution control system and stack or duct such that

- pollutant concentrations can be accurately determined by applicable test methods;
- (B) Safe sampling platform(s), scaffolding or mechanical lifts, including safe access, that comply with California General Safety Orders; and
  - (C) ~~Utilities for sampling and testing equipment.~~
- (8) The LAP contractor shall conduct source testing for at least 30 minutes during normal operation (actual duty cycle). This test shall not be conducted under a steady-state condition unless it is the normal operation. ~~In addition, the LAP contractor shall conduct source testing for NOx and CO emissions for at least 15 minutes at: a Unit’s actual peak load, or the maximum load that can be practically achieved during the test, and at actual minimum load, excluding idle, or the minimum load that can be practically achieved during the test. These additional two tests are not required if the permit limits the Unit to operating at one defined load ± 10%. The LAP contractor shall not conduct any pre-tests for compliance. If an emission exceedance is found during any of the three phases of the test, that phase shall be completed and reported. An operator shall correct the exceedance, and the source test may be immediately resumed.~~
- (9) ~~The LAP contractor shall conduct the source test at least 40 operating hours, or at least 1 week, whichever occurs later, after any Unit servicing or tuning.~~
- (10) A Unit certified in accordance with subdivision (e), Certification, shall be exempt from the requirements of subdivision (f) for the period of the certification.
- (g) Monitoring, Recordkeeping, and Reporting
- (1) Monitoring
    - (A) ~~An owner or operator of a Unit shall maintain an operational non-resettable totalizing time meter to determine the elapsed operating time of the Unit.~~
    - (B) An owner or operator of a Unit shall maintain a utility grade calibrated electric meter that measures the net electrical output of the Unit, which is the difference between the electrical output and the electricity consumed by the auxiliary equipment necessary to operate the Unit.
    - (C) An owner or operator of a Unit shall maintain a District approved parametric monitoring system ~~consisting of an air-to-fuel ratio controller (AFRC), an oxygen sensor, a fuel flow meter, and an air flow meter, which has a malfunction indicator light and audible alarm.~~

- (D) An owner or operator of a Unit shall inspect ~~and~~; maintain, ~~and replace~~ all sensors and meters used by the parametric monitoring system per manufacturer's recommendations as specified in the operating manual. 1-24
- (E) An owner or operator of a Unit shall ~~develop and implement procedures for at least daily monitoring of the parametric monitoring system. monitor and record at least daily the following:~~
- (i) ~~fuel flow rate;~~
  - (ii) ~~elapsed time meter operating hours;~~
  - (iii) ~~AFRC system faults, alarms, and any other related emission control malfunctions; and~~
  - (iv) ~~operating hours since the last source test required by subdivision (f).~~
- 1-25
- (2) Recordkeeping
- An owner or operator of a Unit shall retain all data logs, source test reports, and other records required by this rule for at least five years and be made available to the Executive Officer upon request.
- (A) The owner or operator of a Unit shall maintain records, on a monthly basis, for the following parameters(s) or item(s):
- (i) Total hours of operation;
  - (ii) Type of fuel and quantity of fuel consumption (e.g., cubic feet of gas);  
~~Cumulative hours of operation since the last source test required in subdivision (f);~~
  - (iii) Megawatt-hours of electricity produced; and
  - (iv) ~~Air-to-Fuel~~AFRC system faults, alarms, and any other related emission control malfunctions.
- 1-26
- (B) An owner or operator of a Unit shall keep records to demonstrate compliance with paragraphs (e)(1), (f)(1), ~~and (f)(9).~~ 1-27
- (C) An owner or operator of a Unit shall keep sufficient operating records to demonstrate that it meets the requirements for extension of the source testing deadlines, pursuant to paragraph (f)(1).
- (3) Reporting
- (A) ~~In the event of a breakdown, the operator shall follow the procedures in Rule 430 for reporting of the breakdown. The operator shall report to the Executive Officer, by telephone (1-800-CUT-SMOG or 1-800-288-7664) or other South Coast AQMD approved method, any Breakdown resulting~~
- 1-28

- ~~in emissions in excess of rule or permit emission limits within one hour of such noncompliance or within one hour of the time the operator knew or reasonably should have known of its occurrence. Such report shall identify the time, specific location, equipment involved, responsible party to contact for further information, and to the extent known, the causes of the noncompliance, and the estimated time for repairs. In the case of emergencies that prevent a person from reporting all required information within the one-hour limit, the Executive Officer may extend the time for the reporting of required information provided the operator has notified the Executive Officer of the noncompliance within the one-hour limit.~~
- (B) ~~Within seven calendar days after the reported Breakdown has been corrected, but no later than thirty calendar days from the initial date of the Breakdown, unless an extension has been approved in writing by the Executive Officer, the owner or operator shall submit a written Breakdown report to the Executive Officer which includes:¶¶~~
- ~~(i) An identification of the equipment involved in causing, or suspected of having caused, or having been affected by the Breakdown;¶¶~~
  - ~~(ii) The duration of the Breakdown;¶¶~~
  - ~~(iii) The date of corrective action and information demonstrating that compliance is achieved;¶¶~~
  - ~~(iv) An identification of the types of excess emissions, if any, resulting from the Breakdown;¶¶~~
  - ~~(v) A quantification of the excess emissions, if any, resulting from the Breakdown and the basis used to quantify the emissions;¶¶~~
  - ~~(vi) Information substantiating whether the Breakdown resulted from operator error, neglect or improper operation or maintenance procedures;¶¶~~
  - ~~(vii) Information substantiating that steps were immediately taken to correct the condition causing the Breakdown, and to minimize the emissions, if any, resulting from the Breakdown;¶¶~~
  - ~~(viii) A description of the corrective measures undertaken and/or to be undertaken to avoid such a Breakdown in the future; and¶¶~~
- ~~(C) Pictures of any equipment which failed, if available.~~
- (D) An owner or operator of a Unit shall submit all source test reports,

1-28 cont'd

- ~~including a description of the equipment tested,~~ to the Executive Officer within 60 days of completion of the test. 1-29
- (h) Exemptions
- (1) The requirements of Section (g) shall not apply to linear generators that have been certified under Section (f). 1-30
- (2) The provisions of this rule shall not apply to linear generators that have received a California Air Resources Board Executive Order issued under the Distributed Generation (DG) Certification Regulation
- (3) The provisions of subdivisions (d) shall not apply to:
- (A) Laboratory Units used for testing and research purposes; and
  - (B) Units operating pursuant to Rule 441 with a valid experimental research operations permit to operate, operated for the purposes of performance verification and testing of such Units.
- (4) The provisions of subdivisions (f) shall not apply to:
- (A) Emergency Standby Units, Units used for fire-fighting and flood control, and any other emergency Unit approved by the Executive Officer, which have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.

**Staff Responses to Email Comment #1:***Response to Email Comment 1-1:*

Staff narrowed the applicability of PR 1110.3 to natural gas fueled linear generators only. Source test data was provided for natural gas fueled units which verified the achievability of the proposed emission limits. Since no source test data was provided for any fuel besides natural gas, other fuels are not included in PR 1110.3 applicability.

*Response to Email Comment 1-2:*

Staff removed this definition from PR 1110.3. Units subject to PR 1110.3 will be subject to the breakdown provisions in Rule 430.

*Response to Email Comment 1-3:*

Staff updated the definition to reflect this edit and to further streamline the definition.

*Response to Email Comment 1-4:*

Staff updated this provision to reflect the suggested edit.

*Response to Email Comment 1-5:*

Staff is not including the proposed definition because South Coast AQMD recognizes the source test protocol submitted by the equipment manufacturer as a generic source test protocol rather than a standardized source test protocol. Standardized source test protocols are available to the public through the South Coast AQMD website, whereas generic source test protocols are not publicly available. PR 1110.3 includes verbiage to reference generic source test protocols in subdivision (f) and the staff report provides clarity on what a generic protocol is.

*Response to Email Comment 1-6:*

Staff updated subdivision (c) of PR 1110.3 to clarify that the definitions provided are for the purposes of the rule. In addition, the definition of Unit was updated to clarify that a Unit means any single linear generator core.

*Response to Email Comment 1-7:*

Please see Response to Email Comment 1-1. In addition, Table 1 has been updated to reflect the updated applicability in PR 1110.3.

*Response to Email Comment 1-8:*

Please see Response to Email Comment 1-2. Staff did not include the proposed provision for allowing the Unit's Inspection and Monitoring Plan to be adhered to in the event of a breakdown in PR 1110.3, as it could potentially conflict with the requirements set forth in Rule 430 clause (b)(3)(A)(iv).

*Response to Email Comment 1-9:*

Staff updated the provision to reflect the suggested edit.

*Response to Email Comment 1-10:*

Staff will keep maintenance requirements as a separate subdivision from emission limits.

*Response to Email Comment 1-11:*

Staff did not include the proposed rule language as U.S. EPA indicated that the provisions related to a South Coast AQMD certification program would likely be disapproved since the certification program has not been developed. Staff commits to begin the development of a South Coast AQMD certification program for linear generators within 90 days of the adoption of PR 1110.3 and initiate a rule development process after finalizing a South Coast AQMD certification program for linear generators.

*Response to Email Comment 1-12:*

Staff updated the source testing frequency for non-pooled units to every five years to address concerns about source test frequency. In addition, an option to pool test facilities with six or more identical units has been added to further reduce source testing burdens.

*Response to Email Comment 1-13:*

Staff updated this provision to reflect the suggested edit.

*Response to Email Comment 1-14:*

Staff will require that the source test be conducted within 90 days as requested.

*Response to Email Comment 1-15:*

This proposal is not acceptable as the emission measurements taken from portable analyzers by a facility operator are not enforceable. U.S. EPA would likely not approve PR 1110.3 into the SIP without an enforceable mechanism to determine compliance with emission limits. In addition, source testing can be done for all pollutants regulated by PR 1110.3 (i.e. NO<sub>x</sub>, CO, and VOC), whereas portable analyzer testing would not measure VOC emissions.

*Response to Email Comment 1-16:*

Please see Response to Email Comment 1-5.

*Response to Email Comment 1-17:*

Consistent with other rules with source testing requirements, this provision is necessary to ensure that LAP contractors have access to needed utilities to conduct source tests.

*Response to Email Comment 1-18:*

Staff updated this provision to reflect the suggested edit.



*Response to Email Comment 1-19:*

Staff retained and clarified this provision, as is important to ensure that units are not tuned prior to testing, thus ensuring the integrity and validity source test data.

*Response to Email Comment 1-20:*

Please see Response to Email Comment 1-11.

*Response to Email Comment 1-21:*

Staff updated the rule to remove this provision.

*Response to Email Comment 1-22:*

Staff updated this to a net output meter that is compliant with ANSI C12.20 or equivalent.

*Response to Email Comment 1-23:*

Staff does not believe that it is necessary to have a specific District approved parametric monitoring system. However, staff recognizes the variation of parametric monitoring systems and thus, the provision has been updated to be more general in the event of potential design changes.

*Response to Email Comment 1-24:*

Staff updated this provision to reflect the suggested edits.

*Response to Email Comment 1-25:*

Staff updated this provision to reflect the suggested edits.

*Response to Email Comment 1-26:*

Staff removed this provision and has updated PR 1110.3 subparagraph (g)(2)(A) to reflect the suggested edits.

*Response to Email Comment 1-27:*

Please see Response to Email Comment 1-19. Recordkeeping requirements are necessary to verify compliance with maintenance and emission testing requirements in PR 1110.3.

*Response to Email Comment 1-28:*

Staff deleted the breakdown reporting requirements in PR 1110.3, as requested. Rule 430 will apply to units regulated under PR 1110.3. Staff did not include the proposed language to directly reference Rule 430 for reporting of breakdown requirements.

*Response to Email Comment 1-29:*

Staff updated this provision to reflect the suggested edits, since the source test protocol contains requirements to submit source test reports that include a description of the equipment tested.

*Response to Email Comment 1-30:*

Please see Response to Email Comment 1-11. Staff discussed the proposal to provide an exemption for units certified under the California Air Resources Board (CARB) Distributed Generation (DG) Certification Regulation with U.S. EPA. U.S. EPA expressed concerns about establishing an exemption from PR 1110.3 for units with CARB DG certifications when the CARB DG Certification Regulation is not SIP approved.

## Email Comment #2: Corrie Zuppo- Mainspring Energy, Incorporated

**Hay Lo**

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**From:** Corrie Zupo <corrie.zupo@mainspringenergy.com>  
**Sent:** Monday, February 6, 2023 5:00 PM  
**To:** Hay Lo  
**Cc:** Isabelle Shine; Michael Morris; Michael Krause; Adam Simpson; Scott Weaver; Melicia Charles  
**Subject:** PR 11110.3 tuning and breakdown reporting

Good afternoon Hay,

As an additional follow-up to last week's PR 1110.3 call, we wanted to provide further comments on the definition of tuning and breakdown reporting. The definition of tuning suggestions is from SoCal Gas, who have been champions of linear generator technology. The breakdown reporting language is a condensed version of our current I&M Plan process.

### Section c(13) Tuning:

TUNING means adjusting, optimizing, **rebalancing**, or other similar **action operations** to an electric generating Unit or an associated control device or otherwise defined in the Permit to Operate. Tuning does not include normal operations, **for example, adjustments** to meet load fluctuations **or any adjustment made automatically by the control system**.

2-1

### Section g(3) Reporting:

- (A) In the event of a breakdown, the operator shall follow the procedures in Rule 430 for reporting of the breakdown.
- (B) A remote audit will commence upon notification of potential evidence of the emissions limits. If it is determined that there was an exceedance event, the operator will make any necessary adjustments to get the operation within the emissions limits. If the operator is unsuccessful in achieving and maintaining operation within the emission limits within 72 hours of the remote audit, the unit will be shut down until an onsite inspection can occur and the unit is operating below the emission limits.
- (C) In the event of a breakdown, the operator shall follow the procedures in Rule 430 for reporting of a breakdown.
- (D) An owner or operator of a Unit shall submit all source test reports to the Executive Officer within 60 days of completion of the test.

2-2

Please let me know if you have any questions and/or would like to discuss this further.

Best regards,

**Corrie Zupo** | Environmental Manager Permitting & Compliance | [Mainspring](#) | (c) 424-241-8959

Need to chat? Here's access to my [calendar](#) to set up an invite.

**Staff Responses to Email Comment #2:***Response to Email Comment 2-1:*

Staff provided additional clarity as to what is considered tuning, which incorporates most of the suggested language. Staff did not include the term “action operations” as it was not clearly defined from other operations.

*Response to Email Comment 2-2:*

Please see Response to Email Comments 1-28. The proposed rule language referred to as section (g)(3)(B) was not included in Proposed Rule 1110.3, as it seems to conflict with Rule 430 requirements.

**Email Comment #3: Corrie Zuppo- Mainspring Energy, Incorporated**

**Hay Lo**

**From:** Corrie Zupo <corrie.zupo@mainspringenergy.com>  
**Sent:** Monday, February 6, 2023 4:33 PM  
**To:** Hay Lo  
**Cc:** Isabelle Shine; Michael Morris; Adam Simpson; Scott Weaver; Melicia Charles; Michael Krause  
**Subject:** PR 1110.3 testing follow-up

Good afternoon Hay,

Mainspring appreciates the SCAQMD staff’s work on the PR1110.3 proposed rule language. In our meeting on February 2, we discussed Mainspring’s proposal to update rule language to allow for annual NOx and CO emission testing with a portable analyzer in lieu of performing a source test every three years. Just to clarify, our proposal is to require testing using a portable analyzer, and if the results are above the permit limits, then we would take corrective action and then perform a source test. Our hope is that this will address the enforceability concerns.

3-1

With respect to the timing of any testing (source or portable analyzer), Mainspring would strongly prefer the test schedule to be tied to operating hours rather than calendar months or years. We have a lot of projects in the pipeline that only operate 40-70% of the time (e.g., solar paired or EV charging), and having testing based on calendar months or years puts these projects at an economic disadvantage relative to projects that operate continuously.

3-2

We discussed this on the call, but we want to reiterate that Mainspring remains concerned about the disparate treatment of the linear generator technology when compared to other non-emergency electrical generation technologies of comparable rating (i.e., microturbines and fuel cells). As shown in the table below, emissions of NOx and CO from linear generators are comparable to those of microturbines and fuel cells. However, there are no source testing requirements for microturbines (permitted or registered) or registered fuel cells. The District’s proposal to require source tests on linear generators causes a significant regulatory disparity, especially given the similar emissions profiles.

<b>Table 1. Emission Comparison</b>			
<b>Pollutant</b>	<b>Emissions (lb/MWhr)<sup>1,2</sup></b>		
	<b>Linear Generator</b>	<b>Fuel Cell</b>	<b>Microturbine</b>
NOx	0.06	0.07	0.07
CO	0.02	0.10	0.10

1. Based on Montrose Source Test Report for Colton location. Test date: 4/1/21.  
 2. Microturbne and Fuel Cell emissions based on CARB Distributed Generation Executive Orders: <https://ww2.arb.ca.gov/our-work/programs/dqcert/exec-orders>

3-3

Requiring source testing also causes a competitive disadvantage when compared to those other distributed generation technologies. A 15-year cost comparison, under the current permitting rules, of these technologies is presented below.

<b>Table 2. Source Test Cost Comparison</b>
---

3-4

Fee/Cost	Linear Generator	Fuel Cell	Microturbine (Registered)	Microturbine (permitted)
SCAQMD source test protocol review <sup>1</sup>	\$471.83	\$0.00	\$0.00	\$0.00
SCAQMD source test report review (15 yrs) <sup>2,3</sup>	\$14,231.25	\$0.00	\$0.00	\$0.00
Cost of source test (15 yrs) <sup>3,4</sup>	\$150,000	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$164,703.08</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<ol style="list-style-type: none"> <li>1. Rule 306(m)(1). Based on a 5 hr evaluation. Fees are increased on an hourly basis beyond 5 hrs. However, the SCAQMD source test engineer stated that the protocol evaluation typically takes 5 hrs.</li> <li>2. Based on invoice # 4082044, reference #PR220000, for 8 hours of source test review billed at \$948,75 per review.</li> <li>3. Assumes source test is required upon startup and every year thereafter.</li> <li>4. Assumes \$10,000 per source test for a single unit project/site.</li> </ol>				

3-4  
cont'd

Even at a 3-year source test interval, costs are drastically disproportional. The District has suggested requiring source tests because this is a new technology. However, several of these units have been operating within the District and in BAAQMD for multiple years. A growing number of source tests have been performed, all demonstrating compliance with the emission limits in PR1110.3. The lack of variation in the equipment performance should provide the District with the needed assurance that the emissions will not vary from unit to unit. Mainspring is respectfully requesting that the District reconsiders and adopt Mainspring’s proposal to allow for portable analyzer testing in lieu of source tests.

Please let me know if you have any questions and/or would like to discuss this further.

Best regards,

**Corrie Zupo** | Environmental Manager Permitting & Compliance | [Mainspring](#) | (c) 424-241-8959

Need to chat? Here's access to my [calendar](#) to set up an invite.

**Staff Responses to Email Comment #3:***Response to Email Comment 3-1:*

Please see Response to Email Comment 1-15.

*Response to Email Comment 3-2:*

Staff updated PR 1110.3 to remove the requirements for a non-resettable hour meter and thus, emission testing frequencies will be determined by calendar dates. Please see Response to Email Comment 1-12.

*Response to Email Comment 3-3:*

Although linear generator emission profiles are similar to those of microturbines and fuel cells, staff believes that emission testing is necessary. Some microturbines and fuel cells carry CARB Certifications for specific units, meeting CARB's Distributed Generation standards. The proposed emissions testing requirements will provide staff with assurances of the durability and robustness of the technology.

*Response to Email Comment 3-4:*

Staff proposed a new emissions testing schedule to help alleviate costs associated with emission testing. Based on the new testing schedule and an estimated cost of \$10,000 per source test, staff calculates the cost of source testing each unit to be approximately \$30,000 over a 15-year period. The new test schedule translates to over 60% cost savings over the originally proposed source test frequency that units are currently subject to in R1110.2. In addition, staff has also incorporated pooled initial source testing for facilities with six or more identical units. Since the pooled source testing will allow for testing of one-third of the Units, this provision will further reduce source testing costs.

### Email Comment #4: Steve Jepsen- Southern California Alliance of Publicly Owned Treatment Works

Please find a comment letter and rule redlines attached from SCAP/Clean Water SoCal. We appreciate the opportunity to comment.

PROPOSED CHANGES TO PR 1110.3-  
CLEANWATER SOCIAL REDLINES 2/8/23

(Adopted TBD)

V120822

**PROPOSED  
RULE 1110.3 EMISSIONS FROM LINEAR GENERATORS**

- (a) Purpose  
The purpose of this rule is to reduce emissions of Oxides of Nitrogen (NO<sub>x</sub>), Volatile Organic Compounds (VOCs), and Carbon Monoxide (CO) from Linear Generators.
- (b) Applicability  
All Linear Generators are subject to this rule.
- (c) Definitions
- (1) BREAKDOWN means a physical or mechanical failure or malfunction of a Linear Generator, air pollution control equipment, or related operating equipment that is not the result of operator error, neglect, improper operation or improper maintenance procedures, which may lead to excess emissions beyond rule related emission limits or permit conditions.
  - (2) DAILY means the time period starting at 12 midnight and continuing through 11:59 p.m.
  - (3) DIGESTER GAS means gas that is produced by anaerobic decomposition of organic material.
  - (4) DUAL FUEL UNIT is any Unit subject to this rule permitted to fire digester gas and another fuel
  - ~~(4)~~(5) FACILITY means any source or group of sources or other air contaminant emitting activities which are located on one or more contiguous properties within the South Coast AQMD, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in Section 55.2 of Title 40, Part 55 of the Code of Federal Regulations (40 CFR Part 55). Such above-described groups, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one Facility.
  - ~~(5)~~(6) LANDFILL GAS means any gas derived through a natural process from the decomposition of waste deposited in an MSW Landfill.
  - ~~(6)~~(7) LINEAR GENERATOR means any power generation technology that uses a thermochemical reaction to create linear motion that is directly converted into electricity.

4-1

PR 1110.3 - 1



[PROPOSED CHANGES TO PR 1110.3-  
CLEANWATER SOCIAL REDLINES 2/8/23](#)

Proposed Rule 1110.3 (Cont.)

(Adopted TBD)

- ~~(7)~~(8) MUNICIPAL SOLID WASTE or MSW LANDFILL means an entire disposal Facility in a contiguous geographical space where solid waste is placed in or on land. An MSW Landfill may be active, inactive, or closed.
- (A) Active MSW Landfill means a Municipal Solid Waste Landfill that has received solid waste on or after November 8, 1987.
- (B) Inactive MSW Landfill means a Municipal Solid Waste Landfill that has not accepted solid waste after November 8, 1987 and subsequently no further solid waste disposal activity has been conducted within the disposal Facility.
- (C) Closed MSW Landfill means a Municipal Solid Waste Landfill that has ceased accepting solid waste for disposal and the closure was conducted in accordance with all applicable federal, state and local statutes, regulations, and ordinances in effect at the time of closure.
- ~~(8)~~(9) NATURAL GAS means a mixture of gaseous hydrocarbons, with at least 80 percent methane by volume, and of pipeline quality, such as the gas sold or distributed by any utility company regulated by the California Public Utilities Commission.
- (10) OPERATING CYCLE means a period of time within which a round of regularly recurring events is completed, and cannot be stopped without the risk of endangering public safety or health, causing material damage to the equipment or product, or cannot be stopped due to technical constraints. Economic reasons alone will not be sufficient to extend this time period. The Operating Cycle includes batch processes that may start and finish several times within a twenty-four hour period, in which case each start to finish interval is considered a complete cycle.
- ~~(9)~~(11) PUBLICLY OWNED TREATMENT WORKS FACILITY OR POTW FACILITY is a wastewater treatment or reclamation plant owned or operated by a public entity, including all operations within the boundaries of the wastewater and sludge treatment plant.
- ~~(10)~~(12) OXIDES OF NITROGEN (NO<sub>x</sub>) means the sum of nitric oxides and nitrogen dioxides emitted, collectively expressed as nitrogen dioxide emissions.
- ~~(11)~~(13) TUNING means adjusting, optimizing, rebalancing, or other similar operations to an electric generating Unit or an associated control device or as otherwise defined in the Permit to Operate. Tuning does not include normal operations to meet load fluctuations.
- ~~(12)~~(14) UNIT means any Linear Generator.

4-2

PR 1110.3 - 2

**PROPOSED CHANGES TO PR 1110.3-  
CLEANWATER SOCIAL REDLINES 2/8/23**

**Proposed Rule 1110.3 (Cont.)**

**(Adopted TBD)**

~~(13)~~(15) VOLATILE ORGANIC COMPOUND (VOC) as defined in Rule 102 – Definition of Terms.

(d) Emission Limits

(1) An owner or operator of a Unit shall not operate it in a manner that exceeds the NO<sub>x</sub>, CO, and VOC emission limits listed in Table 1: Concentration Limits for Linear Generators, pursuant to subdivision (f):

**Table 1: Concentration Limits for Linear Generators**

<u>Table 1A: Units Installed on and after [Date of Adoption]</u>			
Fuel Type	NO <sub>x</sub> (ppmv) <sup>1</sup>	CO (ppmv) <sup>1</sup>	VOC (ppmv) <sup>2</sup>
Natural Gas, Propane Gas, Hydrogen Gas, Landfill Gas, <del>and</del> <u>Digester Gas</u>	2.5	12	10
<u>Table 1B Interim Limits</u>			
<u>Digester Gas, or Dual Fuel</u> <sup>3</sup>	<u>11</u>	<u>250</u>	<u>30</u>

4-3

<sup>1</sup> Parts per million by volume, corrected to 15% oxygen on a dry basis and averaged over 15 minutes.

<sup>2</sup> Parts per million by volume, measured as carbon, corrected to 15% oxygen on a dry basis, and averaged over the sampling time required by the test method.

<sup>3</sup>Table 1B Emission Limits shall continue to apply unless amended or otherwise superseded following a technology assessment referenced in Rule 1110.3 (d)(2).

(2) The concentration limits in Table 1A shall become effective for digester and dual fuel Units provided the Executive Officer conducts a technology assessment that confirms that the limits are achievable and reports to the Governing Board by July 2024, at a regularly scheduled public meeting. Interim concentration limits effective upon rule adoption are listed in Table 1B.

4-4

~~(2)~~(3) An owner or operator shall shut down a Unit having a Breakdown that results in emissions in excess of those allowed by Table 1 by the end of an Operating Cycle, or within 24 hours from the time the operator knew of the Breakdown or excess emissions, or reasonably should have known, whichever is sooner.

[PROPOSED CHANGES TO PR 1110.3-  
CLEANWATER SOCAL REDLINES 2/8/23](#)

**Proposed Rule 1110.3 (Cont.)****(Adopted TBD)**

- (e) Maintenance Requirements
- (1) An owner or operator of a Unit shall perform maintenance per manufacturer's recommendations as specified in the operating and maintenance manual.
  - (2) An owner or operator of a Unit shall keep a copy of the manufacturer's operating manual and make it available to South Coast AQMD upon request.
- (f) Source Testing
- (1) An owner or operator of a Unit shall conduct source testing for NO<sub>x</sub>, VOC reported as carbon, and CO concentrations (concentrations in ppm by volume, corrected to 15 percent oxygen on dry basis) at least once every two years from the date of the previous source test, no later than the last day of the calendar month that the test is due, or every 8,760 operating hours, whichever occurs first. The source test schedule may be changed under the following circumstances:
    - (A) An owner or operator of a Unit may elect to reduce the source test frequency to once every three years if the Unit has operated less than 2,000 hours since the last source test; and
    - (B) An owner or operator of a Unit that has not been operated before the date a source test is due, shall conduct a source test by the end of seven consecutive days or 15 cumulative days of resumed operation.
  - (2) An owner or operator of a Unit shall conduct the source test by using a contractor that is approved under the South Coast AQMD's Laboratory Approval Program (LAP) for the test methods specified in Table 2: Testing Methods, or any test methods approved by CARB and EPA, and authorized by the Executive Officer.

**Table 2: Testing Methods**

<b>Pollutant</b>	<b>Method</b>
NO <sub>x</sub>	South Coast AQMD Method 100.1
CO	South Coast AQMD Method 100.1
VOC	South Coast AQMD Method 25.1* or Method 25.3*

\*Excluding ethane and methane

- (3) An owner or operator of a Unit shall submit a source test protocol to the Executive Officer for written approval at least 60 days before the scheduled date of the test. The source test protocol shall include, but not limited to the following:
  - (A) Name, address, and phone number of the Unit operator and a South Coast

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PROPOSED CHANGES TO PR 1110.3-  
CLEANWATER SOCIAL REDLINES 2/8/23

**Proposed Rule 1110.3 (Cont.)**

**(Adopted TBD)**

- AQMD-approved source testing contractor that will conduct the test;
- (B) Application number(s), permit number(s), and emission limits;
  - (C) Description of the Unit(s) to be tested and the test methods and procedures to be used;
  - (D) Number of tests to be conducted and under what loads; and
  - (E) Required minimum sampling time for the VOC test, based on the analytical detection limit and expected VOC levels.
- (4) An owner or operator of a Unit shall conduct the testing after the receipt of source test protocol approval from the Executive Officer. If an owner or operator submits the protocol by the required date, and the Executive Officer takes longer than 60 days to approve the protocol, the owner or operator shall be allowed the additional time needed to conduct the test.
- (5) In lieu of meeting the requirements in paragraph (f)(3), an owner or operator of a Unit may elect not to submit a source test protocol for approval if:
- (A) There is a previously approved protocol for the Unit that meets the requirements in subparagraphs (f)(3)(A) through (f)(3)(E); and
  - (B) The Unit has not been altered in a manner that requires a permit modification.
- (6) An owner or operator of a Unit shall provide South Coast AQMD at least 30 days prior notice of any source test to afford South Coast AQMD the opportunity to have an observer present. If, after the 30 days prior notice is given, there is a delay (due to operational problems, etc.) in conducting the scheduled source test, the owner or operator of a Unit shall notify South Coast AQMD as soon as possible of any delay in the original test date, either by providing notice of the rescheduled date of the source test at least seven days prior, or by arranging a rescheduled date mutually agreed upon with South Coast AQMD.
- (7) An owner or operator of a Unit shall provide source testing facilities as follows:
- (A) Sampling ports adequate for the applicable test methods. This includes constructing the air pollution control system and stack or duct such that pollutant concentrations can be accurately determined by applicable test methods;
  - (B) Safe sampling platform(s), scaffolding or mechanical lifts, including safe access, that comply with California General Safety Orders; and
  - (C) Utilities for sampling and testing equipment.
- (8) The LAP contractor shall conduct source testing for at least 30 minutes during

**PR 1110.3 - 5**

PROPOSED CHANGES TO PR 1110.3-  
CLEANWATER SOCAL REDLINES 2/8/23

**Proposed Rule 1110.3 (Cont.)**

**(Adopted TBD)**

normal operation (actual duty cycle). This test shall not be conducted under a steady-state condition unless it is the normal operation. In addition, the LAP contractor shall conduct source testing for NO<sub>x</sub> and CO emissions for at least 15 minutes at: a Unit's actual peak load, or the maximum load that can be practically achieved during the test, and at actual minimum load, excluding idle, or the minimum load that can be practically achieved during the test. These additional two tests are not required if the permit limits the Unit to operating at one defined load  $\pm 10\%$ . The LAP contractor shall not conduct any pre-tests for compliance. If an emission exceedance is found during any of the three phases of the test, that phase shall be completed and reported. An operator shall correct the exceedance, and the source test may be immediately resumed.

- (9) The LAP contractor shall conduct the source test at least 40 operating hours, or at least 1 week, after any Unit servicing or Tuning.
- (g) Monitoring, Recordkeeping, and Reporting
  - (1) Monitoring
    - (A) An owner or operator of a Unit shall maintain an operational non-resettable totalizing time meter to determine the elapsed Unit operating time.
    - (B) An owner or operator of a Unit shall maintain a calibrated electric meter that measures the net electrical output of the Unit, which is the difference between the electrical output and the electricity consumed by the auxiliary equipment necessary to operate the Unit.
    - (C) An owner or operator of a Unit shall maintain a parametric monitoring system consisting of an air-to-fuel ratio controller (AFRC), an oxygen sensor, a fuel flow meter, and an air flow meter, which has a malfunction indicator light and audible alarm.
    - (D) An owner or operator of a Unit shall inspect, maintain, and replace all sensors and meters used by the parametric monitoring system per manufacturer's recommendations as specified in the operating manual.
    - (E) An owner or operator of a Unit shall develop and implement procedures for at least Daily monitoring and inspection of:
      - (i) fuel flow rate;
      - (ii) elapsed time meter operating hours;
      - (iii) AFRC system faults, alarms, and any other related emission control malfunctions; and
      - (iv) operating hours since the last source test required by subdivision (f).

**PR 1110.3 - 6**

[PROPOSED CHANGES TO PR 1110.3-  
CLEANWATER SOCAL REDLINES 2/8/23](#)

**Proposed Rule 1110.3 (Cont.)**

**(Adopted TBD)**

(2) Recordkeeping

An owner or an operator of a Unit shall retain all data logs, source test reports, and other records required by this rule for at least five years and be made available to South Coast AQMD upon request.

(A) The owner or operator of a Unit shall maintain records, on a monthly basis, for the following parameters(s) or item(s):

- (i) Total hours of operation;
- (ii) Type of fuel and quantity of fuel consumption (cubic feet of gas);
- (iii) Cumulative hours of operation since the last source test required in subdivision (f);
- (iv) Megawatt-hours of electricity produced; and
- (v) AFRC system faults, alarms, and any other related emission control malfunctions.

(B) An owner or operator of a Unit shall keep records to demonstrate compliance with paragraphs (e)(1) and (f)(9).

(C) An owner or operator of a Unit shall keep sufficient operating records to demonstrate that it meets the requirements for extension of the source testing deadlines, pursuant to paragraph (f)(1).

(3) Reporting

(A) The operator shall report to South Coast AQMD, by telephone (1-800 CUT-SMOG or 1-800-288-7664) or other Executive Officer approved method, any Breakdown resulting in emissions in excess of rule or permit emission limits within one hour of such noncompliance or within one hour of the time the operator knew or reasonably should have known of its occurrence. Such report shall identify the time, specific location, equipment involved, responsible party to contact for further information, and to the extent known, the causes of the noncompliance, and the estimated time for repairs. In the case of emergencies that prevent a person from reporting all required information within the one-hour limit, the Executive Officer may extend the time for the reporting of required information provided the operator has notified South Coast AQMD of the noncompliance within the one-hour limit.

(B) Within seven calendar days after the reported Breakdown has been corrected, but no later than thirty calendar days from the initial date of the Breakdown, unless an extension has been approved in writing by the

PROPOSED CHANGES TO PR 1110.3-  
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**Proposed Rule 1110.3 (Cont.)**

**(Adopted TBD)**

Executive Officer, the operator shall submit a written Breakdown report to South Coast AQMD which includes:

- (i) An identification of the equipment involved in causing, or suspected of having caused, or having been affected by the Breakdown;
  - (ii) The duration of the Breakdown;
  - (iii) The date of corrective action and information demonstrating that compliance is achieved;
  - (iv) An identification of the types of excess emissions, if any, resulting from the Breakdown;
  - (v) A quantification of the excess emissions, if any, resulting from the Breakdown and the basis used to quantify the emissions;
  - (vi) Information substantiating whether the Breakdown resulted from operator error, neglect or improper operation or maintenance procedures;
  - (vii) Information substantiating that steps were immediately taken to correct the condition causing the Breakdown, and to minimize the emissions, if any, resulting from the Breakdown;
  - (viii) A description of the corrective measures undertaken and/or to be undertaken to avoid such a Breakdown in the future; and
  - (ix) Pictures of any equipment which failed, if available.
- (C) An owner or operator of a Unit shall submit all source test reports, including a description of the equipment tested, to South Coast AQMD within 60 days of completion of the test.

**Staff Responses to Email Comment #4***Response to Email Comment 4-1*

Staff updated the applicability of PR 1110.3 to only include natural gas fueled units, as staff has only received source test data for natural gas fired units. Please see Response to Email Comment 1-1. Rule amendments can be made in the future as more emission data for various fuels is available.

*Response to Email Comment 4-2:*

The proposed rule language is not necessary at this time, as the applicability of PR1110.3 was narrowed to natural gas fueled units. Please see Response to Email Comment 1-1.

*Response to Email Comment 4-3:*

Please see Response to Email Comment 4-2.

*Response to Email Comment 4-4:*

Please see Response to Email Comment 4-2.



**Email Comment #5: Corrie Zuppo- Mainspring Energy, Incorporated**

Attached are our minor staff report proposed updates.

Citation	Proposed Amended Language	Comments	
Executive Summary, Page EX-1, Paragraph 1	Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines is source-specific rule which applies to non-RECLAIM facilities and RECLAIM facilities with engines greater than 50 rated brake horsepower. The rule was last amended in 2019 to implement Control Measure CMB-05 of the Final 2016 Air Quality Management Plan. During the rule development process, linear generators were introduced as an alternative technology to reduce emissions and stakeholders commented on the unique characteristics of linear generators. Unlike <del>traditional</del> internal combustion engines (ICEs), linear generators produce electricity by driving magnets through copper coils in a linear motion. One unique feature of linear generators is that the <del>combustion</del> thermochemical reaction takes place at lower temperatures than <del>traditional</del> ICE, which results in lower emissions without add-on control devices (e.g., selective catalytic reduction). In addition, linear generators utilize a parametric monitoring system that monitors performance and controls emission levels. Linear generators are currently being used for prime power applications but can be used for emergency backup power to implement Control Measure L-CMB-04 of the Final 2022 Air Quality Management Plan. In response to stakeholder comments, Proposed Rule 1110.3 – Emissions from Linear Generators (PR 1110.3), is being developed to allow for specific considerations of the technology and capabilities of linear generators.	1. Linear Generators are not internal combustion engines. The use of the word "traditional" provides a comparison that is inaccurate. Therefore we are requesting removal of the word "traditional" from the staff report.  2. The reaction that takes place is a thermochemical reaction, not a combustion reaction. Please remove the word "combustion" wherever it is used to describe Linear Generator operation.	5-1
Chapter 1: Background, Page 1-1 Paragraph 2	Unlike <del>traditional</del> combustion engines, linear generators produce electricity by driving magnets through copper coils in a linear motion (Figure 1). In this reaction, a mixture of fuel and air are compressed, causing a chemical <del>combustion</del> reaction that drives the magnets through the copper coils. One of the features that makes linear generators unique is that this <del>combustion</del> thermochemical reaction takes place in the "reaction zone" and occurs at lower temperatures than <del>traditional</del> engines, resulting in lower NOx and CO emissions. Linear generators also do not utilize add-on control technologies such as selective catalytic reduction (SCR) to control NOx emissions. Although they are equipped with an oxidation catalyst, they are not dependent on this catalyst to reach a destruction temperature and thus, start-up emissions are low. As a result of the lower <del>combustion</del> reaction temperatures of linear generators, the oxidation catalyst's ability to control VOC emissions is limited and its main function is to reduce CO emissions. In addition, linear generators utilize a parametric monitoring system to maintain <del>fuel and air injection</del> proper <del>combustion</del> to meet energy demands. The parametric monitoring system works by monitoring and adjusting air and fuel flow to ensure proper air-to-fuel ratio is achieved, which also ensures emissions are under control. Finally, linear generators are also unique in that, <del>based on stakeholder comments</del> , they have the ability to operate on different fuels without any hardware changes to the equipment.	1. Linear Generators are not internal combustion engines. The use of the word "traditional" provides a comparison that is inaccurate. Therefore we are requesting removal of the word "traditional" from the staff report.  2. The reaction that takes place is a thermochemical reaction, not a combustion reaction. Please remove the word "combustion" wherever it is used to describe Linear Generator operation.  3. Linear Generators do have the ability to operate on different fuels. This statement should not be tied to stakeholder comments	5-2
Chapter 2. Proposed Rule 1110.3, Subdivision (b) - Applicability, Page 2-1	PR 1110.3 applies to all linear generators, both portable and stationary, <del>regardless of size and fuel-type fueled by natural gas, landfill gas, digester gas, or hydrogen, with the exception of those units exempt under Section (h) of Rule 1110.3.</del>	Mainspring is requesting the rule specify the listed fuels. Additionally, Mainspring is recommending that the provisions of the rule not apply to linear generators certified under the California Air Resources Board Distributed Generation Certification Regulation.	5-3
Chapter 2. Proposed Rule 1110.3, Subdivision (c) - Definitions, Page 2-1	With input from stakeholders and South Coast AQMD engineering staff, this definition provides clarification and distinguishes linear generator technology from generators that utilize <del>traditional</del> internal combustion engines to generate electricity	Linear Generators are not internal combustion engines. The use of the word "traditional" provides a comparison that is inaccurate. Therefore we are requesting removal of the word "traditional" from the staff report.	5-4
Chapter 2. Proposed Rule 1110.3, Subdivision (d) - Emission Limits, Page 2-1	Paragraph (d)(1) specifies emission limits in Table 1 of PR 1110.3 (Table 2 in Staff Report) and applies to all linear generators, both portable and stationary, <del>regardless of size and fuel-type fueled by natural gas, landfill gas, digester gas, or hydrogen, with the exception of those units exempt under Section (h) of Rule 1110.3.</del>	Mainspring is requesting the rule specify the listed fuels. Additionally, Mainspring is recommending that the provisions of the rule not apply to linear generators certified under the California Air Resources Board Distributed Generation Certification Regulation.	5-5
Chapter 2. Proposed Rule 1110.3, Subdivision (d) - Emission Limits, Page 2-2	The manufacturer also indicated that the oxidation catalyst contribution to VOC reductions were negligible due to the lower <del>combustion</del> temperatures, and VOC emissions are primarily controlled through the parametric monitoring system.	The reaction that takes place is a thermochemical reaction, not a combustion reaction. Please remove the word "combustion" wherever it is used to describe Linear Generator operation.	5-6
Chapter 2. Proposed Rule 1110.3, Subdivision (g) - Monitoring, Recordkeeping, and Reporting, Page 2-3	In addition, records to demonstrate compliance with other rule provisions are also required to be <del>kept and</del> maintained <del>on-site</del> for a period of 5 years and made available to the South Coast AQMD upon request for compliance verification	The Linear Generators are operated remotely. The rule language is written with that understanding, and states:  <i>"An owner or operator of a Unit shall retain all data logs, source test reports, and other records required by this rule for at least five years and be made available to the Executive Officer upon request"</i>  The staff report should be updated to reflect that there will be no requirement to keep the records on-site.	5-7
Chapter 2. Proposed Amended Rule 1110.2, Subdivision (c) - Definitions, Page 2-4	This definition was created with input from stakeholders and South Coast AQMD engineering staff, and provides clarification and distinguishes linear generator technology from engines that utilize <del>traditional</del> internal combustion engines to produce electricity	Linear Generators are not internal combustion engines. The use of the word "traditional" provides a comparison that is inaccurate. Therefore we are requesting removal of the word "traditional" from the staff report.	5-8
Chapter 3. Table 3-1, PR1110.3 Column	Table 1110.3	Update language based on feedback provided by Mainspring Energy to SCAQMD on 1/27/23, and included here as Attachment B	5-9

**Staff Responses to Email Comment #5***Response to Email Comment 5-1:*

The staff report has been updated to reflect these corrections.

*Response to Email Comment 5-2:*

The staff report has been updated to reflect these corrections.

*Response to Email Comment 5-3:*

Please see Response to Email Comment 1-1.

*Response to Email Comment 5-4:*

The staff report has been updated to reflect these corrections.

*Response to Email Comment 5-5:*

Please see Response to Email Comment 1-1.

*Response to Email Comment 5-6:*

The staff report has been updated to reflect these corrections.

*Response to Email Comment 5-7:*

Staff has made the corrections as records may be maintained electronically at a remote location.

*Response to Email Comment 5-8:*

The staff report has been updated to reflect these corrections.

*Response to Email Comment 5-9:*

Please see Response to Email Comment 1-1.

## Email Comment #6: Robert Benz- Benz Air Engineering Co

### Hay Lo

**From:** Robert Benz <RBenz@benzaireng.com>  
**Sent:** Sunday, March 19, 2023 2:59 PM  
**To:** Michael Morris; hio1@aqmd.gov; Isabelle Shine; Sarah Rees; Michael Krause  
**Cc:** Erwin dela Cruz; support+id15706@gobiz.zendesk.com; Jason Aspell; Wayne Nastri; Patrica Spiritus; Jason Aspell; Christian Aviles; cchron@aqmd.gov; Bahareh Farahani; mferandez@aqmd.gov; Shannon Lee; Tommy Mai; Kevin Orellana; Barbara Radlein; Bill Welch; michael@therechargeoasis.com; Mark Nair; Andrew Newman; Dietrich Hartmann; d.mac@omstaff.com; Shelby Benz; Shelby Benz  
**Subject:** PR1110.3 - A Proposed Rule based on a Fictional Narrative.  
**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

The fictional justification of Proposed Rule 1110.3 – Emissions from Linear Generators Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines

Dear Mr. Morris and Fellow Staff of AQMD.

The proposed rule 1110.3 in its entirety serves no useful purpose other than to provide regulatory relief to one specific manufacturer. The central premise of the modification of 1110.2 and the proposed rule 1110.3 is predicated on a fiction that the linear generator is not a compression ignition engine – which in no uncertain terms categorically false. Based on nothing more than a sales brochure, the AQMD has been duped into believing that one specific linear generator is unlike internal combustion engines – in fact not an engine at all. The PR1110.3 and the accompanying PAR 1110.2 then defines the linear generator as using a “thermochemical reaction” which is the oxidation of fuel with oxygen in air, and defining all other engines in 1110.2 as one using either spark or compression ignition- the latter being precisely the ignition being used in the linear generator – a nonsense distinction without difference. The stakeholder posits that their technology is based on a mystical chemical reaction that is somehow “different” than the thermochemical oxidation reaction of fuel and air that occurs within the “reaction zone” of any spark ignited or compression ignited engine.

6-1

The linear generator deserves no special consideration and regulatory relief as prescribed by PR1110.3. Quite the contrary, a cursory review of the underlying combustion technology of the linear generator and the substantially complex control needed to maintain homogenous charge combustion ignition leaves little doubt that the technology requires more stringent monitoring. Unfortunately, the AQMD staff were erroneously led to believe by one stakeholder that the subject linear generator is different than any other engine, hence the reliance of only the stakeholder’s claims and no wonder. So far as I know, there simply isn’t any peer reviewed technical paper describing the stakeholder’s technology, the only mention of successful commercialization in a paper “Recent progress on performance and control of linear engine generator” <https://journals.sagepub.com/doi/full/10.1177/14680874221118014>. Interestingly, this paper describes the subject linear generator as “high compression ratio natural gas-powered ODP (Opposed piston dual power) LEG employs low-temperature combustion to achieve chemical to mechanical energy conversion, and the piston assembly motion is electrically controlled.”

6-2

A review of PR1110.3 reveals significant problems. Specifically,

1. As defined, “any power generation technology that uses a thermochemical reaction to create linear motion that is directly converted into electricity” includes all linear generators be they spark ignited, or compression ignition as all combustion processes are a “thermochemical reaction.”

6-3

2. PR1110.3 less frequent source testing (Rule 1110.2, paragraph (f)(1)) favors one manufacture over all others. The stakeholder’s claim that “performing the emissions checks required them to override their safety protocol in order to access the testing ports” is a red herring statement having no factual basis whatsoever. 6-4
3. Pooled testing - paragraph (f)(10) provides economic favoritism to one manufacturer over all other generator manufacturers and suppliers. Irrespective of Stakeholders concerns of cost or logistics, there is no logical reason supporting that source testing a third of a number of generators located a certain location or within a certain distance from another generator would somehow convey emission compliance. Likewise significantly increasing the time between periodic source testing from 2 years or 8760 hours, whichever occurs first to 5 years or 24000hours whichever comes first, grants one specific manufacturer a significant favor over all other manufacturers and suppliers of “thermochemical reaction” engine generators. As the Staff Draft Report makes abundantly clear, the linear generator is a new technology that has minimal collective run time hours compared with other engine generators. Therefore, allowing this particular manufacture of this new product less restrictive source testing requirements over the plethora of other engine generator manufacturers is without an reasonable explanation. 6-5
4. Amending PAR 1110.2 definition of “ENGINE is any spark- or compression-ignited internal combustion engine, including engines used for control of VOCs, but not including Linear Generators” is a distinction without a difference for the subject linear generator of PR1110.3 is a compression ignition engine. The linear generator subject to PR1110.3 is not some “new” type of chemistry rather a well-known and significantly researched combustion process called “homogeneous charge compression ignition.” 6-6

Disclosure, we are a company that provides a Combined Heat and Power system based on a reciprocating engine that is proven to yield over 90 percent net thermal efficiency. So its no wonder we are miffed to why the AQMD is providing special status to one particular engine manufacture. To be sure, the linear generator has received substantial funding in excess of \$800million. Nevertheless, we expect that air pollution regulations will be applied evenly regardless be it spark or compression ignition based technology. So please understand this special status afforded a technology that has no special benefits to either air pollution or efficiency indicates that the SCAQMD is picking favorites. Unfortunately, as the Staff Draft Report documents, these linear generators (otherwise known as engines) high single cycle efficiency have little or no waste heat to be otherwise used in combined heat and power application. Indeed, the particular stakeholder’s technology currently has no capability at all. So its little wonder the stakeholder seeks permitting relief for there is less of an economic advantage to their engine. 6-7

**Background:** The linear generator is an internal combustion engine that utilizes HCCI to operate during a portion of its duty cycle. For years, HCCI has been a holy grail for some prominent contemporary heat-engine research and development programs.  
<http://www.engr.wisc.edu/news/archive/2009/Aug03.html> <http://magazine.sae.org/12aeid0403> <http://www.sae.org/mags/aei/6635> Yet, this feat had already been demonstrated in the early 1950’s before the term HCCI was coined when an undergraduate student in engineering at MIT constructed a simple free-piston internal combustion engine and operated it with HCCI.

The HCCI combustion process and consequences can be summarized as follows. HCCI shares characteristics with the two familiar combustion processes in common use in existing internal combustion engines. These processes are (1) homogeneous charge spark ignition (gasoline engines) and (2) heterogeneous charge compression ignition (diesel engines). As in (1), HCCI mixes the fuel and air together prior to ignition but it does not use an electric discharge (spark) to ignite a portion of the mixture and rely on that small flame to propagate into and inflame the bulk. Rather, in HCCI, the whole charge is inflamed at once by compressing the mixture sufficiently to raise its density and temperature until the entire flammable mass ignites spontaneously producing an avalanche of combustion reactions as in an explosion. Thus, HCCI resembles the diesel combustion process in that the charge is heated above the auto-ignition temperature of the fuel by compression. But that is where the similarity ends. In the diesel, the compressed charge consists solely of air with combustion occurring only in the wakes of the fuel droplets as they are injected in to the compression-heated air. In HCCI, the fuel and air are premixed and homogenized before they are compressed together until combustion occurs throughout the charge as a strictly vapor-phase reaction.

The defining characteristic of HCCI is simultaneous ignition at many places throughout a compressed and pre-mixed fuel-air charge. Such multi-point ignition makes the fuel-air mixture burn very rapidly. However, since there is no definite trigger for timing the combustion event (like in a spark or fuel pulse), the process is spontaneous, i.e. timed by circumstances. These circumstances are inherently challenging to control in an intermittent combustion engine cycle. Consequently, sophisticated microprocessors and instrumentation have been brought to bear to control the various parameters affecting the physics of the ignition process. When appropriate timing has been achieved, gasoline engine-like emissions with diesel engine-like thermal efficiencies are attained. HCCI engines have demonstrated extremely low levels of nitrogen oxides (NOX) and particulate matter (PM) emissions in the laboratory. However, the exhaust still contains products of incomplete combustion (unburned hydrocarbon and carbon monoxide) at levels comparable to gasoline engines. Advantages attributed to HCCI engine operation include the following:

- Lower emissions and fuel consumption.
- Reduced peak combustion temperatures for reduced NO<sub>x</sub> formation.
- Leaner premixed charges avoid soot production.
- Compression-ignite and lean-burn various fuels without detonation including gasoline, diesel and most alternative fuels.
- Higher compression ratios and leaner mixtures without throttling improve thermal efficiency at partial loads.
- Simplified after-treatment of exhaust gases to reduce particulate and oxides of nitrogen emissions using catalytic oxidation only.

These accomplishments have given rise to expectations that the need for expensive and bulky exhaust gas after-treatment equipment (e.g. catalytic converter and particle filter) can be eliminated. But the residual combustion fragments will require oxidation catalysts to meet automotive emission regulations and the current Rule 1110.2. The HCCI mode of engine operation promises superior thermal single cycle efficiency and reduced emissions with cheaper fuels and without expensive fuel injection or ignition equipment. It perfects the more thermodynamically efficient Otto Cycle while enhancing the use of the simpler and safer distillate fuels without problematic spark ignition, direct ultra-high-pressure cylinder injection or loss-prone inlet throttling. That the stakeholder has perfected HCCI is impressive, but without any peer reviewed technical paper published by SAE or ASME, who knows?

Initially HCCI combustion is familiar only as a symptom of engine distress, such as that which occurs during severe overheating due to inadvertent coolant loss. Then, it is experienced as “run-on” after spark ignition has been turned off. The symptoms of noise, smoke and odor associated with this experience are hard to reconcile with recent laboratory results to the contrary. Schwartzman’s free-piston engine research at MIT is a rare example of deliberate HCCI engine operation <http://www.freepatentsonline.com/4860702.html>. But it is significant background for permitting because it demonstrated ignition control by compression ratio variation. The unrestrained travel of the free piston permitted compression to proceed on each stroke until ignition occurred. The attainment of whatever clearance volume or “reaction volume” as claimed in Staff Draft report, is required on each compression stroke to produce auto-ignition of the entire charge is a challenge for an engine that uses a fixed-center-of-rotation slider-crank mechanism having a fixed stroke. On the other hand, a mechanical output is a challenge for a free piston engine which apparently the stakeholder has developed. Again, what isn’t known to either the SCAQMD or anyone else for that matter, is technical peer review paper that verifies that result. The stakeholder has provided to the SCAQMD staff nothing but source tests which are point of time data without any peer reviewed paper to substantiate the leeway in permitting provided by PR1110.1. Given the challenge of the problem maintain HCCI there is simply no way SCAQMD Staff can conclude that the technology warrants such benefits as significantly long period between source testing.

6-8

To that point, HCCI combustion occurs in a sufficiently homogeneous mixture of vaporous fuel and air when conditions throughout the mixture are favorable for auto-ignition of the whole combustible charge at once, molecule by molecule. To produce such ignition and combustion repetitively with sufficient reliability for continuous internal combustion engine operation, “duds” and “bombs” must be avoided. HCCI operation occurs in the narrow region between misfire (“duds”) and detonation (“bombs”). This accomplishment requires a uniform charge with a prescribed composition after which it is necessary to control the reactivity of the charge from cycle to cycle. To be successful, an HCCI engine must obtain positive control of charge reactivity with sufficient effectiveness and transient response to

6-9

avoid these ignition failures altogether. It only takes one misfire to utterly defeat the best emission after-treatment system. And no engine endures for long with detonation in the combustion chamber. Regardless of the stakeholders claim of their “parametric monitoring system” to maintain the precise air fuel ratio, the extremely tight air fuel ratio control given the substantial transients of weather alone requires transmitters of high accuracy which simply is over the heads of most owners upon which PR1110.3 relies for compliance. Its simply absurd to assume owners of facilities to be sufficiently cognizant in analyzing whether the large data set of analog to digital transmitters having extremely high resolution to effectuate an extremely complex control of proper air fuel ratio needed of HCCI combustion based on multiple dependent variables.

6-9 cont’d.

Conclusion: PR1110.3 in its entirety is not needed. It serves no purpose other than granting regulatory relief without justification to one particular manufacturer.

6-10

Please provide the proper channels to put this on the next agenda in the hearing process involving PR1110.3 and PAR1110.2. Furthermore, I would like to copy all the commissioners and if need be provide a comprehensive technical presentation outlining the significant problems with PR1110.3. Obviously, I would welcome any questions the AQMD staff may have.

6-11

Very Respectfully,

Robert Benz PE  
209-602-1019 cell  
Benz Air Engineering Co  
531 Cypress Ave  
Hermosa Beach, CA 90254



**Staff Responses to Email Comment #6***Response to Email Comment 6-1:*

Staff is currently aware of two linear generator manufacturers and PR 1110.3 will apply to both manufacturers, as well as any other manufacturers of the technology. While fuel and air are compressed in linear generators, there is no flame or burning, and the resulting chemical reaction drives magnets through copper coils in a linear motion to produce electricity. Therefore, linear generators have differences from internal combustion engines. In addition, linear generators are able to achieve near-zero NOx emissions without the need for aftertreatment devices. Due to these unique characteristics, PR 1110.3 is being developed to allow for specific considerations of linear generator technology running solely on natural gas.

*Response to Email Comment 6-2:*

Please see response to Email Comment 6-1.

*Response to Email Comment 6-3:*

PR 1110.3 was developed through a public process and the definition of linear generator was developed with input from multiple stakeholders, including two different linear generator manufacturers.

*Response to Email Comment 6-4:*

Please see response to Email Comment 6-1.

*Response to Email Comment 6-5:*

Please see response to Email Comment 6-1.

*Response to Email Comment 6-6:*

Please see response to Email Comment 6-1. PR 1110.3 specifies requirements for linear generators and thus, the proposed amendments to Rule 1110.2 are necessary for the purpose of clarity and non-duplication.

*Response to Email Comment 6-7:*

Please see response to Email Comments 6-1.

*Response to Email Comment 6-8:*

Please see response to Email Comment 6-1. Staff established emission limits for natural gas fueled linear generations based on achieved in practice source test data. Technical peer reviewed papers of a technology are not a pre-requisite for South Coast AQMD to develop rules and regulations.

*Response to Email Comment 6-9:*

Although parametric monitoring is required in PR 1110.3, it is not relied upon for compliance determination for emission limits. PR 1110.3 requires periodic source testing to verify

compliance with emission limits. Additionally, PR 1110.3 contains requirements for diagnostic emission checks.

*Response to Email Comment 6-10*

Please see response to Email Comment 6-1.

*Response to Email Comment 6-11:*

PR 1110.3 and PAR 1110.2 are scheduled for a Set Hearing on October 6, 2023 and a Public Hearing on November 3, 2023. Public comments will be taken at both the Set Hearing and Public Hearing.



**Comment Letters****Comment Letter #1: Steve Jepsen- Clean Water SoCal**

February 8, 2023

Mr. Mike Morris, Planning and Rules Manager  
 South Coast Air Quality Management District  
 21865 Copley Drive  
 Diamond Bar, California 91765

**Comments on Proposed Rule 1110.3 - Emissions from Linear Generators**

Dear Mr. Morris:

Clean Water SoCal, formerly known as SCAP, represents over 80 public water/wastewater agencies in Southern California. Clean Water SoCal 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. Clean Water SoCal'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.

Clean Water SoCal appreciates the opportunity to provide comments on Proposed Rule 1110.3 - Emissions from Linear Generators (PR1110.3). While we understand the need to establish a source specific rule for linear generators, we remain concerned with the proposed emission limits for digester gas units (biogas) at wastewater facilities. In the absence of completed demonstration projects to verify the viability of the technology on biogas, we're concerned that the proposed emission limits in PR1110.3 will preclude wastewater facilities from pursuing this new technology using biogas. Our members are always seeking opportunities to beneficially use biogas at wastewater facilities in a way that utilizes sustainable and best available technologies, and we are encouraged by this new emerging technology. However, it should be demonstrated in practice while using biogas prior to establishing stringent emission limits in a source specific rule. Until such time, we believe that it is appropriate to adopt Rule 1179.1 biogas engine limits to biogas fueled linear generators.

1-1

Attached for your review and consideration please find proposed redline changes to PR1110.3. The proposed revisions essentially apply Rule 1179.1 biogas engine limits to biogas fueled linear generators until a technology demonstration on biogas units is complete.

1-2

P.O Box 231565  
 Encinitas, CA 92024

email: [info@scap1.org](mailto:info@scap1.org)  
 phone: 760.415.4332



We appreciate you considering our comments and would be happy to meet to discuss in more detail. If there are any questions or concerns regarding this transmittal, please contact:

Alison Torres, Clean Water SoCal Air Quality Committee Co-Vice Chair [torresa@emwd.org](mailto:torresa@emwd.org), or

David Rothbart, Clean Water SoCal Air Quality Committee Chair [drothbart@lacsdsd.org](mailto:drothbart@lacsdsd.org)

Sincerely,

Steve Jepsen

A handwritten signature in blue ink that reads "Steve Jepsen".

Executive Director – Clean Water SoCal

Cc:

Hay Lo, [hlo1@aqmd.gov](mailto:hlo1@aqmd.gov)

Isabelle Shine, [ishine@aqmd.gov](mailto:ishine@aqmd.gov)

P.O Box 231565  
Encinitas, CA 92024

email: [info@scap1.org](mailto:info@scap1.org)  
phone: 760.415.4332

**Staff Response to Comment Letter #1:***Response to Comment Letter 1-1:*

Your concerns have been noted. Staff has decided to narrow the focus of the proposed rule to natural gas fueled linear generators at this time. Please see Response to Email Comment 4-1. Staff agrees that the achievability of meeting emission limits be demonstrated in practice before establishing emission limits in a rule. For this reason, we believe that it is also not appropriate to include Rule 1179.1 emission limits for biogas fueled linear generators.

*Response to Comment Letter 1-2:*

Please see responses to Email Comments 4-1 through 4-4.

**Comment Letter #2: Chris Chavez- Coalition for Clean Air**

March 1, 2023

Susan Rees, Deputy Executive Officer  
 Michael Krause, Assistant Deputy Executive Officer  
 South Coast Air Quality Management District  
 1865 Copley Drive  
 Diamond Bar, CA 91765

**Re: Proposed Rule 1110.3**

Dear Ms. Rees and Mr. Krause:

Coalition for Clean Air is writing in support of Proposed Rule 1110.3, which would streamline permitting requirements for linear generators. Establishing a supportive framework for emerging technologies, such as linear generators, creates opportunities to replace polluting generators with cleaner alternatives.

2-1

The South Coast Air Basin is the nation's smog capital, and diesel particulate matter is the number one air toxic contaminant in our air. Meanwhile, the number of diesel backup generators jumped by 22 percent from 2020 to 2021. Given concerns about grid reliability, increasingly severe summer and winter weather due to the climate crisis and the impacts of California's longstanding air quality crisis, we cannot continue to rely on diesel combustion. Linear generators, along with other low-emitting and zero-emissions technologies, can yield significant emission reductions while also providing the same functions as a diesel generator.

2-12

Though we support the deployment of clean end-use technologies, we urge SCAQMD to work with all stakeholders to promote the use of clean, renewable fuels. Additionally, we urge SCAQMD to work with potential customers to ensure the deployment of the cleanest available application-appropriate technology.

Thank you for your time and consideration of this important rule.

Sincerely,

A handwritten signature in black ink that reads "Chris Chavez".

Chris Chavez  
 Deputy Policy Director

Cc:  
 Mike Morris, Manager  
 Hay Lo, Air Quality Specialist  
 Isabelle Shine, Air Quality Specialist

**Staff Response to Comment Letter #2:***Response to Comment Letter 2-1:*

PR 1110.3 was developed to allow for specific considerations of the technology and capabilities of linear generators. PR 1110.3 does not exempt linear generators from any permitting requirements. South Coast AQMD Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II identifies equipment, processes, or operations that do not require a written permit.

*Response to Comment Letter 2-2:*

Staff appreciates support of PR 1110.3.

**Comment Letter #3- Julia Levin- Bioenergy Association of California and Katrina M. Fritz- California Hydrogen Business Council**



March 1, 2023

Wayne Natri, Executive Officer  
South Coast Air Quality Management District  
1865 Copley Drive  
Diamond Bar, CA 91765

**Re: Proposed Rule 1110.3**

Dear Mr. Natri:

The Bioenergy Association of California (BAC) and the California Hydrogen Business Council (CHBC) are writing to commend South Coast Air Quality Management District (SCAQMD) for its development of Proposed Rule 1110.3 to streamline permitting requirements for linear generators.

3-1

Linear generators provide many air quality and emissions reduction benefits that are critical to SCAQMD’s mission. In addition to being fuel-flexible and fully dispatchable, linear generators have extremely low criteria pollutant emissions. In the SCAQMD, the number of diesel backup generators jumped by 22 percent from 2020 to 2021.<sup>1</sup> Linear generators can serve as a low emissions replacement for emissions-intensive diesel generation. Linear generators can also help reduce emissions in the marine ports by powering electric truck fleets using low and zero-carbon fuels, such as hydrogen.

3-12

While we understand and support SCAQMD’s need for sufficient data to ensure the safe operation of linear generators, we urge SCAQMD to remove any costly or onerous permitting and compliance requirements that discourage deployment of this clean technology. Doing so will risk slowing the installation of linear generators that can provide significant environmental benefits to the South Coast region.

3-23

Thank you for your time and consideration of this important rule.

<sup>1</sup> Steven Moss and Andy Bilich, M.Cubed, “Diesel Back-Up Generator Population Grows Rapidly in the Bay Area and Southern California” (2020). <https://bit.ly/34gOr0b>. BUGs have reached 7,360 MW of capacity in the South Coast AQMD and 4,840 MW of capacity in the Bay Area AQMD based on information for BAAQMD and SCAQMD. The report estimates an average capacity of 0.543 MW for units in SCAQMD and 0.628-0.642 MW for units in BAAQMD.

Sincerely,

/s/

Julia Levin, Executive Director, Bioenergy Association of California

Katrina M. Fritz, Executive Director, California Hydrogen Business Council

Cc:

Vanessa Delgado, Chair of the Board

Michael A. Cacciotti, Vice-Chair of the Board

Andrew Do, Board Member

Curt Hagman, Board Member

Gideon Kracov, Board Member

Larry McCallon, Board Member

Holly J. Mitchell, Board Member

Veronica Padilla-Campos, Board Member

V. Manuel Perez, Board Member

Nithya Raman, Board Member

Carlos Rodriguez, Board Member

**Staff Response to Comment Letter #3:**

*Response to Comment Letter 3-1:*

Please see response to Comment Letter 2-1.

*Response to Comment Letter 3-2:*

Staff appreciates support of PR 1110.3 and your concerns have been noted.

*Response to Comment Letter 3-23:*

South Coast AQMD Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II identifies equipment, processes, or operations that do not require a written permit. Linear generators were evaluated during the rule development process for the April 7, 2023 amendment to Rule 219 and it was determined that linear generators would not be exempt from permitting requirements. PR 1110.3 includes a new source testing schedule to help alleviate compliance costs associated with source testing. Based on the new source testing schedule and an estimated cost of \$10,000 per source test, staff calculates the cost of source testing each unit to be approximately \$30,000 over a 15-year period. The new source test schedule translates to approximately 60% cost savings over the originally proposed source test frequency that units are currently subject to in Rule 1110.2. In addition, facilities with six or more identical units may elect to do pooled source testing further alleviating costs.



## Comment Letter #4- Corrie Zuppo- Mainspring Energy, Inc.



Michael Krause  
 Assistant Deputy Executive Officer  
 Planning, Rule Development and Implementation  
 South Coast Air Quality Management District  
 21865 Copley Dr.  
 Diamond Bar, CA 91765  
[MKrause@aqmd.gov](mailto:MKrause@aqmd.gov)

### ***Proposed Rule 1110.3***

### ***Request for Rulemaking Delay to Reconsider Proposed Rule Language***

Dear Mr. Krause,

At the South Coast Air Quality Management District (SCAQMD or District) Governing Board meeting held on March 3, 2023, District Staff proposed to set a public hearing for Proposed Rule (PR) 1110.3, Emissions from Linear Generators. The Staff's proposed language for PR1110.3 at the time of the Governing Board meeting included the following agreed exemptions for certified equipment:

- An exemption from PR1110.3 for linear generators which become certified under the California Air Resources Board (CARB) Distributed Generation Executive Order program, and
- An exemption from PR1110.3 source testing requirements for linear generators which become certified under a SCAQMD certification program.

4-1

4-2

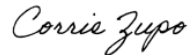
These two pathways for certified equipment would result in regulatory treatment similar to other, comparably scaled distributed generation (DG) technologies (e.g., microturbines, fuel cells).

On the basis of the draft PR1110.3 language that was publicly available on March 3, Mainspring was supportive of the rule and provided such a public comment during the Governing Board meeting. Unfortunately, the rule language contained in the 30-day package released on March 7 did not include the above provisions.

Since those provisions are absolutely critical to ensuring that linear generators receive regulatory treatment equivalent to other low emissions distributed generation technologies, Mainspring respectfully urges SCAQMD to delay the PR1110.3 schedule for Governing Board consideration until the Staff and stakeholders can further consider options for CARB and SCAQMD pathways for linear generator certification.

Please feel free to contact me at [corrie.zupo@mainspringenergy.com](mailto:corrie.zupo@mainspringenergy.com) or (424) 241-8959 with any questions or comments.

Best regards,



Corrie Zupo

Environmental Manager Permitting & Compliance

*CC: Wayne Nastri, SCAQMD  
Susan Nakamura, SCAQMD  
Dr. Sarah Rees, SCAQMD  
Michael Morris, SCAQMD  
ClearkofBoard@aqmd.gov  
Adam Simpson, Mainspring Energy, Inc.  
Scott Weaver, Ramboll US Consulting*



4-3

**Staff Response to Comment Letter #4:***Response to Comment Letter 4-1:*

Staff was informed by U.S. EPA that an exemption for CARB Distributed Generation certified units would not be acceptable for SIP approval, and thus, was removed from PR 1110.3.

*Response to Comment Letter 4-2:*

Staff cannot include this provision since a South Coast AQMD certification program has not been developed. Once developed, a South Coast AQMD certification program would need to be submitted to U.S. EPA for SIP approval.

*Response to Comment Letter 4-3:*

The Public Hearing for PR 1110.3 and PAR 1110.2 was delayed from April 7, 2023 to November 3, 2023.

**Comment Letter #5: Chris Chavez- Coalition for Clean Air**

October 23, 2023

The Honorable Vanessa Delgado  
 Chair of the Governing Board  
 South Coast Air Quality Management District  
 1865 Copley Drive  
 Diamond Bar, CA 91765

**Re: Proposed Rule 1110.3 – Emissions from Linear Generators: SUPPORT**

Dear Chair Delgado,

Coalition for Clean Air is writing in support of Proposed Rule 1110.3, relating to linear generators. This rule, along with previously passed rules, will both create a regulatory framework and streamline permitting requirements for linear generators.

5-1

Southern California must transition away from diesel combustion. The South Coast Air Basin is the smoggiest region in the country, and diesel particulate matter is the number one air toxic contaminant in our air. Yet, despite this the number of diesel backup generators jumped by 22% from 2020 to 2021 and 14 percent from 2021 to 2022. With our increasingly extreme summer and winter weather threatening grid reliability, we must look for alternatives to diesel generators.

Linear generators powered by clean fuels provide many air quality benefits that are critical to public health and SCAQMD's mission. In addition to being fuel-flexible and fully dispatchable, linear generators have extremely low criteria pollutant emissions. Linear generators can serve as a low-emissions replacement for emissions-intensive diesel generation as well as serve in other applications, such as marine ports by powering electric truck fleets and cargo handling equipment.

5-2

Just as we support the deployment of clean end-use technologies, we believe the cleanest available fuel must also be used. SCAQMD and other agencies should work with all stakeholders to promote the use of application-appropriate clean, renewable fuels for linear generators. We also support the district's commitment to introduce a District Certification program in the near future.

Thank you for your consideration of our comments.

Sincerely,



Chris Chavez  
 Deputy Policy Director

Cc:  
 SCAQMD Governing Board Members  
 Wayne Nastri, SCAQMD Executive Officer

**Staff Response to Comment Letter #5:**

Response to Comment Letter 5-1:

Please see response to Comment Letter 2-1.

Response to Comment Letter 5-2:

Staff appreciates support of PR 1110.3.

**Comment Letter #6- Marc Carrel- Breathe Southern California**



**BreatheSoCal.org**

5858 Wilshire Blvd., Suite 300  
Los Angeles, CA 90036  
P: (323) 935-8050  
F: (323) 935-1873

October 19, 2023

Wayne Nastri, Executive Officer  
South Coast Air Quality Management District  
1865 Copley Drive  
Diamond Bar, CA 91765

**Re: Proposed Rule 1110.3**

Dear Mr. Nastri:

Breathe Southern California is writing to commend South Coast Air Quality Management District (SCAQMD) for its development of Proposed Rule 1110.3 to streamline permitting requirements for linear generators.

6-1

Linear generators provide many air quality and emissions reduction benefits that are critical to SCAQMD’s mission. In addition to being fuel-flexible and fully dispatchable, linear generators have extremely low criteria pollutant emissions. In the SCAQMD, the number of diesel backup generators jumped by 14 percent from 2021 to 2022.<sup>1</sup> Linear generators can serve as a low-emissions replacement for emissions-intensive diesel generation. Linear generators can also help reduce emissions in the marine ports by powering electric truck fleets using low and zero-carbon fuels, such as hydrogen.

6-2

We appreciate that the Proposed Rule improves the permitting and compliance requirements for low-emitting linear generators. We also appreciate that the District is committing to continue to improve this Rule by introducing a District Certification program in the near future.

Thank you for your time and consideration of this important rule.

Sincerely,

  
Marc Carrel  
President & CEO  
Breathe Southern California

<sup>1</sup> Steven Moss and Andy Bilich, M.Cubed, “Back-up Generator Populations in Bay Area, South Coast Continue to Grow; San Diego Home to a Significant Number of Generators, Mostly Diesel- Power” (December, 2022). BUGs have reached 7,455 MW of capacity in the South Coast AQMD SCAQMD. Available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=248863-2&DocumentContentId=83404>

**Breathe Easier.™**

Cc:

Vanessa Delgado, Chair of the Board  
Michael A. Cacciotti, Vice-Chair of the Board  
Andrew Do, Board Member  
Curt Hagman, Board Member  
Gideon Kracov, Board Member  
Larry McCallon, Board Member  
Holly J. Mitchell, Board Member  
Veronica Padilla-Campos, Board Member  
V. Manuel Perez, Board Member  
Nithya Raman, Board Member  
Carlos Rodriguez, Board Member

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**Staff Response to Comment Letter #6***Response to Comment Letter 6-1*

Please see response to Comment Letter 2-1.

*Response to Comment Letter 6-2*

Staff appreciates support of PR 1110.3. Please see response to Comment Letter 2-1.



ATTACHMENT I



**South Coast  
Air Quality Management District**

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

**SUBJECT: NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

**PROJECT TITLE: PROPOSED RULE 1110.3 – EMISSIONS FROM LINEAR GENERATORS, AND PROPOSED AMENDED RULE 1110.2 – EMISSIONS FROM GASEOUS - AND LIQUID-FUELED ENGINES**

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-2023>.

**NOTICE OF EXEMPTION FROM THE  
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

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<b>To:</b> County Clerks for the Counties of Los Angeles, Orange, Riverside and San Bernardino; and Governor's Office of Planning and Research – State Clearinghouse	<b>From:</b> South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765
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**Project Title:** Proposed Rule 1110.3 – Emissions from Linear Generators, and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines

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**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.

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**Description of Nature, Purpose, and Beneficiaries of Project:** The current version of Rule 1110.2 applies to facilities with engines greater than 50 rated brake horsepower; however, Rule 1110.2 also contains emission limits and other requirements applicable to linear generators. Unlike internal combustion engines (ICEs), linear generators produce electricity by driving magnets through copper coils in a linear motion and the thermochemical reaction takes place at lower temperatures than ICEs, which results in lower emissions without the need for add-on air pollution control devices. In order to have a rule with dedicated requirements specific to the technology and capabilities of linear generators, Proposed Rule 1110.3 (PR 1110.3) has been developed with updated emission limits and new provisions which incorporate existing requirements for linear generators from Rule 1110.2 into PR 1110.3. Specifically, PR 1110.3: 1) establishes the rule's applicability to include all linear generators fueled solely by natural gas; 2) defines linear generator and other terms to provide context and clarity; 3) establishes concentration-based emission-limits for nitrogen oxides (NOx), volatile organic compounds (VOC), and carbon monoxide (CO); and 4) establishes requirements for conducting maintenance, source testing, monitoring, reporting, and recordkeeping. PR 1110.3 also includes limited exemptions for: 1) laboratory units used for testing and research purposes; and 2) emergency standby units, units used for fire-fighting and flood control, or any other emergency unit approved by the Executive Officer which have permit conditions that limit operation(s) to 200 hours or less per year as determined by an operational non-resettable totalizing time meter. With requirements for linear generators established in PR 1110.3 in lieu of Rule 1110.2, Proposed Amended Rule 1110.2 (PAR 1110.2) contains changes that would: 1) remove all requirements applicable to linear generators; 2) provide clarifications to the definition of an engine; and 3) define linear generator for the purpose of exempting this technology from Rule 1110.2. By providing separate and distinct requirements for linear generators and engines in PR 1110.3 and PAR 1110.2, respectively, stakeholders will benefit from having improved clarity when implementing the applicable requirements.

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**Public Agency Approving Project:**  
South Coast Air Quality Management District

**Agency Carrying Out Project:**  
South Coast Air Quality Management District

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**Exempt Status:**  
CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption

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**NOTICE OF EXEMPTION FROM CEQA (concluded)**

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**Reasons why project is exempt:** South Coast AQMD, as Lead Agency, has reviewed the proposed project (PR 1110.3 and PAR 1110.2) 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 transfers existing requirements from Rule 1110.2 into PR 1110.3 and contains other revisions in PAR 1110.2 to improve clarity and enforceability, but without requiring physical modifications. Thus, it can be seen with certainty that implementing PR 1110.3 and PAR 1110.2 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.

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**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Public Hearing: November 3, 2023

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<b>CEQA Contact Person:</b> Farzaneh Khalaj, Ph.D.	<b>Phone Number:</b> (909) 396-3022	<b>Email:</b> <a href="mailto:fkhalaj@aqmd.gov">fkhalaj@aqmd.gov</a>	<b>Fax:</b> (909) 396-3982
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<b>PR 1110.3 and PAR 1110.2 Contact Person:</b> Hay Lo	<b>Phone Number:</b> (909) 396-2450	<b>Email:</b> <a href="mailto:hlo1@aqmd.gov">hlo1@aqmd.gov</a>	<b>Fax:</b> (909) 396-3982
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**Date Received for Filing:** \_\_\_\_\_ **Signature:** *(Signed and Dated Upon Board Approval)*  
Kevin Ni  
Acting Program Supervisor, CEQA  
Planning, Rule Development, and  
Implementation

# Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid- Fueled Engines

Board Meeting  
November 3, 2023

# Background

Proposed Rule 1110.3 – Emissions from Linear Generators will establish emission limits for linear generators, as well as provisions for source testing, monitoring, reporting, and recordkeeping

Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines (Rule 1110.2) regulates engines rated over 50 brake horsepower (bhp) and was last amended in 2019 where provisions and emission standards for linear generators were initially established

Proposed Amended Rule 1110.2 will remove provisions currently applicable to linear generators, which will be addressed in Proposed Rule 1110.3 due to the unique characteristics of the technology

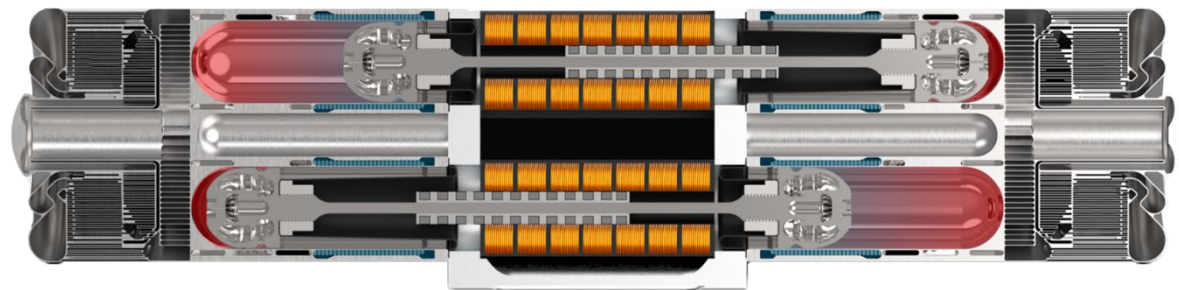
# Unique Characteristics of Linear Generators

## Electricity Production via Electromagnetic Induction

- Magnets are driven through copper coils in a linear motion to produce electricity

## Low Emissions Profile

- Lower reaction temperatures results in lower NOx and CO emissions
- Low NOx emissions achieved without add-on pollution control equipment
- No catalyst heating required, which results in low NOx levels at startup
- No ammonia slip, which results in lower PM levels



# Overview of Proposed Changes

## Proposed Amended Rule 1110.2 (PAR 1110.2)

- Defines Linear Generator
- Remove emission limits and provisions for linear generators
- Add exemption for linear generators

## Proposed Rule 1110.3 (PR 1110.3)

- Applies to linear generators fueled solely by natural gas
- Establishes NO<sub>x</sub>, VOC, and CO emission limits
- Includes source testing, monitoring, reporting, and recordkeeping requirements

# Proposed Rule 1110.3

## Emission Limits

**Table 1: Concentration Limits for Linear Generators**

Units with a Permit to Operate Issued on or after <i>[Date of Adoption]</i>			
Fuel Type	NOx (ppmv) <sup>1</sup>	CO (ppmv) <sup>1</sup>	VOC (ppmv) <sup>2</sup>
Natural Gas	2.5	12	10

<sup>1</sup> Parts per million by volume, corrected to 15% oxygen on a dry basis and averaged over 15 minutes.

<sup>2</sup> Parts per million by volume, measured as carbon, corrected to 15% oxygen on a dry basis, and averaged over the sampling time required by the test method.

- Emission limits mirror the requirements in Rule 1110.2 and are already achieved in practice

- Existing linear generators subject to VOC limit of 25 ppmv

- Upon rule adoption, all newly permitted units will be subject to concentration limits in Table 1



# Other Proposed Provisions in PR 1110.3

## Maintenance Requirements

- Inspect and maintain sensors, meters, and oxidation catalyst per manufacturer's requirements

## Source Testing

- Conduct source testing every 5 years
- Pooled testing option for 6 or more units located at a single facility
  - Pooled testing conducted on one-third of units every 3 years

## Monitoring

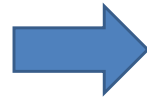
- Portable analyzer testing every 2 years
- Maintain ANSI C12.20 net output meter
- Parametric monitoring system

## Recordkeeping and Reporting

# Commitment to Develop Certification Program

Resolution directs staff to develop a South Coast AQMD certification program for linear generators

Initiate development of the certification program within 90 days of rule adoption



Initiate rule development process after finalizing a certification program\*

Stakeholders support approach

\*Certification program subject to U.S. EPA approval

# Impacts and Key Issues

## Costs

- PR 1110.3 and PAR 1110.2 will result in a cost savings to affected facilities
- No adverse socioeconomic impacts

## Environmental Impacts

- No significant adverse environmental impacts are expected
- A Notice of Exemption from CEQA has been prepared

## Key Issues

- Staff is not aware of any remaining key issues

# Staff Recommendations

Adopt resolution:

- Determining that Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 are exempt from the requirements of the California Environmental Quality Act
- Adopting Rule 1110.3 and Amending Rule 1110.2



BOARD MEETING DATE: November 3, 2023

AGENDA NO. 23

**PROPOSAL:** Determine That Proposed Amended Rule 2011 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions and Proposed Amended Rule 2012 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions, Are Exempt from CEQA; and Amend Rules 2011 and 2012

**SYNOPSIS:** Rules 2011 and 2012 establish requirements for CEMS for facilities in the SOx and NOx RECLAIM program, respectively. Proposed Amended Rules 2011 and 2012 will allow an owner or operator to temporarily shutdown a CEMS, when the combustion unit is scheduled to be not operating and generating emissions for an extended period of time, provided specific conditions are met.

**COMMITTEE:** Stationary Source, September 15, 2023, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Determining that Proposed Amended Rule 2011 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions and Proposed Amended Rule 2012 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions, are exempt from the requirements of the California Environmental Quality Act; and
2. Amending Rules 2011 and 2012.

Wayne Nastri  
Executive Officer

SR:MK:MM:IS:JE

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**Background**

South Coast AQMD has established CEMS monitoring rules to provide guidance and specifications for CEMS installation and operation, and to ensure accuracy and precision of the CEMS when determining compliance with an emission limitation or standard. Regulation XX – RECLAIM contains two rules for CEMS, Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur Emissions (Rule 2011) and Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen Emissions (Rule 2012), which establish

specifications for the installation and operation of CEMS to ensure accuracy and precision of monitoring mass emissions for SO<sub>x</sub> and NO<sub>x</sub>, respectively.

In March 2021, the Board adopted Rule 218.2 - Continuous Emission Monitoring System: General Provisions (Rule 218.2) and Rule 218.3 - Continuous Emission Monitoring: Performance Specifications (Rule 218.3) to update CEMS requirements and to prepare for the transition of facilities in NO<sub>x</sub> RECLAIM to a command-and-control regulatory program. Rule 218.2 contains provisions to address compliance requirements for CEMS under extended shutdowns of basic equipment (minimum of 168 consecutive hours) provided specific conditions are met. Rule 218.3 contains expanded alternative performance requirements for CEMS including a three-point linearity test that addresses a data gap for CEMS with dual span ranges, which may require facility permit holders to report emissions that are higher than they actually are.

The proposed amendments to Rules 2011 and 2012 incorporate existing provisions in Rule 218.2 for CEMS during extended basic equipment shutdowns and the three-point linearity error test in Rule 218.3. Proposed Amended Rule 2011 (PAR 2011) and Proposed Amended Rule 2012 (PAR 2012) are necessary to provide monitoring relief for RECLAIM facilities as they replace and/or modify equipment to comply with landing rules and will provide consistency across South Coast AQMD CEMS rules.

### **Public Process**

The development of PAR 2011 and PAR 2012 was conducted through a public process. A Public Workshop for PAR 2011 and PAR 2012 was held on August 29, 2023.

### **Proposal**

PAR 2011 and PAR 2012 will provide SO<sub>x</sub> and NO<sub>x</sub> RECLAIM facilities with an additional compliance pathway for operating CEMS during extended shutdowns (minimum of 168 consecutive hours) of a combustion unit. To qualify for monitoring relief, the Facility Permit holder must demonstrate non-operation of the basic equipment for the entire duration of the shutdown (e.g., disconnecting fuel line and placing blind flange(s)). Furthermore, a CEMS must record zero value data points for a minimum of four hours after the NO<sub>x</sub> and/or SO<sub>x</sub> source is shutdown and for a minimum of four hours before the NO<sub>x</sub> and/or SO<sub>x</sub> source resumes operation. Missing data procedures do not apply during the extended shutdown, provided that all requirements are met, and all required electronic reports are submitted within 48 hours of passing the CEMS calibration error test.

Additionally, PAR 2011 and PAR 2012 will incorporate a three-point linearity performance test for CEMS to address a data gap in emissions monitoring that may result in over reporting of emissions.

### **Emission Reductions**

PAR 2011 and PAR 2012 provide technical guidelines for the installation and operation of CEMS required by South Coast AQMD rules or permit conditions. PAR 2011 and PAR 2012 do not contain emission limits and the proposed provisions to temporarily shutdown the CEMS is only if there is a prolonged period of time that the combustion unit is not operational; therefore, there are no emission reductions that will result from this rule development.

### **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 2011 and PAR 2012) is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3). A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and is included as Attachment M 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 Impact Assessment**

The proposed amendments to Rule 2011 and Rule 2012 are administrative in nature and do not affect air quality or emission limitations. Therefore, a socioeconomic impact assessment is not required under Health and Safety Code Sections 40440.8 and 40728.5.

### **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 2011
- G. Proposed Amended Rule 2011 Appendix A, Chapter 2
- H. Proposed Amended Rule 2011 Appendix A, Attachments A-F
- I. Proposed Amended Rule 2012
- J. Proposed Amended Rule 2012 Appendix A, Chapter 2
- K. Proposed Amended Rule 2012 Appendix A, Attachments A-G
- L. Final Staff Report
- M. Notice of Exemption from CEQA
- N. Board Presentation

**ATTACHMENT A**  
**SUMMARY OF PROPOSED AMENDED RULE 2011 AND**  
**PROPOSED AMENDED RULE 2012**

**Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and  
Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions  
and  
Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and  
Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions**

Compliance pathway for CEMS during extended basic equipment shutdowns

- NO<sub>x</sub> and/or SO<sub>x</sub> source must be non-operational for an extended period (at least 168 consecutive hours)
- CEMS must operate for a minimum of four hours after basic equipment shutdown and show zero emissions before being brought offline
- Submit a report of the CEMS shutdown to South Coast AQMD
- CEMS must pass a calibration error test and run for a minimum of four hours before any emissions are generated and operations resume
- Missing data procedures do not apply provided that all required electronic reports are submitted within 48 hours of passing the calibration error test

Expanded Alternative Performance Test Options

- Includes new provisions for a three-point linearity error test to measure concentrations that fall below ten percent of the higher full scale span value of any range, with the exception of the lowest vendor guaranteed span range



## **ATTACHMENT B**

### **KEY ISSUES AND RESPONSES**

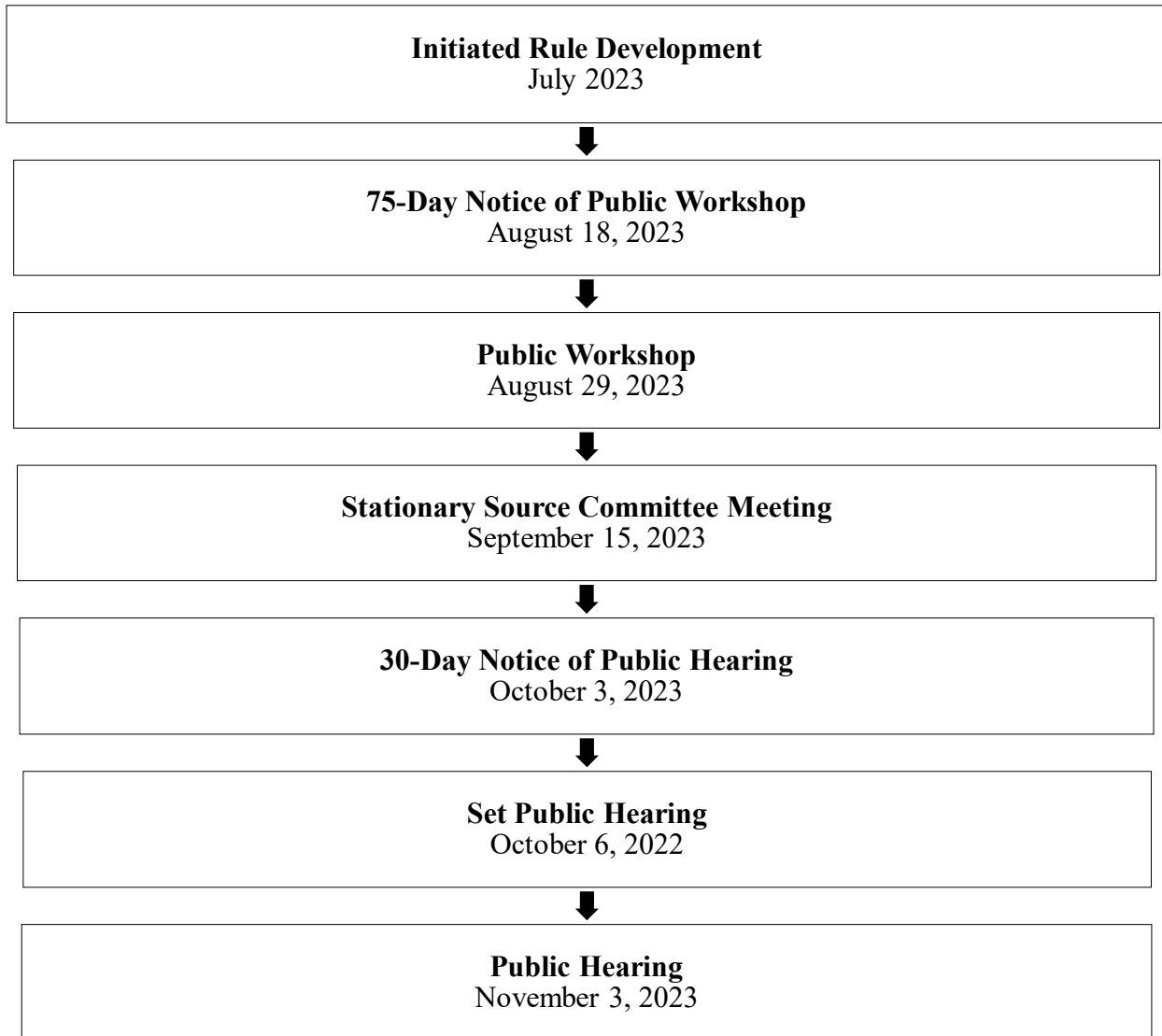
Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions  
And  
Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions

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 2011 – Requirements for Monitoring, Reporting,  
and Recordkeeping for Oxides of Sulfur (SOx) Emissions  
And  
Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and  
Recordkeeping for Oxides of Nitrogen (NOx) Emissions**



**Four (4) months spent in rule development**  
**One (1) Public Workshop**  
**One (1) Stationary Source Committee Meeting**

**ATTACHMENT D**  
**KEY CONTACTS LIST**

AES

California Council for Environmental and Economic Balance

Southern California Air Quality Alliance

Southern California Gas Company

## ATTACHMENT E

RESOLUTION NO. 23-\_\_\_\_\_

**A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) determining that Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions and Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions, are exempt from the requirements of the California Environmental Quality Act (CEQA).**

**A Resolution of the South Coast AQMD Governing Board amending Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions and Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions.**

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that Proposed Amended Rule 2011 and Proposed Amended Rule 2012 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 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 continuous emissions monitoring systems (CEMS) as required by South Coast AQMD rules or permit conditions without requiring physical modifications to occur, 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 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 2011, Proposed Amended Rule 2012, 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 Amended Rule 2011 and Proposed Amended Rule 2012 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 Amended Rule 2011 and Proposed Amended Rule 2012 within the meaning of Health and Safety Code Section 40726 because the changes to the Table of Contents in Proposed Amended Rule 2011 Appendix A, Chapter 2 are made to update page numbers and: (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**, 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 2011 and Rule 2012 to provide monitoring relief for RECLAIM facilities as they replace and/or modify equipment to comply with landing rules and to provide consistency across South Coast AQMD CEMS rules; 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, 39616, 40000, 40001, 40440, 40440.1, 40441, 40702, 40725 through 40728, and 41511; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 2011 and Proposed Amended Rule 2012 are written and displayed so that their meaning can be easily understood by persons directly affected by them; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 2011 and Proposed Amended Rule 2012 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 2011 and Proposed Amended Rule 2012 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, in amending Rule 2011 and Rule 2012, references the following statute which the South Coast AQMD hereby implements, interprets or makes specific: Assembly Bill 617, Health and Safety Code Sections 39002, 39616, 40000, 40001, 40440(a), 40702, 40725 through 40728.5, and 41511; and

**WHEREAS**, the South Coast AQMD Governing Board finds that Proposed Amended Rule 2011 and Proposed Amended Rule 2012 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 no socioeconomic impact assessment needs to be performed per Health and Safety Code Sections 40440.8 and 40728.5 because Proposed Amended Rule 2011 and Proposed Amended Rule 2012 are administrative in nature, thus will not directly result in any significant changes in air quality or emission limitations; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Amended Rule 2011 and Proposed Amended Rule 2012 do 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 regarding Proposed Amended Rule 2011 and Proposed Amended Rule 2012 on August 29, 2023; 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 state and federal law; and

**WHEREAS**, the South Coast AQMD specifies the Planning and Rules Manager overseeing the rule development for Proposed Amended Rule 2011 and Proposed Amended Rule 2012 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed project is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

**WHEREAS**, Proposed Amended Rule 2011 and Proposed Amended Rule 2012 will not be submitted for inclusion into the State Implementation Plan; 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 2011 and Proposed Amended Rule 2012 are exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) – Common Sense Exemption. 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 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 2011 and Proposed Amended Rule 2012 as set forth in the attachment, and incorporated herein by reference.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CLERK OF THE BOARDS

## ATTACHMENT F

(Adopted October 15, 1993) (Amended March 10, 1995)(Amended September 8, 1995)  
(Amended December 7, 1995)(Amended July 12, 1996)(Amended February 14, 1997)  
(Amended April 11, 1997)(Amended April 9, 1999)(Amended March 16, 2001)  
(Amended May 11, 2001)(Amended December 5, 2003)(Amended January 7, 2005)  
(Amended May 6, 2005) (Amended TBD)

**PROPOSED**  
**AMENDED**  
**RULE 2011.**

**REQUIREMENTS FOR MONITORING, REPORTING,  
AND RECORDKEEPING FOR OXIDES OF SULFUR (SO<sub>x</sub>)  
EMISSIONS**

*[RULE INDEX TO BE ADDED AFTER RULE ADOPTION]*

(a) Purpose

The purpose of this rule is to establish the monitoring, reporting, and recordkeeping requirements for SO<sub>x</sub> emissions under the RECLAIM program.

(b) Applicability

The provisions of this rule shall apply to any RECLAIM SO<sub>x</sub> source or SO<sub>x</sub> process unit. The SO<sub>x</sub> sources and process units regulated by this rule include, but are not limited to:

Boilers	Fluid Catalytic Cracking Units
Internal Combustion Engines	Dryers
Heaters	Fume Incinerators/Afterburners
Gas Turbines	Test Cells
Furnaces	Tail Gas Units
Kilns and Calciners	Sulfuric Acid Production
Ovens	Waste Incinerators

(c) Major SO<sub>x</sub> Source

(1) Major SO<sub>x</sub> source means any of the following SO<sub>x</sub> sources, except for such SO<sub>x</sub> sources reclassified to process units at approved Super Compliant Facilities as specified in paragraph (c)(4):

- (A) any petroleum refinery fluid catalytic cracking unit;
- (B) any tail gas unit;
- (C) any sulfuric acid production unit;
- (D) any equipment that burns refinery, landfill or sewage digester gaseous fuel, except gas flares;



- (E) any existing equipment using SO<sub>x</sub> CEMS or equivalent monitoring device, or that is required to install such monitoring device under District rules to be implemented as of October 15, 1993;
  - (F) any SO<sub>x</sub> source or process unit elected by the Facility Permit holder or required by the Executive Officer or designee to be monitored with a CEMS or equivalent monitoring device;
  - (G) any SO<sub>x</sub> source or process unit for which SO<sub>x</sub> emissions reported pursuant to Rule 301 - Permit Fees, were equal to or greater than 10 tons per year for any calendar year between 1987 to 1991, inclusive, excluding any SO<sub>x</sub> source or process unit which has reduced SO<sub>x</sub> emissions to below 10 tons per year prior to January 1, 1994.
- (2) The Facility Permit holder of a major SO<sub>x</sub> source shall:
- (A) install, maintain, and operate a direct monitoring device for each major SO<sub>x</sub> source to continuously measure the concentration of SO<sub>x</sub> emissions or fuel sulfur content and all other applicable variables specified in Table 2011-1 and Appendix A, Chapter 2, Table 2-A; or
  - (B) install, maintain, and operate an alternative monitoring device which has been determined by the Executive Officer or designee to be equivalent to CEMS in relative accuracy, reliability, reproducibility and timeliness according to the requirements set forth in Appendix A, Chapter 2.
  - (C) The operating requirements specified in subparagraph (c)(2)(A) or (c)(2)(B) shall not apply during any time period not to exceed 96 hours provided that all of the following are met:
    - (i) the Facility Permit holder reports emissions as specified in Appendix A;
    - (ii) the direct monitoring device has been either:
      - (I) shut down for maintenance performed pursuant to the facility's Quality Assurance and Quality Control Program or
      - (II) damaged in a fire or mechanical or electrical failure caused by circumstances beyond the Facility Permit holder's control; and

- (iii) Whenever the monitoring device is non-operational for more than 24 hours, the Facility Permit holder shall submit a report to the Executive Officer within 96 hours after the device becomes non-operational. Such report shall include information as prescribed by the Executive Officer including at a minimum the cause of the shutdown, the time the monitoring device became non-operational, the time or estimated time the monitoring device returned to normal operation, and the maintenance performed or corrective and preventative actions taken to prevent future non-operational conditions.

If the source for which the CEMS is certified to monitor is not operating when the CEMS is in maintenance or being repaired, and either the flow or concentration monitor is properly operating, and clauses (c)(2)(C)(i) and (c)(2)(C)(ii) are met, then the above time period shall be extended for an additional 96 hours.

- (D) If a SO<sub>x</sub> source does not operate for a minimum of 168 consecutive hours, as demonstrated pursuant to subparagraph (c)(2)(E), the Facility Permit holder of the CEMS is not subject to the requirements of subparagraphs (c)(2)(A) and (c)(2)(B), and the emission hours are considered valid and consisting of zero value data points after zero emissions have been recorded for a minimum of 4 hours after the SO<sub>x</sub> source shutdown, provided that the Facility Permit holder of the CEMS:
- (i) Maintains the CEMS operation pursuant to subparagraphs (c)(2)(A) and (c)(2)(B) to record zero value data points for a minimum of 4 hours after the SO<sub>x</sub> source shutdown;
  - (ii) Submits the report in accordance with clause (c)(2)(C)(iii);
  - (iii) Resumes CEMS operation and meets the requirements of subparagraphs (c)(2)(A) and (c)(2)(B) for a minimum of 4 hours before the SO<sub>x</sub> source resumes operation or at which time any emissions are generated; and
  - (iv) Passes a calibration error test for each CEMS analyzer before any emissions are detected.
- (E) Demonstrating a SO<sub>x</sub> source is not operating and no emissions are generated

- (i) For a SO<sub>x</sub> source in which fuel combustion is the only source for the CEMS monitored emissions, the Facility Permit holder of the CEMS shall meet one or more of the following provisions for the entire duration:

  - (I) Disconnect the fuel line to the SO<sub>x</sub> source and place blind flange(s) to prevent fuel flow;
  - (II) Demonstrate there is no fuel flow to the SO<sub>x</sub> source 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 SO<sub>x</sub> source or the fuel line associated with the SO<sub>x</sub> source that is not operating; or
  - (IV) Demonstrate the SO<sub>x</sub> source is not operational based on a stack flow monitoring system certified according to Appendix A, 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.
- (ii) For a SO<sub>x</sub> source in which fuel combustion is not the only source for the CEMS monitored emissions, the Facility Permit holder of the CEMS shall:

  - (I) Request the Executive Officer's written approval of the method(s) to demonstrate that the SO<sub>x</sub> source is not operating and no emissions are generated; and
  - (II) Include the above approved method(s) in the QA/QC plan.
- (3) The Facility Permit holder of a major SO<sub>x</sub> source shall:

- (A) install, maintain, and operate a reporting device to electronically report to the District Central SO<sub>x</sub> Station for each major SO<sub>x</sub> source: total daily mass emissions of SO<sub>x</sub> and daily status codes. Such data shall be transmitted by 5:00 p.m. of the following day. If the facility experiences a power, computer, or other system failure that prevents the reporting of total daily mass emissions of SO<sub>x</sub> and daily status codes, the Facility Permit holder shall be granted 24 hours to submit the required report. Between July 1, 1995 and December 31, 1995, SO<sub>x</sub> emissions after the 24-hour extension, shall be calculated using interim reporting procedures set forth in Appendix A, Chapter 2. Starting January 1, 1996 and thereafter, SO<sub>x</sub> emissions after the 24-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2. For each major SO<sub>x</sub> source opting to comply with subparagraph (c)(10), reports of SO<sub>x</sub> mass emissions shall be electronically filed on a monthly instead of daily basis; and
- (B) submit Monthly Emissions Report aggregating SO<sub>x</sub> emissions from all major sources within 15 days following the end of each calendar month. In its Monthly Emissions Report, the Facility Permit holder may correct daily transmitted data for that month, provided such corrections are clearly identified and justified.
- (C) Notwithstanding subparagraph (c)(3)(A), starting May 11, 2001 if a power, computer, or other system failure precludes the Facility Permit holder from reporting total daily mass emissions of SO<sub>x</sub> and daily status codes by 5:00 p.m., the Facility Permit holder shall be granted 96 hours to submit the required report provided that the raw data as obtained by the direct monitoring device is stored at the facility. SO<sub>x</sub> emissions reported after the 96-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2. The provisions of this subparagraph shall be limited to no more than three non-consecutive occurrences per compliance year.

- (D) The requirement of calculating emissions using Missing Data Procedures under subparagraph (c)(3)(A) shall not apply if the failure to report the total daily mass emissions of SO<sub>x</sub> and daily status codes is due to a demonstrated failure at the District's Central Station preventing it from receiving the data. The Facility Permit holder shall submit the report within 48 hours of the ~~problem~~ demonstrated failure being corrected, provided that the raw data as obtained by the direct monitoring device is stored at the facility. SO<sub>x</sub> emissions reported after the 48-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2.
- (E) The requirement of calculating emissions using Missing Data Procedures under subparagraph (c)(3)(A) shall not apply if the SO<sub>x</sub> source is offline pursuant to subparagraph (c)(2)(D) and a Facility Permit holder is unable to report total daily mass emissions of SO<sub>x</sub> and daily status codes by 5:00 p.m. The Facility Permit holder shall be granted 48 hours from the time the CEMS passes the calibration error test specified in clause (c)(2)(D)(iv) to submit all electronic reports required by subparagraph (c)(3)(A), subparagraph (c)(3)(B), and Appendix A, Chapter 7. SO<sub>x</sub> emissions reported after the 48-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2.
- (4) Super Compliant Facilities
- (A) Facilities operating at or below their adjusted 2003 Allocation as of their 1994 compliance year.

- (i) The Facility Permit holder of major SO<sub>x</sub> sources may reclassify its major SO<sub>x</sub> sources to SO<sub>x</sub> process units provided that (1) the facility's annual SO<sub>x</sub> emissions as properly reported in its 1994 compliance year APEP report are already at or below the level of its adjusted compliance year 2003 SO<sub>x</sub> Allocation. The adjusted compliance year 2003 SO<sub>x</sub> Allocation shall be the compliance year 2003 SO<sub>x</sub> Allocation as calculated pursuant to Rule 2002 subdivision (e) plus any compliance year 2003 SO<sub>x</sub> RTCs resulting from conversion of ERCs which the Facility Permit holder had applied to own by July 1, 1994 and has continuously owned, unless such RTCs have already been accounted for in the compliance year 2003 Allocation as established pursuant to Rule 2002 subdivision (e); and (2) it submits a complete application for SO<sub>x</sub> Super Compliance status on or before December 2, 1996. The Executive Officer will provisionally approve for purposes of paragraph (c)(5) such application if the Facility Permit holder has retired all SO<sub>x</sub> RTCs in excess of the facility's adjusted compliance year 2003 Allocation for each of the compliance years from the year of application submittal through the 2010 compliance year. The Facility Permit holder need not retire any RTCs (excluding converted ERCs) which are held by transfer pursuant to Rule 2007 paragraph (e)(2); however, such non-retired RTCs must be converted into RTC certificates pursuant to Rule 2007 subdivision (g), transferred to a different holder, or retired. For the purposes of this rule, converted ERCs shall mean SO<sub>x</sub> RTCs resulting from conversion of ERCs which the Facility Permit holder had applied to own by July 1, 1994 and has continuously owned.
- (ii) Final approval of SO<sub>x</sub> Super Compliant status shall be granted if the Executive Officer or designee approves the initial source test required by subparagraph (c)(4)(C) and the facility's total annual SO<sub>x</sub> emissions has not exceeded its adjusted compliance year 2003 Allocation.

- (B) Facilities not operating at or below their adjusted 2003 Allocation as of their 1994 compliance year.
- (i) On or before December 2, 1996 the facility Permit holder of major SO<sub>x</sub> sources may submit a complete application for SO<sub>x</sub> Super Compliant status. Such applications must also include a complete application for permit modifications to install SO<sub>x</sub> emission reduction equipment or to make any other physical modifications to substantially reduce emissions from each major SO<sub>x</sub> source to be reclassified as a SO<sub>x</sub> process unit. The Executive Officer shall deny the application for Super Compliant status unless the applicant demonstrates the proposed modifications would comply with all applicable District rules and would permanently reduce the facility's total annual SO<sub>x</sub> emissions to a level not to exceed its adjusted compliance year 2003 SO<sub>x</sub> Allocation as defined in clause (c)(4)(A)(i), would not result in any increases in the mass emissions of any other air contaminant or in emissions to any other media, and would not result in any increases in receptor concentrations of any air contaminant in excess of the values identified in Table A-2 of Rule 1303;
  - (ii) Upon issuance of the permit to construct for the modification specified in clause (c)(4)(B)(i), the Executive Officer shall also issue a provisional approval of the facility's application for SO<sub>x</sub> Super Compliant status for purposes of paragraph (c)(5).
  - (iii) Final approval of SO<sub>x</sub> Super Compliant status shall be granted if the following provisions are met:
    - (I) An approved permit to operate has been issued for the modification specified in clause (c)(4)(B)(i);
    - (II) The facility's total annual SO<sub>x</sub> emissions as reported in its APEP report are at a level at or below the facility's adjusted compliance year 2003 SO<sub>x</sub> Allocation on a permanent basis no later than the facility's 1998 compliance year;

- (III) The Facility Permit holder has retired all SO<sub>x</sub> RTCs in excess of the facility's adjusted compliance year 2003 Allocation for each of the compliance years from the earlier of the facility's 1998 compliance year or the facility's first full compliance year with SO<sub>x</sub> Super Compliant Facility status through the facility's 2010 compliance year. The Facility Permit holder need not retire any RTCs (excluding converted ERCs as defined in clause (c)(4)(A)(i) which are held by transfer pursuant to Rule 2007 paragraph (e)(2); however, such non-retired RTCs must be converted into RTC certificates pursuant to Rule 2007 subdivision (g), transferred to a different holder, or retired; and
  - (IV) The facility Permit holder has an approved initial source test as required under subparagraph (c)(4)(C).
- (C) The Facility Permit holder shall have initial source tests conducted to establish an equipment specific emission rate, for each major source to be reclassified as a SO<sub>x</sub> process unit, pursuant to Appendix A, Chapter 4, Subdivision D prior to January 1, 1998 for Cycle 1 facilities and prior to July 1, 1998 for Cycle 2 facilities. In lieu of an equipment specific emission rate, the Executive Officer may approve an equipment specific concentration limit if the Facility Permit holder demonstrates to the satisfaction of the Executive Officer that there are no measurable operating parameters to establish an accurate equipment specific emission rate. The Facility Permit holder shall have initial source tests conducted in accordance with test methods listed under Rule 2011, Appendix A, Chapter 4, Subdivision A - Test Methods, to establish emission levels of the source. The Facility Permit holder shall select an equipment-specific concentration limit for each major source which will be reclassified as a SO<sub>x</sub> process unit. The concentration limits selected shall be consistent with the source test results and at a level adequate to allow continuous compliance



and shall be enforceable through permit conditions.

- (i) For facilities seeking Super Compliant status pursuant to subparagraph (c)(4)(A), the Facility Permit holder may use the concentration limit to determine emissions retroactive to the date of provisional approval of the application for SO<sub>x</sub> Super Compliant status.
  - (ii) For facilities seeking Super Compliant status pursuant to subparagraph (c)(4)(B), the Facility Permit holder may use the concentration limit to determine emissions retroactive to the date of completion of modification.
- (D) Requirements to maintain Super Compliant status.
- Super Compliant status is contingent upon the Facility Permit holder meeting at all times the following provisions:
- (i) Every major SO<sub>x</sub> source at a Super Compliant SO<sub>x</sub> facility which is reclassified as a SO<sub>x</sub> process unit with an approved equipment specific emission rate shall be source tested a minimum of once every twelve months in order to establish an equipment specific emission rate, pursuant to Appendix A, Chapter 4, Subdivision D. These source tests shall be conducted every four calendar quarters after the initial source test. If a source test is not conducted within three months after the required date, the facility shall no longer be considered Super Compliant, unless upon good cause the Executive Officer has granted a written extension of time. The source test results shall, upon approval, constitute the basis for assigning equipment specific emission rates which shall be used for purposes of reporting emissions and determining compliance.
  - (ii) Every major SO<sub>x</sub> source at a Super Compliant SO<sub>x</sub> facility which is reclassified as a SO<sub>x</sub> process unit with an approved equipment specific concentration limit shall comply with that limit on a sixty-minute basis. In addition, compliance with the approved equipment specific concentration limit shall be demonstrated by source test a minimum of once every six months. Such tests shall be conducted for a duration of sixty minutes in accordance to

test methods listed under Rule 2011, Appendix A, Chapter 4, Subdivision A - Test Methods. These source tests shall be conducted every two calendar quarters after the initial source test. If a source test is not conducted within three months after the required date, the facility shall no longer be considered Super Compliant, unless upon good cause the Executive Officer has granted a written extension of time. If the results of a source test indicate non-compliance with the concentration limit then the Facility Permit holder shall select a new concentration limit which is consistent with the source test results unless the Facility Permit holder demonstrates to the satisfaction of the Executive Officer or designee that no change is warranted. If all tests conducted pursuant to this paragraph over a two-year period comply with the equipment-specific concentration limit then the facility shall have the option of reducing the source test frequency to once every four quarters. If any test conducted on a four quarter cycle exceeds the concentration limit then the facility shall return to conducting source tests every two quarters until the facility is able to demonstrate consecutive compliance over another two year period.

- (iii) The facility's total annual SO<sub>x</sub> emissions, as reported in its APEP report, shall not exceed the facility's adjusted compliance year 2003 SO<sub>x</sub> Allocation. If there are such exceedances for two consecutive years or in any three years, the facility shall no longer be considered Super Compliant.
- (5) Any Facility Permit holder of a facility which is provisionally approved for SO<sub>x</sub> Super Compliant status shall have the option for each major SO<sub>x</sub> source to be reclassified as a SO<sub>x</sub> process unit, in lieu of following the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii) of Appendix A Chapter 2, to monitor and report emissions pursuant to paragraph (d)(2). This option shall be available to the Facility Permit holder retroactively from July 1, 1995 if the complete application for SO<sub>x</sub> Super Compliant status is submitted on or before January 2, 1996, or

retroactively from the date of application submittal if the complete application is submitted after January 2 and before December 3, 1996. If the facility is unsuccessful at obtaining final approval as a SO<sub>x</sub> Super Compliant Facility then the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii) of Appendix A Chapter 2 shall apply retroactively to each major SO<sub>x</sub> source reclassified as a process unit for which SO<sub>x</sub> emissions had been calculated pursuant to paragraph (d)(2) from the date the facility began monitoring and reporting major SO<sub>x</sub> source emissions as SO<sub>x</sub> process unit emissions to the date a CEMS is installed and certified.

- (6) After final approval of Super Compliant status, a Facility Permit holder may elect to discontinue its Super Compliant status and increase its annual Allocations above the level of its adjusted compliance year 2003 Allocation provided it first meets all of the following requirements:
  - (A) The Facility Permit holder submits an application to discontinue SO<sub>x</sub> Super Compliant status and to have all sources at the facility that were reclassified from major SO<sub>x</sub> sources to SO<sub>x</sub> process units pursuant to paragraph (c)(4) permanently revert back to major SO<sub>x</sub> sources;
  - (B) The Facility Permit holder installs, operates, and certifies in compliance with Rule 2012 paragraphs (c)(2) and (c)(3) monitoring and reporting systems on each source at the facility that was reclassified from a major SO<sub>x</sub> source to a SO<sub>x</sub> process unit pursuant to paragraph (c)(4); and
  - (C) The Facility Permit holder acquires, pursuant to Rule 2007, sufficient RTCs to ensure that the facility continuously operates in compliance with Rule 2004 subdivision (d).
- (7) If a facility designated as a SO<sub>x</sub> Super Compliant Facility pursuant to paragraph (c)(4) exceeds its adjusted compliance year 2003 SO<sub>x</sub> Allocation, then the facility shall acquire, pursuant to Rule 2007, sufficient RTCs to cover such exceedance and shall be considered in violation of Rule 2004(d)(1).
- (8) If the Executive Officer determines that a facility designated as a SO<sub>x</sub> Super Compliant Facility exceeds its adjusted compliance year 2003 SO<sub>x</sub> Allocation for two consecutive years or any three years, then that facility shall no longer be considered Super Compliant. If a facility loses its

Super Compliant status pursuant to this paragraph or subparagraph (c)(4)(D), all sources at the facility that were reclassified from major SO<sub>x</sub> sources to SO<sub>x</sub> process units pursuant to paragraph (c)(4) shall permanently revert back to major SO<sub>x</sub> sources and shall become subject to the monitoring and reporting requirements of paragraphs (c)(2) and (c)(3) according to the following schedule:

- (A) Within 1 month from the end of the compliance year, submit a monitoring, reporting, and recordkeeping plan specifying the use of CEMS;
- (B) During the shorter of the first twelve months from the end of the compliance year or until the facility complies with paragraphs (c)(2) and (c)(3), the Facility Permit holder shall comply with the monitoring requirements of paragraph (f)(3) of this rule; and
- (C) Within one year from the end of the compliance year, comply with paragraphs (c)(2) and (c)(3) and have appropriate direct monitoring equipment installed and certified pursuant to Appendix A.

(9) Infrequently-Operated Major SO<sub>x</sub> Source

Subparagraphs (c)(2)(A) and (c)(2)(B) shall not apply to a major SO<sub>x</sub> source if the Facility Permit holder complies with the following requirements.

- (A) The Facility Permit holder submits an application for each major SO<sub>x</sub> source to classify such source to be an infrequently-operated major SO<sub>x</sub> source, demonstrating to the satisfaction of the Executive Officer that such source will not be operated more than 30 days in the current or next compliance year, and receives written approval from the Executive Officer. The Executive Officer shall further not approve an application to classify a major source to be an infrequently-operated major SO<sub>x</sub> source if such source had been previously classified as an infrequently-operated source for any time during the 18 calendar months prior to the filing date of the application.
- (B) The Facility Permit holder accepts and complies with all permit conditions imposed to ensure compliance with subparagraphs (c)(9)(C) and (c)(9)(D).
- (C) The Facility Permit holder shall comply with all of the following

requirements:

- (i) While the infrequently-operated major SO<sub>x</sub> source is operating, the Facility Permit holder shall comply with provisions under subparagraphs (c)(2)(A), (c)(2)(B), or Rule 2011, Appendix A, Chapter 2, Paragraph B.6. - Alternative Data Acquisition Using Reference Methods.
  - (ii) While the infrequently-operated major SO<sub>x</sub> source is not operating, the Facility Permit holder shall disconnect fuel or process feed line(s) and place flanges at both ends of the disconnected line(s) and install, maintain, and operate a monitoring device, which has been approved by the Executive Officer, to provide a continuous positive indicator of the operational status of the source to the remote terminal unit (RTU) for the purposes of demonstrating the source is not operating and for preparing emissions reports.
- (D) A source, which has been approved as an infrequently-operated source pursuant to paragraph (c)(9), shall not be operated more than 30 days in any compliance year unless the following requirements are met:
- (i) The Facility Permit holder shall provide written notification to the Executive Officer that the infrequently-operated major SO<sub>x</sub> source will be operated more than 30 days in any compliance year on or before the day that such source will be operated in excess of 30 days in any compliance year.
  - (ii) The infrequently-operated Major SO<sub>x</sub> source complies with subparagraph (c)(2)(A) or (c)(2)(B) on the thirty first day of operation in any compliance year except if that source qualifies for a one-time only CEMS certification period as provided in subparagraph (c)(11).
- (10) Non-Operated Major SO<sub>x</sub> Source
- Subparagraphs (c)(2)(A) and (c)(2)(B) shall not apply to a major SO<sub>x</sub> source if the Facility Permit holder complies with the following requirements.
- (A) The Facility Permit holder submits an application for each major

SOx source to classify such source to be a non-operated major SOx source, demonstrating to the satisfaction of the Executive Officer that such source will not be operated in the current or next compliance year, and receives written approval from the Executive Officer. The Executive Officer shall further not approve an application to classify a major source to be a non-operated major SOx source if such source had previously been classified as a non-operated source for any time during the 18 calendar months prior to the filing date of the application.

- (B) The Facility Permit holder accepts and complies with all permit conditions imposed to ensure compliance with subparagraphs (c)(10)(C) and (c)(10)(D).
- (C) The Facility Permit holder shall comply with the requirements under either subclause (i) or (ii):
  - (i) The Facility Permit holder shall:
    - (I) disconnect fuel feed lines and place flanges at both ends of the disconnected lines, and
    - (II) render the source non-operational by either disconnecting the process feed lines and place flanges at both ends of the disconnected lines or removing a major component of the source necessary for its operation.
  - (ii) The Facility Permit holder shall monitor the source with an operating CEMS that was certified to monitor emissions from that source in accordance with District Rule 218 - Stack Monitoring or Rule 2011 and Appendix A, and maintain records demonstrating the source's non-operational status as required by either Rule 218 or these rules, whichever is applicable.
- (D) A source, which has been approved as a non-operated source pursuant to paragraph (c)(10), shall not be operated until the following requirements are met:
  - (i) The Facility Permit holder shall provide written notification to the Executive Officer that the source will be operated. The notification shall be made no less than 30 days prior to starting operation of the source.

- (ii) The source meets the requirements of subparagraph (c)(2)(A) or (c)(2)(B) no later than 30 calendar days after the start of operation except as provided under paragraph (c)(11). Until the source meets the requirements of subparagraph (c)(2)(A) or (c)(2)(B), emissions shall be determined pursuant to the Missing Data Procedures as specified under Rule 2011, Appendix A, Chapter 2, Subdivision E.
- (11) An infrequently-operated or non-operated major SO<sub>x</sub> source qualifies for a one-time only CEMS certification period if:
- (A) the source has never been monitored by a RECLAIM certified CEMS since October 15, 1993, and
  - (B) the source has been in compliance with paragraph (c)(9) or (c)(10) during the previous 12 months prior to the date the source operates in excess of the applicable operating time limit.

This one-time only CEMS certification period shall commence on the first day of any operation for non-operated major sources and the thirty-first day of any operation for infrequently operated major sources in any compliance year and ends on the date the CEMS is certified or 12 calendar months from the first day of any operation for non-operated major sources and the thirty-first day of any operation for infrequently operated major sources, whichever date is earlier. By the end of this CEMS certification period, the Facility Permit holder shall install, operate, and maintain all required monitoring, reporting, and recordkeeping systems. During this CEMS certification period, the Facility Permit holder shall comply with the monitoring, reporting, and recordkeeping requirements of paragraphs (f)(2) and (f)(3).

- (12) If an approved infrequently-operated or non-operated major SO<sub>x</sub> source fails to meet the requirements of the applicable paragraph (c)(9) or (c)(10) that source shall no longer be considered an infrequently-operated or non-operated major SO<sub>x</sub> source, and the facility permit holder of the source shall be considered in violation for each day from the start of the compliance year and emissions shall be determined as if the source had been operating from the start of the compliance year according to Missing Data Procedures as specified under Rule 2011, Appendix A, Chapter 2, clause (E)(1)(d)(iii), except for those days in which the Facility Permit

holder can conclusively prove that the source has not been operated.

(d) SO<sub>x</sub> Process Unit

- (1) SO<sub>x</sub> process unit is any piece of SO<sub>x</sub> emitting equipment which is not a major SO<sub>x</sub> source or a piece of equipment designated in Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II.
- (2) The Facility Permit holder of a SO<sub>x</sub> process unit shall comply with paragraphs (c)(2) and (c)(3) for any SO<sub>x</sub> process unit, or elect to comply with the following:
  - (A) install, maintain, and operate a totalizing fuel meter and/or timer, or any device approved by the Executive Officer or designee to be equivalent in accuracy, reliability, reproducibility and timeliness, for the SO<sub>x</sub> process unit, to measure quarterly fuel usage or other applicable measured variables specified in Table 2011-1, and Appendix A, Chapter 3, Table 3-A; and
  - (B) report quarterly mass emission of SO<sub>x</sub> to the District Central Station 30 days after the end of each of the first three quarters and 60 days after the last quarter of a compliance year for each process unit using a modem, the District Internet Web Site, or any reporting device approved by the Executive Officer to be equivalent in accuracy, reliability, and timeliness; and
  - (C) accept the emission factor as specified pursuant to paragraphs (d)(3), (d)(4), or (d)(5) in the Facility Permit, as the sole method for determining mass emissions for all purposes, including, but not limited to, determining:
    - (i) compliance with the annual allocations;
    - (ii) excess emissions;
    - (iii) the amount of penalties; and
    - (iv) fees.
- (3) Starting January 1, 1994 for Cycle 1 facilities, and July 1, 1994 for Cycle 2 facilities, calculations of mass emissions from each process unit shall be based upon the emission factor specified in Rule 2002. The emission factor for each process unit will be specified in the Facility Permit and will remain valid unless amended by the Executive Officer or designee pursuant to paragraphs (d)(4) or (d)(5).
- (4) A Facility Permit holder may apply to the Executive Officer or designee to



amend the emission factor to an equipment or category specific emission rate in the Facility Permit for a SO<sub>x</sub> process unit at any time. If the applicant demonstrates to the Executive Officer or designee that the equipment or category specific emission rate is reliable, accurate, and representative for the purpose of calculating SO<sub>x</sub> emissions, the Executive Officer or designee will amend the Facility Permit to incorporate the equipment or category specific emission rate. The equipment or category specific emission rate shall take effect prospectively from the date the Facility Permit is amended.

- (5) The Executive Officer or designee may amend the Facility Permit at any time to specify an equipment or category specific emission rate for a SO<sub>x</sub> process unit if the equipment or category specific emission rate is determined to be more reliable, accurate, or representative of that unit's emissions than the previous emission factor stated in the Facility Permit. The equipment or category specific emission rate shall take effect prospectively from the date the Facility Permit is amended.

(e) General Requirements

- (1) A Facility Permit holder shall at all times comply with all requirements specified in subdivisions (c), (d), (e), (f) and (g) for monitoring, reporting and recordkeeping, including but not limited to, measuring, reporting, timesharing, determining mass emissions, and installing, maintaining or operating monitoring, measuring, and reporting devices, in accordance with the applicable requirements set forth in Appendix A.
- (2) The monitoring system and the applicable method for determination of mass emissions for each SO<sub>x</sub> source or process unit will be specified in the Facility Permit, in accordance with the applicable requirements set forth in Appendix A.
- (3) The time-sharing of CEMS or equivalent devices among SO<sub>x</sub> sources may be allowed by the Executive Officer or designee in accordance with the requirements for time-sharing specified in Appendix A. In such cases, the Executive Officer or designee will specify conditions in the Facility Permit upon which time-sharing may occur.
- (4) Any monitoring system certified prior to October 15, 1993 requiring a change to its full scale span range in order to meet the certification requirements set forth in Appendix A, shall be recertified by the District in

accordance with the recertification requirements specified in Chapter 2, Section ~~B.15~~B.17, in Appendix A.

- (5) The Executive Officer or designee may at any time require a Facility Permit holder to use a specific monitoring and reporting system if the Executive Officer or designee determines that the elected system is inadequate to accurately determine mass emissions.
  - (6) The sharing of totalizing fuel meters may be allowed by the Executive Officer or designee if the process units served by the fuel meters have the same emission factor.
  - (7) A Facility Permit holder of any SO<sub>x</sub> major source, process unit, or piece of equipment which is exempt from permit requirements pursuant to Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II, shall determine SO<sub>x</sub> emissions according to the methodology specified in Appendix A. Process units, or pieces of equipment exempt from permit requirements pursuant to Rule 219 shall report such SO<sub>x</sub> emissions in the Quarterly Certification of Emissions required by Rule 2004 - Requirements. Emissions from equipment exempt from permit requirements pursuant to Rule 219 shall also be reported quarterly to the District Central Station by the end of the quarterly reconciliation period as specified under Rule 2004(b) – Compliance Period and Certification of emissions. Alternatively, these emissions may be reported using the District Internet Web Site.
  - (8) A Facility Permit holder shall at all times comply with all applicable requirements specified in this rule and Appendix A for monitoring, reporting and recordkeeping of operations of RECLAIM SO<sub>x</sub> sources that are not included in the Facility Permit so as to determine and report to the District Central Station the quarterly emissions from these sources by the end of the quarterly reconciliation period as specified under Rule 2004(b). These sources may include, but are not limited to, rental equipment, equipment operated by contractors, and equipment operated under a temporary permit or without a District permit. In addition, the Facility Permit holder shall include emissions from these sources in the Quarterly Certification of Emissions required by Rule 2004.
- (f) Compliance Schedule
- (1) Facilities with existing CEMS and fuel meters as of October 15, 1993

shall continue to follow recording and reporting procedures required by District rules and regulations in effect immediately prior to October 15, 1993 until December 31, 1994 for Cycle 1 facilities and June 30, 1995 for Cycle 2 facilities.

- (2) Between January 1, 1994 and December 31, 1994 for Cycle 1 facilities and between July 1, 1994 and June 30, 1995 for Cycle 2 facilities, interim emission reports shall be submitted to the District by the Facility Permit holder. The interim reports shall comply with all of the data requirements of this rule and Appendix A, except that the reporting frequency shall be monthly for major sources, and quarterly for process units. Such reports shall be submitted by the fifteenth (15<sup>th</sup>) day of each month for major sources, and as specified in paragraph (b)(2) of Rule 2004 - Requirements, for process units.
- (3) A Facility Permit holder shall install, maintain and operate a totalizing fuel meter or any device approved by the Executive Officer or designee to be equivalent in accuracy, reliability, reproducibility, and timeliness for each major source and process unit by January 1, 1994 for Cycle 1 facilities, and July 1, 1994 for Cycle 2 facilities, except that sharing of such devices may be allowed, pursuant to paragraph (e)(6) of this rule.
- (4) All required or elected monitoring and reporting systems specified in subdivision (c) and (d) shall be installed no later than December 31, 1994 for Cycle 1 facilities and June 30, 1995 for Cycle 2 facilities. Monitoring, Reporting, and Recordkeeping (MRR) Forms will be provided by the Executive Officer or designee by November 15, 1993 for Cycle 1 facilities and April 15, 1994 for Cycle 2 facilities. The information required on such MRR forms shall be submitted no later than December 31, 1993 for Cycle 1 facilities and June 30, 1994 for Cycle 2 facilities.
- (5) The Facility Permit holder of an existing facility which elects to enter RECLAIM or a facility which is required to enter RECLAIM shall install all required or elected monitoring, reporting and recordkeeping systems no later than 12 months after entry into RECLAIM. During the 12 months prior to the installation of the required or elected monitoring, reporting and recordkeeping systems, the Facility Permit holder shall comply with the monitoring, reporting, and recordkeeping requirements of paragraphs (f)(2) and (f)(3) of this rule.
- (6) The Facility Permit holder which installs a new major SO<sub>x</sub> source at an

existing facility shall install, operate, and maintain all required monitoring, reporting and recordkeeping systems no later than 12 months after the initial start up of the major SO<sub>x</sub> source. During the interim period between the initial start up of the major SO<sub>x</sub> source and the provisional certification date of the CEMS, the Facility Permit holder shall comply with the monitoring requirements of paragraphs (f)(2) and (f)(3) of this rule.

(g) Recordkeeping

The Facility Permit holder of a major SO<sub>x</sub> source or SO<sub>x</sub> process unit shall maintain all data required to be gathered, computed or reported pursuant to this rule and Appendix A for three years after each APEP report is submitted to the District except that all data gathered or computed for intervals of less than 15 minutes shall be maintained for a minimum of 48 hours. The Facility Permit holder of a major SO<sub>x</sub> source which is required to comply with 40 CFR Part 75 may instead opt to comply with the applicable recordkeeping requirements under 40 CFR Part 75. All records shall be made available to the District staff upon request.

(h) Source Testing

All required source testing shall comply with applicable District Source Test Methods 1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 4.1, 6.1, 100.1 and 307-91; ASTM Methods D3588-91, D4891-89, D1945-81, D4294-90, and D2622-92, and EPA Method 19.

(i) Exemption

The provisions of this rule shall not apply to gas flares.

(j) Appeals

The Facility Permit holder of a facility which has established Super Compliant status shall have a maximum of ten calendar days from the receipt of notification that the facility is no longer Super Compliant in which to file an appeal of such finding to the District Hearing Board in accordance with the requirements of Rule 216.

(k) Appendix A

All provisions of Appendix A are incorporated herein by reference.

**Attachment:** Appendix A - "Protocol for Monitoring, Reporting and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions."

**Table 2011-1**

**MEASURED VARIABLES AND REPORTED DATA FOR SO<sub>x</sub> SOURCES**

<b>SO<sub>x</sub> SOURCES</b>	<b>MEASURED VARIABLES</b>	<b>RECORDING FREQUENCY</b>	<b>REPORTED DATA</b>	<b>TRANSMITTING/REPORTING FREQUENCY</b>
All sources subject to Paragraphs (c)(2) and (c)(3)	Stack SO <sub>x</sub> concentration, Exhaust flow rate, and Status codes  OR  SO <sub>x</sub> concentration, Stack O <sub>2</sub> concentration, Fuel flow rate and Status codes  OR  Fuel sulfur content, Fuel flow rate, and Status codes	Once every 15 minutes	Total daily mass emissions from each source          Daily status codes	Once a day for transmitting/ once a month for reporting
SO <sub>x</sub> Process units subject to Paragraph (d)(2)	Fuel usage  OR  Operating time and Production/ Processing/ Feed rate	Quarterly	Total quarterly mass emissions	Once a quarter for reporting

**ATTACHMENT G**

**RULE 2011 PROTOCOL -  
CHAPTER 2**

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**MAJOR SOURCES - CONTINUOUS EMISSION  
MONITORING SYSTEM (CEMS)**

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The criteria for determining the applicable SO<sub>x</sub> RECLAIM category for a specific piece of equipment is presented in Table 1-A for a major source. If a major source category is applicable to this equipment, then the Facility Permit holder shall be required to comply with the performance standards associated with a CEMS (Continuous Emission Monitoring System) or an approved Alternative Monitoring System (AMS).

The Facility Permit holder of a source that is required to install CEMS may request the Executive Officer to approve an alternative monitoring device (or system components) to quantify emissions of SO<sub>x</sub>. The applicant shall demonstrate to the Executive Officer that the proposed alternative monitoring device is at a minimum equivalent in relative accuracy, precision, reliability, and timeliness to a CEMS for that source, according to the criteria specified in 40 CFR Part 75 Subpart E. In lieu of the criteria specified in 40 CFR Part 75 Subpart E, substitute criteria is acceptable if the applicant demonstrates to 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 source. Upon approval by the Executive Officer, the substitute criteria shall be submitted to the federal Environmental Protection Agency as an amendment to the State Implementation Plan (SIP).

Chapter 2 describes the methodologies for measuring, monitoring, and reporting emissions from major sources. All major sources shall be monitored by a continuous emissions monitoring system (CEMS) or an alternative monitoring system (AMS). The required equipment-specific variables, both measured and reported, to be monitored are found in Tables 2-A and 2-B, respectively.

Another important requirement of major SO<sub>x</sub> sources is the way in which they transmit data to the District's Central Station and the reporting frequency. Major sources shall electronically transmit the data via an RTU on a daily basis. In addition, the aggregated SO<sub>x</sub> emissions from all major sources must be submitted in a Monthly Emissions Report.

During the interim period, January 1, 1994 through December 31, 1994 for Cycle 1 facilities and July 1, 1994 through June 30, 1995 for Cycle 2 facilities mass emissions for major sources shall be determined using emission factors referenced in Table 2 of Rule 2002.

Other important aspects covered in this chapter include missing data procedures and CEMS timesharing requirements.

## **A. MEASUREMENT REQUIREMENTS**

1. Between January 1, 1994 and December 31, 1994 (Cycle 1 facilities) and between July 1, 1994 and June 30, 1995 (Cycle 2 facilities), major sources shall be allowed to use an interim reporting procedure to measure and record SO<sub>x</sub> emissions on a monthly basis and may be extracted from SO<sub>x</sub> emission data gathered by existing District certified continuous emissions monitoring system (CEMS). Chapter 2, Subdivision C, Paragraph 1 specifies the requirements for this interim period. On and after January 1, 1995 (Cycle 1 facilities) and July 1, 1995 (Cycle 2 facilities), the Facility Permit holder of each major source shall report a daily average of SO<sub>x</sub> emission by 5:00 p.m. of the following day and comply with all other applicable requirements (except Chapter 2, Subdivision C, Subparagraph 1) specified in this chapter.

2. The Facility Permit holder shall by March 31, 1994 for Cycle 1 facilities and September 30, 1994 for Cycle 2 facilities, submit a CEMS plan to the Executive Officer for approval. The plan shall contain at a minimum the following items:
  - a. A list of all major sources which will have CEMS installed.
  - b. Details of all proposed Continuous Emission Monitors as well as the proposed flow monitors for each affected source.
  - c. Details of the Quality Control/Quality Assurance Plan for the CEMS.
  - d. Proposed range of each CEMS and the expected concentrations of pollutants for each source.
  - e. Date by which purchase order for each system will be issued.
  - f. Construction schedule for each system, and date of completion of the installation.
  - g. Date by which CEMS certification test protocol will be submitted to the District for approval for each system.
  - h. Date by which certification tests will be completed for each system.
  - i. Date by which certification test results will be submitted for review by the District, for each system.
  - j. Any other pertinent information regarding the installation and certification for each system.

If a CEMS Plan is disapproved in whole or in part, the District staff will notify the Facility Permit holder in writing and the Facility Permit holder shall have 30 days from the date it receives the notice from the District to resubmit its plan.

3. The Facility Permit holder of each major SO<sub>x</sub> equipment shall install, calibrate, maintain, and operate an approved CEMS to measure and record the following:
  - a. Sulfur oxide concentrations in the gases discharged to the atmosphere from affected equipment.
  - b. Oxygen concentrations, at each location where sulfur oxide concentration are monitored, if required for calculation of the stack gas flow rate.
  - c. Stack gas volumetric flow rate. An in-stack flow meter may be used to determine mass emissions to the atmosphere from affected equipment, except:
    - i. when more than one affected piece of equipment vents to the atmosphere through a single stack and there is no approvable means of determining emissions from each piece of equipment, or

- ii. during periods of low flow rates when the flow rate is no longer within the applicable range of the in-stack flow meter.
- d. In lieu of complying with Chapter 2, Subdivision A, Paragraph 1, Subparagraph c, the Facility Permit holder shall calculate stack gas volumetric flowrate using one of the following alternate methods:
  - i. Heat Input
 

If heat input rate is needed to determine the stack gas volumetric flow rate, the Facility Permit holder shall include in the CEMS calculations the F factors listed in 40 CFR Part 60, Appendix A, Method 19, Table 19-1. The Facility Permit holder shall submit data to develop F factors when alternative fuels are fired and obtain the approval of the Executive Officer for use of the F factors before firing any alternative fuels.
  - ii. Oxygen Mass Balance
 

Flow rate can be determined using oxygen mass balance as approved through a plan submitted to and approved by the Executive Officer, or
  - iii. Nitrogen Mass Balance
 

Flow rate can be determined using nitrogen mass balance as approved through a plan submitted to and approved by the Executive Officer.

The Facility Permit holder shall measure and record all variables necessary for the method chosen to calculate stack gas volumetric flowrate.
- e. Fuel gas flow rate if the CEMS uses the fuel gas flow rate and the sulfur content of the fuel gas to determine the sulfur oxide emissions.
- f. Sulfur content of the fuel if the CEMS uses the fuel input rate and the sulfur content of the fuel gas to determine the sulfur oxides emission rate.
- g. All applicable variables listed in Table 2-A.
- h. The Facility Permit holder shall also provide any other data necessary for calculating air contaminant emissions as determined by the Executive Officer.
- i. The data generated from a monitoring system for parameters listed in Subparagraphs a, b, c, d, e, and f of Chapter 2, Subdivision A, Paragraph 3 shall be recorded by both (1) the remote terminal unit (RTU) and (2) strip chart recorder or electronic recorder. The RTU shall be capable of producing a printout of the stored data upon request from the Executive Officer or designee. The strip chart recorder or alternative electronic recorder shall be located in

parallel to the RTU. The strip chart recorder or alternative electronic recorder shall receive data independent of the RTU and serve as an independent tool for verifying data archived in the RTU or sent to the District Central SOx Station.

If a strip chart recorder is used, the strip chart shall have a minimum chart width of 10 inches, a readability of 0.5% of the span, and a minimum of 100 chart divisions. Alternatively, if an electronic recorder is used, the recorder shall be capable of writing data on a medium that is secure and tamper-proof. Possible media include, but are not limited to, "write-once-read-many" type or a data encryption system that does not permit encrypted data files to be altered after they have been created, without making the data inaccessible through standard vendor-provided decryption software, or without leaving traceable evidence of tampering. Also, at a minimum, the real-time sampling frequency of the electronic recorder shall be equal to or greater than the rate of data collection for the RTU. Furthermore, such recorded data shall be readily accessible upon request by the Executive Officer or designee. If software is required to access the recorded data, a copy of the software, and all subsequent revisions, shall be provided to the Executive Officer or designee at no cost. If a device is required to retrieve and provide a copy of such recorded data upon request to the Executive Officer or designee, the Facility Permit holder shall maintain and operate such a device at the facility.

The Facility Permit holder shall specify within the CEMS application, as required under Chapter 2, Subdivision A, Paragraph 2, the type of data recording system to be used in parallel to the RTU.

4. The Facility Permit holder must submit to the District his certification test results and supporting document for each CEMS by December 31, 1994. It must certify that the results show that the CEMS has met all the requirements of the rule if its submission is after August 31, 1994. Upon receipt of the test results and the certification that the CEMS is in compliance, the District will issue a Provisional Approval.

After the Provisional Approval, all the data measured and recorded by the CEMS will be considered valid quality assured data, (retroactive to January 1, 1995) provided that the Executive Officer does not issue a notice of disapproval of final certification. Final certification of the CEMS will be granted if the certification test results show that the CEMS has met all the requirements of the rule.

In the case where the test results show that the CEMS does not meet all the requirements of the rule, the Executive Officer will disapprove the final certification. If this occurs, the previously considered valid data from January 1, 1995 will have to be replaced by data as specified in the "Missing Data" section of the rule. This procedure shall be used until the time that new certification test results are submitted, and the CEMS has received final approval by the District.

5. The variables listed in Table 2-A shall be measured and recorded to track the operation of basic and control equipment independent of measurements made by

the monitoring equipment. The variables found in Table 2-B shall be reported to the District's SO<sub>x</sub> Central Station Computer. Alternatives in Table 2-A and 2-B indicated choices which must be specified in the Facility Permit for that equipment.

6. As part of the Facility Permit Application review, the Executive Officer may modify the list of Facility Permit holder-selected variables.
7. Data on Facility Permit holder - selected variables shall be made available to the District staff upon request.
8. Source tests shall be performed by testing firms/laboratories who have received approval from the District by going through the District's laboratory approval program.
9. All Relative Accuracy Test Audits (RATA) shall be performed by testing firms/laboratories who have received approval from the District by going through the District's laboratory approval program.

**B. MONITORING SYSTEMS**

**1. Information Required for Each 15-Minute Interval**

All CEMS for affected equipment shall, at a minimum, generate and record the following data points once for each successive 15-minute period on the hour and at equally spaced intervals thereafter:

- a. Sulfur oxide concentration in the stack in units of ppmv.
- b. Oxygen concentration or carbon dioxide in the stack in units of percent.
- c. Volumetric flow rate of stack gases in units of dry or wet standard cubic feet per hour (dscfh or wscfh). For affected equipment standard gas conditions are defined as a temperature at 68°F and one atmosphere of pressure.
- d. (i) Fuel flow rates in units of standard cubic feet per hour (scfh) for gaseous fuels or pounds per hour (lb/hr) for liquid fuels if EPA Method 19 is used to calculate the stack gas volumetric flow rate, and  
 (ii) Fuel type.
- e. Sulfur oxide mass emissions in units of lb/hour. The sulfur oxide emissions are calculated according to the following:

$$e_i = a_i \times c_i \times 1.662 \times 10^{-7} \tag{Eq. 1}$$

where:

- $e_i$  = The mass emissions of sulfur oxides (lb/hr),
- $a_i$  = The stack gas concentration of sulfur oxide (ppmv),
- $c_i$  = The stack gas volumetric flow rate (scfh).

Example Calculation:

$$\begin{aligned}
 a_i &= 2.7 \text{ ppm} \\
 c_i &= 90,000 \text{ scfh} \\
 e_i &= a_i \times c_i \times 1.662 \times 10^{-7} \\
 e_i &= (2.7)(90,000)(1.662 \times 10^{-7}) = 0.04 \text{ lb/hr SO}_x
 \end{aligned}$$

When the CEMS uses the heat input rate and oxygen concentration to determine the sulfur oxide emissions, the following equation would be used to calculate the emission of sulfur oxide:

$$e_i = a_i \times [20.9/(20.9 - b_i)] \times 1.662 \times 10^{-7} \times \sum_{j=1}^r (F_{dij} \times d_{ij} \times V_{ij}) \quad (\text{Eq. 2})$$

where:

- $e_i$  = The mass emissions of sulfur oxide (lb/hr),
- $a_i$  = The stack gas concentration of sulfur oxide (ppmv),
- $b_i$  = The stack gas concentrations of oxygen (%),
- $r$  = The number of different types of fuel,
- $F_{dij}$  = The F factor for each type of fuel, the ratio of the gas volume of the products of combustion to the heat content of the fuel (scf/10<sup>6</sup> Btu),
- $d_{ij}$  = The metered fuel flow rate for each type of fuel measured every 15-minute period,
- $V_{ij}$  = The higher heating value of the fuel for each type of fuel.

The product ( $d_{ij} \times V_{ij}$ ) must have units of millions of Btu per hour (10<sup>6</sup> Btu/hr). Equation 2 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), and the oxygen content of the stack gas is 19 percent or greater.

Example Calculation:

$$e_i = a_i \times [20.9/(20.9 - b_i)] \times 1.662 \times 10^{-7} \times \sum_{j=1}^r (F_{dij} \times d_{ij} \times V_{ij})$$

where:

- $a_i$  = 38.9 ppm
- $b_i$  = 5.6%
- $F_{dij}$  = 8710 dscf/10<sup>6</sup> Btu
- $d_{ij}$  = 10,000 dscfh
- $V_{ij}$  = 1394 Btu/dscf
- $e_i$  = 38.9 x [20.9/(20.9 - 5.6)] x 1.662 x 10<sup>-7</sup> x [8710/10<sup>6</sup> x 10000 x 1394]
- $e_i$  = 1.1 lb/hr of SO<sub>x</sub>

When the CEMS uses the heat input rate and carbon dioxide concentration to determine the sulfur oxide emissions, the following equation shall be used to calculate the emission of sulfur oxide:

$$e_i = (a_i/t_i) \times 100 \times 1.662 \times 10^{-7} \times \sum_{j=1}^r (F_{cij} \times d_{ij} \times V_{ij}) \quad (\text{Eq. 3})$$

where:

- $e_i$  = The mass emissions of sulfur oxide (lb/hr).
- $a_i$  = The stack gas concentration of sulfur dioxide (ppmv).
- $t_i$  = The stack gas concentrations of carbon dioxide (%).
- $r$  = The number of different types of fuel.
- $F_{cij}$  = The carbon dioxide-based dry F factor for each type of fuel, the ratio of the dry gas volume of carbon dioxide to the heat content of the fuel (scf/10<sup>6</sup> Btu).
- $d_{ij}$  = The metered fuel flow rate for each type of fuel measured every 15-minute period.
- $V_{ii}$  = The higher heating value of the fuel for each type of fuel.

The product ( $d_{ij} \times V_{ij}$ ) must have units of millions of Btu per hour (10<sup>6</sup> Btu/hr).

Example Calculation:

$$e_i = (a_i/t_i) \times 100 \times 1.662 \times 10^{-7} \times \sum_{j=1}^r (F_{cii} \times d_{ij} \times V_{ii})$$

where:

- $a_i$  = 38.9 ppm
- $t_i$  = 11.0%
- $F_{cii}$  = 1040 scf/10<sup>6</sup> Btu
- $d_{ij}$  = 10,000 dscfh
- $V_{ii}$  = 1394 Btu/dscf
- $e_i$  = (38.9/11.0) x 100 x 1.662 x 10<sup>-7</sup> x [1040/10<sup>6</sup> x 10000 x 1394]
- $e_i$  = 0.85 lb/hr of SO<sub>x</sub>

When the CEMS uses the fuel gas flow rate and the sulfur content to determine the sulfur oxides emission rate, the CEMS shall use the following equation to calculate the emissions of sulfur oxide:

$$e_i = s_i \times d_i \times 1.662 \times 10^{-7} \tag{Eq. 4}$$

- where:
- $e_i$  = The emissions of sulfur oxide (lb/hr),
  - $s_i$  = The sulfur content of fuel gas (ppmv),
  - $d_i$  = The fuel gas flow rate (scfh).

Example Calculation:

- $s_i$  = 38 ppmv
- $d_i$  = 1,576,980 scfh = 1.577 x 10<sup>6</sup> scfh
- $e_i$  = (38)(1.577 x 10<sup>6</sup> scfh)(1.662 x 10<sup>-7</sup>) = 9.96 lb/hr.

- f. All measurements for concentrations and stack gas flow rates, and selection of F factor shall be made on a consistent wet or dry basis.
- g. CEMS status. The following codes shall be used to report the CEMS status:
  - 1-1 - VALID DATA
  - 2-2 - CALIBRATION
  - 3-3 - OFF LINE

- 4-4 - ALTERNATE DATA ACQUISITION (e.g., manual sampling)
- 5-5 - OUT OF CONTROL
- 6-6 - FUEL SWITCH (e.g., gas to oil, coke to coal)
- 7-7 - 10% RANGE (may be used to report at default 10% valid range whenever actual concentration value is below 10%)
- 8-8 - LOWER THAN 10% RANGE (may be used to report at actual concentration value if less than 10% valid range)
- 9-9 - NON-OPERATIONAL

- h. For processes in which less than 50% of emissions are caused by fuel combustion, record the Source Classification Code (SCC) for the process conducted. SCCs are listed in the State of California Air Resources Board Document "Instructions for the Emission Data System Review and Update Report, Appendix III, Source Classification Codes and EPA Emission Factors".
- i. The count of valid data points collected.
- j. The count of data points in excess of 95% of span range of the monitor collected.

**2. Hourly Calculations**

The hourly average stack gas concentrations of sulfur oxides and oxygen, the stack gas volumetric flow rate, the fuel flow rate, the fuel sulfur content of the fuel gas, and the emission rate of sulfur oxides shall be calculated for each piece of affected equipment as follows:

$$A = \frac{\sum_{i=1}^n a_i}{n} \quad (\text{for SO}_x \text{ concentration}) \quad (\text{Eq. 5})$$

$$B = \frac{\sum_{i=1}^n b_i}{n} \quad (\text{for O}_2 \text{ concentration}) \quad (\text{Eq. 6})$$

$$C = \frac{\sum_{i=1}^n c_i}{n} \quad (\text{for stack gas volumetric flow rate}) \quad (\text{Eq. 7})$$



$$D = \frac{\sum_{i=1}^n d_i}{n} \quad (\text{for fuel flow rates}) \quad (\text{Eq. 8})$$

Calculate D for each type of fuel firing separately.

$$S = \frac{\sum_{i=1}^n s_i}{n} \quad (\text{for sulfur content of fuel gas}) \quad (\text{Eq. 9})$$

$$E_k = \frac{\sum_{i=1}^n e_i}{n} \quad (\text{for SO}_x \text{ emissions}) \quad (\text{Eq. 10})$$

All concentrations and stack gas flow rates shall be made on a consistent wet or dry basis

where:

- A = The hourly average stack gas concentration of sulfur oxides (ppmv),
- a<sub>i</sub> = The measured stack gas concentrations of sulfur oxides (ppmv),
- B = The hourly average oxygen stack concentration (%),
- b<sub>i</sub> = The measured stack gas concentrations of oxygen (%),
- C = The hourly average stack gas flow rate (scfh),
- c<sub>i</sub> = The measured stack gas volumetric flow rates (scfh),
- D = The hourly average metered fuel flow rates, for each type of fuel (appropriate units of volumetric flow rate for each type of fuel, e.g., scfh, gal/hr, lb/hr, bbl/hr, liters/hr, etc.),
- d<sub>i</sub> = The metered fuel flow rates for each type of fuel (appropriate units of volumetric flow rate for each type of fuel, e.g., scfh, gal/hr, lb/hr, bbl/hr, etc.),
- S = the hourly average sulfur content of the fuel (ppmv),
- E<sub>k</sub> = The hourly average emissions of sulfur oxide (lb/hr),
- e<sub>i</sub> = The measured emissions of sulfur oxide (lb/hr),
- n = Number of valid data points during the hour.

The values of A through E<sub>k</sub> shall be recorded for each affected piece of equipment.

Example Calculation:

For SO<sub>x</sub> concentration:  
 $a_1 = 3.0 \text{ ppm}, a_2 = 4.6 \text{ ppm}, a_3 = 12.2 \text{ ppm}, a_4 = 7.0 \text{ ppm}.$

$$A = \frac{\sum_{i=1}^n a_i}{n} = \frac{3.0 + 4.6 + 12.2 + 7.0}{4} = 6.7 \text{ ppm}$$

For O<sub>2</sub> concentration:  
 $b_1 = 3.5\% \text{ O}_2, b_2 = 5.2\%, b_3 = 4.4\%, b_4 = 3.0\%$

$$B = \frac{\sum_{i=1}^n b_i}{n} = \frac{3.5 + 5.2 + 4.4 + 3.0}{4} = 4.0 \%$$

For stack gas volumetric flow rate:  
 $c_1 = 89,160 \text{ scfh} \quad c_3 = 91,980 \text{ scfh}$   
 $c_2 = 90,120 \text{ scfh} \quad c_4 = 89,520 \text{ scfh}$

$$C = \frac{\sum_{i=1}^n c_i}{n} = \frac{89,160 + 90,120 + 91,980 + 89,520}{4} = 90,195 \text{ scfh}$$

For Sulfur:

$$S = \frac{\sum_{i=1}^n S_i}{n} \quad (\text{for sulfur content of fuel gas})$$

$S_1 = 558 \text{ ppmv H}_2\text{S}$	$S_3 = 722 \text{ ppmv H}_2\text{S}$
$S_2 = 630 \text{ ppmv H}_2\text{S}$	$S_4 = 785 \text{ ppmv H}_2\text{S}$
$S = \frac{588 + 630 + 722 + 785}{4}$	$= 681 \text{ ppmv H}_2\text{S}$

For fuel flow rate:  
 $d_1 = 106,392 \text{ scfh} \quad d_3 = 101,426 \text{ scfh}$   
 $d_2 = 96,504 \text{ scfh} \quad d_4 = 92,065 \text{ scfh}$

$$D = \frac{\sum_{i=1}^n d_i}{n} = \frac{106,392 + 96,504 + 101,406 + 92,065}{4} = 99,097 \text{ scfh}$$

For SO<sub>x</sub> emission rate:  
 $e_1 = .032 \text{ lb/hr}, e_2 = .037 \text{ lb/hr}, e_3 = .039 \text{ lb/hr}, e_4 = .041 \text{ lb/hr}$

$$E_k = \frac{\sum_{i=1}^n e_i}{n} = \frac{.032 + .037 + .039 + .041}{4} = .037 \text{ lb/hr}.$$

**3. Daily Calculations**

a. Daily mass emissions calculation

The daily emissions of sulfur oxides shall be calculated and recorded for each affected SO<sub>x</sub> source using the following procedure:

$$G = \sum_{k=1}^N E_k + \sum_{m=1}^P E_m \quad (\text{Eq. 11})$$

where:

G = The daily emissions of sulfur oxide (lb),

E<sub>k</sub> = The hourly average emission rate using CEMS (lb/hr)

E<sub>m</sub> = The hourly average emission rate of sulfur oxides using substitute data (see Chapter 2, Subdivision B, Paragraph 5, Subparagraph b and Chapter 2, Subdivision F)(lb/hr),

N = Number of hours of valid data (see Chapter 2, Subdivision B, Paragraph 5) from the CEMS coinciding with the source operating hours,

P = Number of hours using substitute data when the source is operating; and

M = Number of hours during the day.

Note that M = N + P = 24 hours

Example Calculation:	
E <sub>m</sub>	= 1.7 lb/hr
N	= 23 hrs
P	= 1 hr
M	= 24 hr
E <sub>k</sub>	= 0.037 lb/hr
G	= (0.037 lb/hr)(23 hr) + (1.7 lb/hr)(1hr)
G	= 2.55 lb/day SO <sub>x</sub>

**4. Operational Requirements**

The CEMS shall be operated and data recorded at all times except for CEMS breakdowns and repairs. Calibration data shall be recorded during zero and span calibration checks, and zero and span adjustments. For periods of hot standby the Facility Permit holder may enter a default value for SO<sub>x</sub> emissions. Before using any default values the Facility Permit holder must obtain the approval of the Executive Officer and must include in the CEMS applications or CEMS plans the estimates of SO<sub>x</sub> emissions, the SO<sub>x</sub> concentrations, the oxygen concentrations, the sulfur content of fuel gas, and the fuel input rates or the stack gas volumetric flow rates during hot standby conditions. The Executive Officer will approve only those emission values which are found to correspond to hot standby conditions.

## 5. Requirements for Valid Data Points

Valid data points are data points from a CEMS which meets the requirements of Chapter 2, Subdivision B, Paragraph 14, and which is not out-of-control as defined in Attachment C - Quality Assurance and Quality Control Procedures. In addition, whenever specifically allowed by these RECLAIM rules, data points obtained by the methods specified in Chapter 2, Subdivision B, Paragraph 6 or Chapter 2, Subdivision B, Paragraph 7, are considered valid. Furthermore, a data point gathered by a certified CEMS except a zero value data point, shall not be valid unless it meets the requirements of Chapter 2, Subdivision B, Subparagraph (8)(a). A zero value data point is a data point gathered while the source is not operating and is within 5% of the span range from zero value.

- a. Each CEMS and component thereof shall be capable of completing a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute interval.
- b. Raw data shall be gathered from the monitors at equally spaced intervals. The Facility Permit holder shall specify, within the test report for a Relative Accuracy Test Audit of a CEMS, the frequency of data gathering in a 15-minute interval. This data gathering frequency shall remain the same throughout the period following the Relative Accuracy Test Audit until a subsequent Relative Accuracy Test Audit is conducted with a different specified frequency. The specified frequency shall be the frequency for data gathering to constitute continuous measurement.
- c. All valid raw data points gathered from the monitors within a 15-minute interval shall be used to compute a 15-minute average emissions data point. If only one valid data point is gathered within a 15-minute interval, that data point shall be used as the 15-minute average emission data point. No invalid data points may be used to compute the 15-minute average emission data point. A valid 15-minute average emission data point must further be based on a minimum of one valid raw data point.
- d. Except for facilities which are required to comply with 40 CFR Part 75, the following data for each 15-minute period shall be computed for each CEMS:
  - i. the average emissions values,
  - ii. the count of valid data points, and
  - iii. the count of data points in excess of 95% of span range of the monitor.
- e. All SO<sub>x</sub> concentration, volumetric flow, and SO<sub>x</sub> emission rate data shall be reduced to 1 hour averages. Valid hour averages shall be equally computed based on four valid 15-minute average emission data points equally spaced over each 1 hour period, commencing at 12:00 a.m., except for a maximum of four 1-hour maintenance periods in each day during which CEMS maintenance activities such as calibration, quality assurance, maintenance, or CEMS repair is conducted. During these 1-hour maintenance periods a valid hour average shall consist of at least two valid 15-

minute average emission data points. A 1-hour maintenance period is defined when the operation of the CEMS is interrupted for CEMS maintenance activities at any time during any 1-hour period, and that period shall count towards the four 1-hour maintenance periods allowed regardless of the number of valid data points gathered. The CEMS shall be kept properly operational at all times unless such CEMS must be turned off for CEMS maintenance activities.

- f. Failure of the CEMS to acquire the required number of valid 15-minute average emission data points within any 1-hour period shall result in the loss of such data for the entire 1-hour period and the Facility Permit holder shall record and report data by means of the data acquisition and handling system for the missing hour in accordance with the applicable procedures for substituting missing data in the Missing Data Procedures in Chapter 2 Subdivision E of this document.

## **6. Alternative Data Acquisition Using Reference Methods**

- a. When valid sulfur oxides emission data is not collected by the permanently installed CEMS, emission rate data may be obtained using District Methods 6.1 or 100.1 (for SO<sub>x</sub> concentration in the stack gas) in conjunction with District Methods 1.1, 2.1, 3.1, and 4.1 or by using District Methods 6.1 or 100.1 in conjunction with District Method 3.1 and EPA Method 19. Emission rate data may also be obtained using District Methods 307-91 or ASTM Method D1072-90, Standard Test for Total Sulfur in Fuel Gases (for sulfur content in the fuel gas) in conjunction with the fuel gas flow rate.
- b. If the Facility Permit holder chooses to use a standby CEMS (such as in a mobile van or other configuration), to obtain alternative monitoring data at such times when the permanently installed CEMS for the affected source(s) cannot produce valid data, then the standby CEMS is subject to the following requirements:
  - i. Standby CEMS shall be equivalent in relative accuracy, reliability, reproducibility and timeliness to the corresponding permanently installed CEMS.
  - ii. The Facility Permit holder shall submit a standby CEMS plan to the District for review prior to using the standby CEMS.
  - iii. District acceptance of standby CEMS data shall be contingent on District approval of the plan.
  - iv. The use of standby CEMS shall be limited to a total of 6 months for any source(s) within a calendar year.
  - v. The Facility Permit holder shall notify the District within 24 hours if the standby CEMS is to be used in place of the permanently installed CEMS.

- vi. During the first 30 days of standby CEMS use, the Facility Permit holder shall conduct a Certified Gas Audit (CGA) of the standby CEMS.
- vii. The Facility Permit holder shall notify the District within the 30-day period if the standby CEMS shall be used longer than 30 days.
- viii. After the first 30 days of using the standby CEMS, the Facility Permit holder shall conduct at least one RATA of the standby CEMS and the RATA shall be conducted within 90 days of the initial use of the standby CEMS.
- ix. All RATA and CGA shall be performed by testing firms/laboratories who have received approval from the District by going through the District's laboratory approval program.
- x. Immediately prior to obtaining data from the source(s) to be monitored, the standby CEMS shall be quality assured in accordance with District Method 100.1

**7. Alternative Data Acquisition Using Process Curves or Other Means**

Process curves of SO<sub>x</sub> emissions or other alternative means of SO<sub>x</sub> emission data generation shall be used to obtain sulfur oxides emission data, provided the Facility Permit holder has obtained the approval of the Executive Officer prior to using alternate means of SO<sub>x</sub> emission data generation. The process curves and the alternate means of SO<sub>x</sub> emission data generation mentioned in this paragraph shall not be used more than 72 hours per calendar month and shall only be used if no CEMS data or reference method data gathered under Chapter 2, Subdivision B, Paragraph 6 is available. Process curves may be used on units which have air pollution control devices for the control of sulfur oxides emissions provided the Facility Permit holder submits a complete list of operating conditions that characterize the permitted operation. The conditions must be specified in the Facility Permit for that equipment. The process variables specified in the Facility Permit conditions must be monitored by the source.

**8. Span Range Requirements for SO<sub>x</sub> Analyzers or Fuel Gas Sulfur Analyzers and O<sub>2</sub> Analyzers**

- a. Full scale span ranges for the SO<sub>x</sub> analyzers and O<sub>2</sub> analyzers used as part of a stack gas volumetric flow system at each source shall be set on an individual basis. The full scale span range of the SO<sub>x</sub> analyzers and O<sub>2</sub> analyzers shall be set so that all data points gathered by the CEMS lie within 10 - 95 percent of the full scale span range. However, any data points that fall below 10 percent of the full scale span range may be reported in accordance with 8(b), 8(c), or 8(d) as applicable. Missing Data Procedures as prescribed in Chapter 2, Subdivision E shall be substituted for any data points falling above 95 percent range of the full scale span range.

- b. For CEMS with RECLAIM certified multiple span ranges, the Facility Permit holder shall report data that falls below 10 percent of the higher full scale span range and above 95 percent of the lower full scale span range, at the 10 percent value of the higher full scale span range.
  - i. The Facility Permit holder electing (or who may be required) to measure concentrations that fall below 10 percent of the higher full scale span value of any range (other than the lowest vendor guaranteed span range), shall perform a linearity test according to the procedure in Attachment F, Section B "Linearity Error", to satisfy the performance requirements.
- c. In the event that any data points gathered by the CEMS fall below 10 percent of the full scale span range, the Facility Permit holder may elect to report SO<sub>x</sub> concentrations at the 10 percent full scale span range value.
- d. In the event that any data points gathered by the CEMS fall below 10 percent of the lowest vendor guaranteed full scale span range for that CEMS (defined as the lowest full scale span range that the vendor guarantees to be capable of meeting all current certification requirements of RECLAIM in Rule 2011 Protocols, Appendix A), the Facility Permit holder may elect to use the following procedures to measure and report SO<sub>x</sub> concentrations.
  - i. Report all monitored concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range for that CEMS at the 10 percent lowest vendor guaranteed full scale span range value, or
  - ii. Report all monitored concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range for that CEMS at the actual measured value, provided that the CEMS meets the Alternative Performance Requirements prescribed in Attachment F.

The Alternative Performance Requirements prescribed in Attachment F shall be imposed in place of the semiannual assessments as required pursuant to Attachment C (B)(2).
- e. The Facility Permit holder electing to use (B)(8)(c) and (B)(8)(d)(i) to report SO<sub>x</sub> concentrations that fall below 10 percent of full scale span range or 10 percent of the lowest vendor guaranteed full scale span range for that CEMS, shall meet the following:
  - i. In the event any of the specified testing requirements as prescribed in Attachment C (B)(2) are not met, the Facility Permit holder shall no longer use (B)(8)(c) or (B)(8)(d)(i) to report SO<sub>x</sub> concentrations below 10 percent of the full scale span range until compliance is demonstrated. Missing Data Procedures specified in Chapter 2,

Subdivision E shall apply retroactively from the date in which the Facility Permit holder last demonstrated compliance with Attachment C (B)(2).

- ii. From September 8, 1995 to the beginning of the compliance year (January 1, 1995 for Cycle 1 and July 1, 1995 for Cycle 2), the Facility Permit holder may retroactively report concentrations that fell below 10 percent of the full scale span range at the 10 percent span range value, in lieu of using the Missing Data Procedures specified in Chapter 2, Subdivision E.
- f. The Facility Permit holder electing to use (B)(8)(d)(ii) to measure and report SO<sub>x</sub> concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range for that CEMS, shall meet the following:
- i. Submit an application, with the appropriate fees, supporting documentation, and if necessary test protocols to the Executive Officer or designee in order to amend their CEMS Certification Plan to include the selected criteria. The application shall be approved by the Executive Officer or designee prior to using (B)(8)(d)(ii).
  - ii. (B)(8)(d)(ii) may only be chosen after initial tests as prescribed in Attachment F are completed and demonstrate that the CEMS is capable of measuring SO<sub>x</sub> concentrations at below 10 percent of the full scale span range.
  - iii. In the event any of the specified reporting and testing requirements for (B)(8)(d)(ii) as prescribed in Attachment F are not met, the Facility Permit holder shall no longer use (B)(8)(d)(ii) to measure SO<sub>x</sub> concentrations below 10 percent of the lowest vendor guaranteed full scale span range for that CEMS until compliance with (B)(8)(d)(ii) is demonstrated. Missing Data Procedures described in Chapter 2, Subdivision E shall apply retroactively from the date in which the Facility Permit holder last demonstrated compliance with (B)(8)(d)(ii), unless the Facility Permit holder can demonstrate compliance with Attachment C (B)(2), then the Facility Permit holder may report concentrations retroactively at the 10 percent lowest vendor guaranteed span range value and may continue to report at the 10 percent lowest vendor guaranteed span range value until compliance is demonstrated with (B)(8)(d)(ii).
  - iv. In the event that the SO<sub>x</sub> concentrations are at levels such that the Facility Permit holder cannot complete the low level spike recovery test or alternative reference method test for low level concentrations pursuant to Attachment F, then the Facility Permit holder may elect to report all monitored concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range at the 10



percent lowest vendor guaranteed full scale span range value, in lieu of using Missing Data Procedures.

- v. Upon approval of the CEMS application to use (B)(8)(d)(ii), the Facility Permit holder may retroactively report concentrations at the 10 percent lowest vendor guaranteed span range value in lieu of using the Missing Data Procedures specified Chapter 2, Subdivision E, from the beginning of the compliance year for which the application was submitted up until the application approval date.
- g. Up until July 1, 1996, Facility Permit holders whose CEMS have been provisionally or finally certified prior to September 8, 1995, and have used Missing Data Procedures as prescribed in Chapter 2, Subdivision E to report mass emissions that have been measured by the CEMS in the 10 percent to less than 20 percent of full scale span range, may report the actual concentrations measured in this range as valid data retroactively from the beginning of the current compliance year.

**9. Calibration Drift Requirements**

The CEMS design shall allow determination of calibration drift (both negative and positive) at zero level (0 to 10 percent of full scale and high-level (80 to 100 percent of full scale) values. Alternative low-level and high-level span values shall be allowed with the prior written approval of the Executive Officer.

**10. Relative Accuracy Requirements for Stack Gas Volumetric Flow Measurement Systems**

The stack gas volumetric flow measurement system shall meet a relative accuracy requirement of being less than or equal to 15 percent of the mean value of the reference method test data in units of standard cubic feet per hour (scfh). Relative accuracy is calculated by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2. Alternatively, for cases where the mean stack gas velocity obtained by reference method test is less than 15 feet per second, the flow relative accuracy requirement may be met if equation 11a is satisfied.

$$|d| + |cc| \leq 2 \text{ feet per second} \times A \times cf \quad (\text{Eq. 11a})$$

Where

d = average of differences between stack gas volumetric flow measurement system reading and the corresponding reference method test data in units of standard cubic feet per hour.

cc = confidence coefficient as determined by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2.

A = Stack cross sectional area in the plane of measurement.

cf = conversion factor to standard cubic feet per hour.

The volumetric flow measurement system shall also meet the specifications in Attachment B (BIAS TEST) of this protocol. Prior to conducting a certification or re-certification test, the Facility Permit holder shall perform a flow profile study to determine the acceptability of the potential flow monitor location and to determine the number and location of flow sampling points required to obtain a representative flow value. The results of such study shall be part of the certification test report.

There shall be a minimum of nine sets of tests conducted. All data collected shall be submitted to the Executive Officer and shall be used to determine relative accuracy except data may be rejected per the technical guidance or for unusual problems and/or occurrences during testing (e.g., process upsets, CEMS malfunction, testing failure) if the number of tests exceeds nine sets. Any exclusion of data must be substantiated with appropriate documentation and is subject to approval by the Executive Officer.

In situations where the stack gas velocity is low (less than 10 ft./sec.) and the above relative accuracy procedure provides results that have a low level of accuracy and precision, the relative accuracy of the fuel flow meter may be determined according to one of the following alternatives:

- a. Calibrate the facility CEMS fuel flow meter in accordance with the procedures outlined in 40 CFR Part 75, Appendix D, either in-line or off-line.
- b. Calibrate a test fuel flow meter in accordance with the procedures outlined in 40 CFR Part 75, Appendix D. Use the calibrated test fuel meter to calibrate the facility CEMS fuel flow meter to the same level of accuracy and precision as in 40 CFR Part 75, Appendix D.
- c. Calibrate a test fuel flow meter according to the procedure outlined in (B)(10)(b) and install this meter in line with the facility CEMS fuel flow meter and use 40 CFR Part 60, Method 19 (F-factor approach) to determine relative accuracy to the same level of accuracy as in (B)(10).

Other alternative techniques (e.g., tracer gas approach, electronic micro-manometer) may be used to determine relative accuracy of fuel flow meters where low stack volumetric flow rates exist, if these techniques are approved in writing by the District.

**11. Quality Assurance for Fuel Flow Meters**

Fuel flow measuring devices used for obtaining stack flow in conjunction with F-factors shall be tested as installed for relative accuracy using reference methods to determine stack flow.

If the flow device manufacturer has a method or device that permits the fuel flow measuring device to be tested as installed for relative accuracy, the Facility Permit holder shall request approval from the Executive

Officer. Approval will be granted in cases where the Facility Permit holder can demonstrate to the satisfaction of the Executive Officer that no suitable testing location exists in the exhaust stacks or ducts and that it would be an inordinate cost burden to modify the exhaust stack configuration to provide a suitable testing location. The method or device used for relative accuracy testing shall be traceable to NIST standards. This method shall be used only if natural gas, fuel oil, or other fuels can be shown, by the Facility Permit holder to have stable F-factors and gross heating values, or if the Facility Permit holder measures the F-factor and gross heating value of the fuel. A stable F-Factor is defined as not varying by more than +/-2.5 % from the constant value used for F-Factor. For the fuels listed in 40 CFR 60, Appendix A, Method 19, Table 19-1, the F-Factors are assumed to be stable at the value cited in Table 19-1. Any F-Factor cited in Regulation XX shall supersede the F-Factor in Table 19-1. For fuels not listed in the citations above, but which the Facility Permit holder can demonstrate that the source-specific F-Factor meets the same stability criteria, periodic reporting of F-Factor may be accepted and the adequacy to the frequency of analysis shall be demonstrated by the facility such that the probability that any given analysis will differ from the previous analysis by more than 5% (relative to the previous analysis) is less than 5%. Analysis records shall be maintained, including all charts and laboratory notes.

**12. Relative Accuracy Requirements for Mass Emission Rate Measurement**

The mass emission rate measurement shall meet a relative accuracy requirement of being less than or equal to 20 percent of the mean value of the reference method test data in units of lb/hr. Relative accuracy is calculated by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2. The emission rate measurement shall also meet the specifications in Attachment B (BIAS TEST) of this Appendix A. Alternatively, for cases where the mean SOx concentration obtained by reference test method is less than or equal to 10.0 ppm, or the mean stack gas velocity obtained by reference test method is less than 15 feet per second, the mass emission rate measurement relative accuracy requirement may be met if equation 11b is satisfied.

$$|d| + |cc| \leq (c \times s \times A) \times cf \tag{Eq. 11b}$$

Where

d = average of differences between mass emission rate determined by the CEMS and the corresponding reference method test data in units of pounds per hour.

cc = confidence coefficient as determined by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2.

A = Stack cross sectional area in the plane of measurement.

c = 2.0 ppm 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.

cf = conversion factor to pounds per hour.

There shall be a minimum of nine sets of tests conducted. All data collected shall be submitted to the Executive Officer and shall be used to determine relative accuracy except data may be rejected per the technical guidance or for unusual problems and/or occurrences during testing (e.g., process upsets, CEMS malfunction, testing failure) if the number of tests exceeds nine sets. Any exclusion of data must be substantiated with appropriate documentation and is subject to approval by the Executive Officer.

**13. Relative Accuracy Requirements for Analyzers**

The sulfur oxides gas analyzers shall meet a relative accuracy requirement of being less than or equal to 20 percent of the mean value of the reference method test data in units of ppmv for sulfur oxides. Relative accuracy is calculated by the equations in Section 8 of 40 CFR, Part 60, Appendix B, Performance Specification 2. Alternatively, for cases where the mean value of the reference method test data is less than 10 ppmv, the SOx concentration relative accuracy requirement may be met if equation 11c is satisfied.

$$|d| + |cc| \leq 2.0 \text{ ppmv} \tag{Eq. 11c}$$

Where:

d = average of differences between the SOx concentration measurement system reading and the corresponding reference method test data in units of ppmv.

cc = confidence coefficient as determined by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2.

The oxygen and carbon dioxide gas analyzers shall meet a relative accuracy requirement of being less than or equal to 20 percent of the mean value of the reference method test data in units of volume percent. Relative accuracy is calculated by the equations in Section 8 of 40 CFR, Part 60, Appendix B, Performance Specification 2. Alternatively, for cases where the mean value of the reference method test data for oxygen or carbon dioxide concentration is less than 5.0 volume percent, the relative accuracy requirement for oxygen or carbon dioxide concentration may be met if equation 11d is satisfied.

$$|d| + |cc| \leq 1.0 \text{ volume percent} \tag{Eq. 11d}$$

Where:

d = average of differences between the oxygen or carbon dioxide concentration measurement system reading and the corresponding reference method test data.

cc = confidence coefficient as determined by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2.

The portion of the CEMS which samples, conditions, analyzes, and records the sulfur in the fuel gas shall be certified using the specifications in 40 CFR, Part 60, Appendix B, Performance Specification 2 with the exception that District Method 307-91 shall be used for reference method to determine the sulfur content in the fuel gas. Units using monitors with more than one span range must perform the calibration error test on all span ranges. This portion of the CEMS shall also meet the specifications in Attachment B of this Appendix A.

There shall be a minimum of nine sets of tests conducted. All data collected shall be submitted to the Executive Officer and shall be used to determine relative accuracy except data may be rejected per the technical guidance or for unusual problems and/or occurrences during testing (e.g., process upsets, CEMS malfunction, testing failure) if the number of tests exceeds nine sets. Any exclusion of data must be substantiated with appropriate documentation and is subject to approval by the Executive Officer.

#### **14. Certification**

##### **a. Provisional Approval**

The Facility Permit holder of a major source shall submit certification test results and supporting documents to the District for each CEMS within the applicable time period required by Rule 2011 to install, operate, and maintain a CEMS. The Facility Permit holder shall certify that the results show that the CEMS has met all the requirements of the protocol if its submission is after August 31, 1994. Upon receipt of the test results and the certification that the CEMS is in compliance, the District will issue a Provisional Approval. The effective date of Provisional Approval shall be the last date of source testing if the test results are submitted within 60 days from the last date of source testing. However, if the test results are submitted more than 60 days after the last date of source testing, the effective date of Provisional Approval shall be the date of submittal of the testing results. After the Provisional Approval, the Facility Permit holder shall comply with the requirements under Attachment C - Quality Assurance and Quality Control Procedures.

##### **b. Final Certification**

After the Provisional Approval, all the data measured and recorded by the CEMS will be considered valid quality assured data provided that the Executive Officer does not issue a notice of disapproval of final certification. Final certification of the CEMS will be granted if the certification test results show that the CEMS has met all the requirements of the protocol, including Subdivision B, Paragraphs 10, 12, and 13 of this Chapter.

In the case where the test results show that the CEMS does not meet all the requirements of the rule, the Executive Officer will disapprove the final certification. If this occurs, the previously considered valid data from the date of Provisional Approval shall

be replaced by data as specified in subdivision (E) -Missing Data Procedures. This procedure shall be used until the time that new certification test results are submitted, and the CEMS has received final approval by the District. After the Provisional Approval, the Facility Permit holder shall comply with the requirements under Attachment C - Quality Assurance and Quality Control Procedures. Data collected by the CEMS shall not be valid unless the CEMS is demonstrated to meet the requirements under Attachment C.

c. Re-certification

The Facility Permit holder shall conduct tests to re-certify a certified CEMS whenever the CEMS is modified in accordance with paragraph (B)(17).

**15. Sampling Location Requirements**

Each affected piece of equipment shall have sampling locations which meet the "Guidelines for Construction of Sampling and Testing Facilities" in the District Source Test Manual. If an alternate location (not conforming to the criteria of eight duct diameters downstream and two diameters upstream from a flow disturbance) is used, the absence of flow disturbance shall be demonstrated by using the District method in the Source Test Manual, Chapter X, Section 1.4 or 40 CFR, Part 60, Appendix A, Method 1. Section 2.5 and the absence of stratification shall be demonstrated using District method in the Source Test Manual, Chapter X, Section 13.

**16. Sampling Line Requirement**

The CEMS sample line from the CEMS probe to the sample conditioning system shall be heated to maintain the sample temperature above the dew point of the sample. This requirement does not apply to dilution probe systems where no sample condensation occurs.

**17. Recertification Requirements**

The District will reevaluate the monitoring systems at any affected piece of equipment where changes to the basic process equipment or air pollution control equipment occur, to determine the proper full span range of the monitors. Any monitor system requiring change to its full span range in order to meet the criteria in Chapter 2, Subdivision B shall be recertified according to all the specifications in Chapter 2, Subdivision B, Paragraphs 8, 10, 11, and 12, as applicable, including the relative accuracy tests, the calibration drift tests, and the calibration error tests. A new CEMS plan shall be submitted for each CEMS which is reevaluated.

The recertification for any reevaluated CEMS, including existing, modified or new CEMS, monitoring an existing or modified major source that was previously permitted under RECLAIM, shall be completed within 90 days of the start-up of the newly changed or modified equipment monitored by such CEMS. The Facility Permit holder shall calculate and report SO<sub>x</sub> emission data for the period prior to the CEMS recertification by means of the automated data acquisition and handling system according to the following procedures:

- a. For any CEMS which is recertified within 90 days of start-up of the newly modified equipment, the emission data recorded by the CEMS prior to the recertification would be considered valid and shall be used for calculating and reporting SO<sub>x</sub> emissions for the equipment it serves.
- b. For any CEMS which is not recertified within 90 days of start-up of the newly modified equipment, the 90th percentile emission data (lb/day) for the previous 90 unit operating days recorded by the CEMS prior to the recertification shall be used for calculating and reporting SO<sub>x</sub> emissions for the equipment it serves.

#### **18. Quality Assurance Procedures for Analyzers**

The quality assurance and quality control requirements for analyzers, flow monitors, and SO<sub>2</sub> emission rate systems are given in Attachment C (QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES) of these guidelines. The quality assurance plans required by Attachment C of these protocols shall be submitted along with the CEMS certification application to the District for the approval of the Executive Officer. Source test and monitoring equipment inspection reports required by the Protocols shall be kept on-site for at least three years. The reference method tests are those methods specified in Chapter 6 (Reference Methods). Any CEMS which is deemed out-of-control by Attachment C shall be corrected, retested by the appropriate audit procedure, and restored to in-control status within 24 hours after being deemed out-of-control. If the CEMS is not in-control at the end of the 24-hour period, the CEMS data shall be gathered using the methods in Chapter 2, Subdivision B, Paragraph 6 and Chapter 2, Subdivision B, Paragraph 7. All data which is gathered in order to comply with Attachment C shall be maintained for three years and be made available to the Executive Officer upon request. Any such data which is invalidated shall be identified and reasons provided for any data invalidation. The sulfur oxides, oxygen, and fuel gas sulfur monitors shall also meet the specifications in Attachment B (BIAS TEST).

#### **19. Calibration Gas Traceability**

All calibration gases used during certification tests and quality assurance and quality control activities shall be NIST/EPA approved standard reference materials (SRM), certified reference materials (CRM), or shall be certified according to "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards," September 1997, EPA 600/R-97/121 or any subsequent version published by EPA.

**20. Relative Accuracy Test Audits Report Submittal**

A test report shall be submitted to the District for each semi-annual or annual assessment test of a CEMS as required under Paragraph (B)(2) of Attachment C - Quality Assurance and Quality Control Procedures. Such report shall be submitted on or before the end of the quarter following the date of a required test.

**21. Concentration Stratification**

a. The owner or operator shall demonstrate at the time of certification and re-certification the absence of stratification for locating a facility CEMS gas sampling probe through testing performed according to the method in Chapter X, "Non-Standard Methods and Techniques", of the District Source Testing Manual. The number of tests shall be determined as follows:

- i. A minimum of one test shall be conducted 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;
- ii. A minimum of two tests shall be conducted if the equipment operates between 20 and 50 percent load range for at least 80 percent of the time; or,
- iii. A minimum of three tests shall be conducted if the equipment operates outside of the criteria in clauses (i) and (ii) above.

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, the owner or operator 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. The CEMS sampling probe should be located in the stack at least one-third of the stack diameter. The RM 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.

b. If testing demonstrates the presence of stratification, the owner or operator shall elect one of the following alternatives:

- i. The owner or operator may use a single point sampling probe, 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 2.0 ppmv:
  - I. Then the CEMS sampling probe may be located at any point within the stack except any points that are



adjacent to the stack wall or adjacent to either the highest measured concentration (time normalized) or the lowest measured concentration (time normalized), or

- II. 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 locate the CEMS sampling probe 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).
- ii. The owner or operator may use a single point sampling probe, if there exists a representative CEMS probe location such that all of the following criteria are met:
  - I. Each traverse point concentration is within 10.0% of the average of all traverse point concentrations (time normalized), or the difference between each traverse concentration and the average of all traverse point concentrations is less than or equal to 2.0 ppm, and
  - II. at least one traverse point concentration, not located next to the stack or duct wall, is within 10.0% of each adjacent traverse point concentration, or the difference between each traverse point concentration and the average of all traverse point concentrations is less than or equal to 2.0 ppm, whichever is greater, and,
  - III. if more than one traverse point meets the criteria listed in subclause (ii)(II), the CEMS probe shall be located at (or as near as practical) the traverse point with minimum adjacent traverse point concentration fluctuations as determined in section (ii)(II), above.
- iii. The owner or operator may use a multipoint sampling probe and determine a representative multiple point sampling configuration as approved by the Executive Officer.
- iv. The owner or operator may elect to modify the stack and/or CEMS sampling probe location and retest for the absence of stratification.

**C. REPORTING PROCEDURES**

**1. Interim Reporting Procedures**

- a. From January 1, 1994 until December 31, 1994 (Cycle 1 facilities) and July 1, 1994 until June 30, 1995 (Cycle 2 facilities), the

Facility Permit holder shall be allowed to use an interim procedure for data reporting and storage. The Facility Permit holder shall submit as part of the Facility Permit application, the methodology for interim data reporting and storage. The Facility Permit application shall be subject to the approval of the Executive Officer and shall, at a minimum, meet the requirements of Chapter 2, Subdivision C, Paragraph 1, Subparagraphs b, c and d.

- b. All the data required in Chapter 2, Subdivision C, Paragraph 1, Subparagraphs c and d shall be made available to the Executive Officer.
- c. For each affected piece of equipment the following information shall be stored on site in a format approved by the Executive Officer.
  - i. Calendar dates covered in the reporting period.
  - ii. Each daily emissions (lb/day) and each hourly emissions (lb/hour).
  - iii. Identification of the operating hours for which a sufficient number of valid data points has not been taken; reasons for not taking sufficient data; and a description of corrective action taken.
- d. The following information for the entire facility shall be reported on a monthly basis in a format approved by the Executive officer:
  - i. Calendar dates covered in the reporting period.
  - ii. The sum of the daily emissions (lb/day) from each affected SO<sub>x</sub> RECLAIM sources.
- e. All data required by Chapter 2, Subdivision B, Paragraphs 1,2,3,4,5 and Chapter 2, Subdivision C, Paragraph 1, Subparagraphs c and d shall be recorded and/or transmitted to the District in a format approved by the Executive Officer.

**2. Final Reporting Procedures**

- a. On and after January 1, 1995 (Cycle 1 facilities) and July 1, 1995 (Cycle 2 facilities), the RTU installed at each location shall be used to electronically report total daily mass emissions of SO<sub>x</sub> and daily status codes to the District Central SO<sub>x</sub> Station.
- b. On and after January 1, 1995 (Cycle 1 Facilities) and July 1, 1995 (Cycle 2 Facilities), the Facility Permit holder shall submit to the Executive Officer a Monthly Emissions Report in the manner and form specified by the Executive Officer within 15 days following the end of each calendar month.

- c. On and after January 1, 1995, (Cycle 1 facilities) and July 1, 1995 (Cycle 2 facilities), all or part of the interim data storage systems shall remain as continuous backup systems.
- d. An alternate backup data storage system shall be implemented, upon request.

**D. ALTERNATIVE PROCEDURES FOR EMISSION STACK FLOW RATE DETERMINATION**

**1. Multiple Sources Venting to a Common Stack**

In the event that more than one source vents to a common stack, the alternative reference method for determining individual source flow rates shall use the F-factors in EPA Method 19 and the following equation:

$$c_i = [20.9 / (20.9 - b_i)] \times \sum_{j=1}^r (F_{dij} \times d_{ij} \times V_{ij}) \quad (\text{Eq. 12})$$

where:

- $c_i$  = The stack gas volumetric flow rate (scfh),
- $b_i$  = The stack gas concentrations of oxygen (%),
- $r$  = The number of different types of fuel,
- $F_{dij}$  = The oxygen-based dry F factor for each type of fuel, the ratio of the gas volume of the products of combustion to the heat content of the fuel (scf/10<sup>6</sup> Btu),
- $d_{ij}$  = The metered fuel flow rate for each type of fuel measured every 15-minute period,
- $V_{ij}$  = The higher heating value of the fuel for each type of fuel

The product ( $d_{ij} \times V_{ij}$ ) must have units of millions of Btu per hour (10<sup>6</sup> Btu/hr). All concentrations and stack gas flow rates shall be calculated on a consistent wet or dry basis. The measurement of wet concentration and wet F factor shall be allowed provided that wet concentration of SO<sub>x</sub> is measured.

Example Calculation:	
Gaseous Fuel	
$B_i$	= 4.2% $O_2$
$F_{dij}$	= 8710 dscf/10 <sup>6</sup> Btu
$d_{ij}$	= 50,000 scfh
$V_{ij}$	= 1050 Btu/dscf
$C_{i\sigma}$	= $[20.9/(20.9 - 4.2)] \times [(8710/10^6)(50,000)(1050)$
$C_{i\sigma}$	= 570,938 dscfh
Liquid Fuel:	
$B_i$	= 4.2% $O_2$
$F_{ij}$	= 9,190 dscf/10 <sup>6</sup> Btu
$d_{ij}$	= 500 gal/hr.
$V_{ij}$	= 136,000 Btu/gal.
$C_{i1}$	= $(20.9/20.9 - 4.2)(9,190/10^6)(136,000)(500) = 781,150$ dscfh
Total Stack Flow Rate = $c_{i\sigma} + c_{i1} = 570,938 + 781,150 = 1,352,088$ dscfh	

This method shall be used for applicable sources before and after the interim period mentioned in Chapter 2, Subdivision C, Paragraph 1. The orifice plates used in each affected piece of equipment vented to a common stack shall meet the requirements in Chapter 2, Subdivision D, Paragraph 2.

**2. Quality Assurance for Orifice Plate Measurements**

Each orifice plate used to measure the fuel gas flow rate shall be checked once every 12 months using Reference Methods. If the orifice plate cannot be checked using Reference Methods, it may be checked using other methods that can show traceability to NIST Standards. If the orifice plate cannot be checked by Reference Methods or other methods that can show traceability to NIST standards, the orifice plate shall be removed from the gas supply line for an inspection once every 12 months, and the following inspection procedure shall be followed:

- a. Each orifice plate shall be visually inspected for any nicks, dents, corrosion, erosion, or any other signs of damage according to the orifice plate manufacturer's specifications.
- b. The diameter of each orifice shall be measured using the method recommended by the orifice plate manufacturer.
- c. The flatness of the orifice plate shall be checked according to the orifice plate manufacturer's instructions. The departure from flatness of an orifice plate shall not exceed 0.010 inches per inch of dam height  $(D-d/2)$  along any diameter. Here  $D$  is the inside pipe diameter and  $d$  is the orifice diameter at its narrowest constriction.
- d. The pressure gauge or other device measuring pressure drop across the orifice shall be calibrated against a manometer, and shall be replaced if it deviates more than  $\pm 2$  percent across the range.

- e. The surface roughness shall be measured using the method recommended by the orifice plate manufacturer. The surface roughness of an orifice plate shall not exceed 50 micrometers.
- f. The upstream edge of the measuring orifice shall be square and sharp so that it shall not show a beam of light when checked with an orifice gauge.
- g. In centering orifice plates, the orifice shall be concentric with the inside of the meter tube or fitting. The concentricity shall be maintained within 3 percent of the inside diameter of the tube or fitting along all diameters.
- h. Any other calibration tests specified by the orifice plate manufacturer shall be conducted at this time.

If an orifice plate fails to meet any of the manufacturer's specifications, it shall be replaced within two weeks.

**3. Fuel flow measuring devices used for obtaining stack flow in conjunction with F-factors shall be tested as installed for relative accuracy using reference methods to determine stack flow.**

If the flow device manufacturer has a method or device that permits the fuel flow measuring device to be tested as installed for relative accuracy, the Facility Permit holder shall request approval from the Executive Officer. Approval will be granted in cases where the Facility Permit holder can demonstrate to the satisfaction of the Executive Officer that no suitable testing location exists in the exhaust stacks or ducts and that it would be an inordinate cost burden to modify the exhaust stack configuration to provide a suitable testing location. The method or device used for relative accuracy testing shall be traceable to NIST standards. This method shall be used only if natural gas, fuel oil, or other fuels can be shown, by the Facility Permit holder to have stable F-factors and gross heating values, or if the Facility Permit holder measures the F-factor and gross heating value of the fuel. A stable F-Factor is defined as not varying by more than  $\pm 2.5\%$  from the constant value used for F-Factor. For the fuels listed in 40 CFR 60, Appendix A, Method 19, Table 19-1, the F-Factors are assumed to be stable at the value cited in Table 19-1. Any F-Factor cited in Regulation XX shall supersede the F-Factor in Table 19-1. For fuels not listed in the citations above, but which the Facility Permit holder can demonstrate that the source-specific F-Factor meets the same stability criteria, periodic reporting of F-Factor may be accepted and the adequacy to the frequency of analysis shall be demonstrated by the facility such that the probability that any given analysis will differ from the previous analysis by more than 5% (relative to the previous analysis) is less than 5%. Analysis records shall be maintained, including all charts and laboratory notes.

**E. MISSING DATA PROCEDURES**

The following Missing Data Procedures shall be used to determine substitute data whenever a valid hour of SO<sub>x</sub> emission data or fuel gas total sulfur content data has not been obtained or recorded.

**1. Procedures for Missing SO<sub>x</sub> Concentration Data or Fuel Gas Sulfur Content Data**

For each equipment, whenever a valid hour of SO<sub>x</sub> pollution concentration or fuel gas total sulfur content data has not been obtained or recorded, the Facility Permit holder shall provide substitute data using the procedures below. Alternatively, a facility may provide SO<sub>x</sub> pollution concentration missing data using the procedure in 40 CFR Part 75 Subpart D if the relative accuracy of the pollutant analyzer and flow measurement system during the last CEMS certification test and/or RATA are both less than 10%.

a. The Facility Permit holder shall calculate on a daily basis the percent data availability from the SO<sub>x</sub> pollutant concentration monitoring analyzer or the fuel gas sulfur content monitoring analyzer according to the following procedures.

i. Calculate on a daily basis a rolling percentage of the operating hours of each equipment that each concentration monitoring system was available for the period from the date the SO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.

ii. Record on a daily basis the percent annual concentration monitor availability using the following equation:

$$W = Y/Z \times 100\% \quad (\text{Eq.13})$$

where:

- W = the percent annual monitor availability
- Y = the total operating hours for which the monitor provided quality-assured data during the period from the date the SO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.
- Z = the total operating hours of the affected piece of equipment during the period from the date the SO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.

Example Calculation:

$$\begin{aligned}
 Y &= 1,680 \text{ hrs} \\
 Z &= 2,160 \text{ hrs} \\
 W &= Y/Z \times 100\% \\
 W &= (1,680/2,160) \times 100\% \\
 W &= 78\%
 \end{aligned}$$

- b. Whenever the percent annual monitor availability is 95 percent or more, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - i. For a missing data period less than or equal to 24 hours, substitute data shall be calculated using the 1N Procedure in Attachment A. If insufficient data is available to perform this calculation, substitute data shall be calculated pursuant to clause E(1)(b)(ii).
  - ii. For a missing data period greater than 24 hours, substitute data shall be calculated using the maximum hourly concentration recorded by the concentration monitor for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(1)(c)(i)(III).
- c. i. Whenever the percent annual monitor availability is 90-percent or more but less than 95-percent, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - I. For a missing data period of less than or equal to 3 hours, substitute data shall be calculated using the average of the recorded concentration for the hour immediately before the missing data period and the hour immediately after the missing data period. If no emissions occurred during the hour immediately before the missing data period or the hour immediately after the missing data period, substitute data shall be calculated pursuant to clause E(1)(c)(i)(II).
  - II. For a missing data period of more than 3 hours but less than or equal to 24 hours, substitute data shall be calculated using the maximum hourly concentration recorded by the concentration monitor for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(1)(c)(i)(III).
  - III. For a missing data period of greater than 24 hours, substitute data shall be calculated using the maximum hourly concentration recorded by the

concentration monitor for the previous 365 days. If no emissions occurred during the previous 365 days, substitute data shall be calculated pursuant to clause E(1)(c)(ii).

- ii. Whenever the percent annual monitor availability is less than 90 percent, substitute data shall be calculated using the highest hourly concentration recorded during the service of the monitoring system. For the purpose of this subparagraph, service of the monitoring system shall start from the initial certification date of the analyzer or the date when a decrease in the valid range of the monitoring system is approved by the Executive Officer.
- d. For missing data periods where there is no prior CEMS data available or the highest CEMS data is zero:
  - i. for less than or equal to 24 hours, the mass emissions shall be calculated using totalized fuel usage and the starting emission factor specified in Table 2 of Rule 2002 or any alternative emission factor used in the determination of initial allocations; or
  - ii. For less than or equal to 24 hours and where fuel usage is not available, the mass emissions shall be calculated using the equipment maximum rated capacity, 100 percent equipment uptime, and the starting emission factor specified in Table 2 of Rule 2002; or
  - iii. for greater than 24 hours, the mass emissions shall be calculated using the equipment maximum rated capacity, 100 percent uptime, and uncontrolled emission factors. An uncontrolled emission factor is an emission factor representative of the emissions prior to any emission control equipment from the source. An uncontrolled emission factor can be determined based on the starting emission factor used in the determination of initial allocations discounted by any control efficiency, or based on source test data. In determining a control efficiency, the facility permit holder may use source test data.
  - iv. Retroactively from January 1, 1995 and ending June 30, 1995, for Cycle 1 Facility Permit holders with major SO<sub>x</sub> sources that do not have an approved RECLAIM certified CEMS, may calculate SO<sub>x</sub> daily mass emissions in lieu of the procedures specified in the above clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii), using (1) the emission factor specified in Table 2 of Rule 2002 or any alternative factor used in the determination of initial allocations or specified in the facility permit and (2) the totalized fuel usage or process throughput.
  - v. Facility Permit holders with SO<sub>x</sub> major sources which demonstrate to the satisfaction of the Executive Officer or



designee that standard equipment is not available for measuring exhaust emissions for the purpose of RECLAIM CEMS certification may submit an application by December 31, 1995 to use an alternative exhaust gas and/or pollutant concentration measuring equipment. Such equipment must employ commercially available technology, and must be demonstrated to meet all the requirements of CEMS certification. Upon approval of the application, the Facility Permit holder may calculate SO<sub>x</sub> daily mass emissions in lieu of the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii), using the alternate method of (1) the emission factor specified in the facility permit and (2) the totalized fuel usage or process throughput. Such calculation of SO<sub>x</sub> mass emissions may be done retroactively from July 1, 1995 and ending December 31, 1997 or until the CEMS is finally certified, whichever is earlier. The alternate method of calculating mass emissions shall be applied after the proposed equipment has been approved by the Executive Officer. If the CEMS is not certified by December 31, 1997, then SO<sub>x</sub> daily mass emissions shall be calculated by the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii) retroactive to July 1, 1995.

- vi. If the Facility Permit holder demonstrates that standard equipment is not available but alternative equipment is commercially available as set forth in E(1)(d)(v) and also demonstrates to the satisfaction of the Executive Officer or designee that their CEMS cannot be certified because (1) there is an inordinate cost burden for flow monitoring as specified under (B)(11) and (2) that the Reference Methods, as specified in Rule 2011(h)(1) and Appendix A, cannot be applied because no suitable testing location exists in the exhaust stacks or ducts, then the Facility Permit holder may submit an alternative CEMS plan for certification by December 31, 1995. This plan must demonstrate that the proposed monitoring system complies with all other requirements of CEMS certification and is the most technically feasible in measurement accuracy. Until the alternative CEMS is certified or up until December 31, 1997, whichever is earlier, and retroactive to July 1, 1995, the Facility Permit holder may calculate SO<sub>x</sub> daily mass emissions in lieu of the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii), using the alternate method of (1) the emission factor specified in the facility permit and (2) the totalized fuel usage or process throughput. If the CEMS is not certified by December 31, 1997, then SO<sub>x</sub> daily mass emissions shall be calculated by the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii).

**2. Procedures for Missing Stack Exhaust Gas Flow Rate Data**

For each equipment, whenever a valid hour of stack exhaust gas flow rate data has not been obtained or recorded, the Facility Permit holder shall provide substitute data using the procedures below. Alternatively, a facility may provide stack exhaust gas flow rate missing data using the procedure in 40 CFR Part 75 Subpart D if the relative accuracy of the pollutant analyzer, flow measurement system, and emission rate measurement during the last CEMS certification test and/or RATA are all less than 10%.

a. The Facility Permit holder shall calculate on a daily basis the percent data availability from the flow monitoring system according to the following procedures.

i. Calculate on a daily basis a rolling percentage of the operating hours of each equipment that each flow monitoring system was available for the period from the date the SO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.

ii. Record on a daily basis the percent annual flow monitor availability using the following equation:

$$W = Y/Z \times 100\% \quad (\text{Eq. 14})$$

where:

W = the percent annual flow monitor availability

Y = the total operating hours for which the monitor provided quality-assured data during the period from the date the SO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.

Z = the total operating hours of the affected piece of equipment during the period from the date the SO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.

Example Calculation:	
Y	= 1,680 hrs
Z	= 2,160 hrs
W	= $Y/Z \times 100\%$
W	= $(1,680/2,160) \times 100\%$
W	= 78%

- b. Whenever the percent annual flow monitor availability is 95 percent or more, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - i. For a missing data period less than or equal to 24 hours, substitute data shall be calculated using the 1N Procedure in Attachment-A. If insufficient data is available to perform this calculation, substitute data shall be calculated pursuant to clause E(2)(b)(ii).
  - ii. For a missing data period greater than 24 hours, substitute data shall be calculated using the maximum hourly flow recorded by the flow monitor for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(2)(c)(iii).
  
- c. Whenever the percent annual flow monitor availability is 90-percent or more but less than 95-percent, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - i. For a missing data period of less than or equal to 3 hours, substitute data shall be calculated using the average of the recorded flow rate for the hour immediately before the missing data period and the hour immediately after the missing data period. If no emissions occurred during the hour immediately before the missing data period or the hour immediately after the missing data period, substitute data shall be calculated pursuant to clause E(2)(c)(ii).
  - ii. For a missing data period of more than 3 hours but less than or equal to 24 hours, substitute data shall be calculated using the maximum hourly flow rate recorded by the flow monitor for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(2)(c)(iii).
  - iii. For a missing data period of greater than 24 hours, substitute data shall be calculated using the maximum hourly flow rate recorded by the flow monitor for the previous 365 days. If no emissions occurred during the previous 365 days, substitute data shall be calculated pursuant to subparagraph E(2)(d).

- d. Whenever the percent annual flow monitor availability is less than 90 percent, substitute data shall be calculated using the highest hourly flow rate recorded during the service of the monitoring system. For the purpose of this subparagraph, service of the monitoring system shall start from the initial certification date of the analyzer or the date when a decrease in the valid range of the monitoring system is approved by the Executive Officer.

**3. Procedures for Missing Stack Exhaust Gas Flow Rate Data and Missing SO<sub>x</sub> Concentration Data**

For each equipment, whenever a valid hour of both stack exhaust gas flow rate data and SO<sub>x</sub> pollution concentration data have not been obtained or recorded, the Facility Permit holder shall provide substitute data using emissions data and the procedures below.

- a. The Facility Permit holder shall calculate and record on a daily basis the percent annual emission availability. The percent annual emission availability shall be equal to the lesser of the percent annual concentration monitor availability as determined in subparagraph E(1)(a) or the percent annual flow monitor availability as determined in subparagraph E(2)(a).
- b. Whenever the percent annual emission availability is 95 percent or more, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - i. For a missing data period less than or equal to 24 hours, substitute data shall be calculated using the 1N Procedure in Attachment-A. If insufficient data is available to perform this calculation, substitute data shall be calculated pursuant to clause E(3)(b)(ii).
  - ii. For a missing data period greater than 24 hours, substitute data shall be calculated using the maximum hourly emissions for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(3)(c)(iii).
- c. Whenever the percent annual emission availability is 90-percent or more but less than 95-percent, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - i. For a missing data period of less than or equal to 3 hours, substitute data shall be calculated using the average of the recorded emissions for the hour immediately before the missing data period and the hour immediately after the missing data period. If no emissions occurred during the hour immediately before the missing data period or the hour immediately after the missing data period, substitute data shall be calculated pursuant to clause E(3)(c)(ii).

- ii. For a missing data period of more than 3 hours but less than or equal to 24 hours, substitute data shall be calculated using the maximum hourly emissions recorded for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(3)(c)(iii).
- iii. For a missing data period of greater than 24 hours, substitute data shall be calculated using the maximum hourly emissions for the previous 365 days. If no emissions occurred during the previous 365 days, substitute data shall be calculated pursuant to subparagraph E(3)(d).
- d. Whenever the percent annual emission availability is less than 90 percent, substitute data shall be calculated using the highest hourly emissions recorded during the service of the monitoring system. For the purpose of this subparagraph, service of the monitoring system shall start from the initial certification date of the analyzer or the date when a decrease in the valid range of the monitoring system is approved by the Executive Officer.

#### **F. TIME-SHARING**

1. Time-sharing is where an analyzer and possibly the associated sample conditioning system is used on more than one source. Timesharing is allowed for SO<sub>x</sub> RECLAIM sources provided the CEMS can meet the following requirements in addition to the other requirements in this document for each source that is timeshared.
2. All sources shall have mutually compatible span range(s). The span range(s) must be able to meet the criteria in Chapter 2, Subdivision B. Paragraph 8.
3. Each source must have a data reading period greater than or equal to 3 times the longest response time of the system. For shared systems the response time is measured at the input or probe at each source. A demonstration of response time for each source must be made during certification testing. Data is not to be collected following a switch of sampled sources until an amount of time equal to the response time has passed.
4. The CEMS must be able to perform and record zero and span calibrations at each source.

**TABLE 2-A**  
**MEASURED VARIABLES FOR MAJOR SO<sub>x</sub> SOURCES**  
**EQUIPMENT TYPE : FLUID CATALYTIC CRACKING UNITS**

EQUIPMENT	MEASURED VARIABLES
FCCUs	1. Stack SO <sub>x</sub> concentration and exhaust flow rate; 2. Status code; 3. Feed rate.
FCCUs with feed hydrodesulfurization	All variables identified for FCCUs.
FCCUs with SO <sub>x</sub> reducing catalyst	All variables identified for FCCUs; AND 4. Type and amount of catalyst used.
FCCUs with wet flue gas desulfurization (e.g., slurry of Ca(OH) <sub>2</sub> /CaCO <sub>3</sub> or NaOH/Na <sub>2</sub> CO <sub>3</sub> )	All variables identified for FCCUs; AND 4. Scrubber solution injection rate.
FCCUs with dry flue gas desulfurization (e.g., dried slurry of Ca(OH) <sub>2</sub> /CaCO <sub>3</sub> or NaOH/Na <sub>2</sub> CO <sub>3</sub> )	All variables identified for FCCUs; AND 4. Scrubber solution injection rate.

**TABLE 2-A (CONTINUED)**  
**MEASURED VARIABLES FOR MAJOR SO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : TAIL GAS UNITS**

EQUIPMENT	MEASURED VARIABLES
Tail gas units	1. Stack SO <sub>x</sub> concentration and exhaust flow rate; 2. Status code; 3. Production rate;
Tail gas units with amine treatment (e.g. MEA, DEA, SCOT)	All variables identified for tail gas units; AND 4. Amine solution injection rate
Tail gas units with caustic wash (e.g., MEROX w NaOH, catalyst)	All variables identified for tail gas units; AND 4. Caustic solution injection rate
Tail gas units with metal based wash (e.g., CHEMSWEET with ZnO and Zn Acetate, IRON SPONGE with wood chips w iron oxide)	All variables identified for tail gas units; AND 4. Metal based solution injection rate
Tail gas units with carbonate wash (e.g., CATAcarb with K <sub>2</sub> CO <sub>3</sub> , catalyst, and inhibitor)	All variables identified for tail gas units; AND 4. Carbonate solution injection rate
Tail gas units with REDOX processes (e.g., STRETFORD with Vanadium based solution, WELLMAN-LORD SULFEROX with iron w/chelating agent)	All variables identified for tail gas units; AND 4. REDOX solution injection rate
Tail gas units with other catalytic conversion processes to H <sub>2</sub> S (e.g., Hydrotreating)	All variables identified for tail gas units

**TABLE 2-A (CONTINUED)**  
**MEASURED VARIABLES FOR MAJOR SO<sub>x</sub> SOURCES**  
**EQUIPMENT TYPE : SULFURIC ACID PRODUCTION PLANTS**

EQUIPMENT	MEASURED VARIABLES
Sulfuric acid production plants with dual absorption processes	<ol style="list-style-type: none"> <li>1. Stack SO<sub>x</sub> concentration and exhaust flow rate;</li> <li>2. Status code;</li> <li>3. Sulfuric acid production rate;</li> <li>4. Strength of acid produced;</li> <li>5. Inlet SO<sub>2</sub>, O<sub>2</sub> concentrations to 1st and 2nd stage converters;</li> <li>6. Inlet SO<sub>3</sub> to absorption tower;</li> <li>7. Conversion efficiency of 1st and 2nd stage converters;</li> <li>8. Conversion efficiency of absorption tower;</li> <li>9. Efficiency of acid mist control devices;</li> <li>10. Type and amount of fuel usage for furnace.</li> </ol>
Sulfuric acid production plants with sodium sulfite/bisulfite/ammonia scrubbing processes	<ol style="list-style-type: none"> <li>1. Stack SO<sub>x</sub> concentration and exhaust flow rate;</li> <li>2. Status code;</li> <li>3. Sulfuric acid production rate;</li> <li>4. Strength of acid produced</li> <li>5. Sodium sulfite/bisulfite/ammonia injection rate;</li> <li>6. Scrubber solution pH</li> <li>7. Conversion efficiency of absorption tower</li> <li>8. Efficiency of acid mist control devices;</li> <li>9. Type and amount of fuel usage for furnace.</li> </ol>



**TABLE 2-A (CONTINUED)**  
**MEASURED VARIABLES FOR MAJOR SO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE :** EQUIPMENT BURNING REFINERY, LANDFILL OR DIGESTER GASEOUS FUELS

EQUIPMENT	MEASURED VARIABLES
Combustion equipment	1 Stack SO <sub>x</sub> , O <sub>2</sub> concentrations, and fuel flow rate; OR Fuel sulfur content and fuel flow rate; 2. Status code;
Combustion equipment with wet scrubber (e.g., Lime CaO, Limestone CaCO <sub>3</sub> , Sodium Sulfite Na <sub>2</sub> SO <sub>3</sub> , Double alkali Na <sub>2</sub> SO <sub>3</sub> /CaO/CaCO <sub>3</sub> , Magnesium oxide Mg(OH) <sub>2</sub> )	All variables identified for combustion equipment; AND 3. Scrubber solution injection rate.
Combustion equipment with spray dryer or dry scrubber (e.g., absorption with Na <sub>2</sub> CO <sub>3</sub> or slaked lime solution)	All variables identified for combustion equipment; AND 3. Scrubber solution injection rate;
Combustion equipment with carbon adsorption	All variables identified for combustion equipment.

**TABLE 2-B**

**REPORTED VARIABLES FOR ALL MAJOR SO<sub>x</sub> SOURCES**

EQUIPMENT	REPORTED VARIABLES
<p>Fluid Catalytic Cracking Units                      Tail Gas Units                      Sulfuric Acid Production                      Equipment that burns refinery, landfill or sewage digester gaseous fuel except gas flares. Any existing equipment using SO<sub>x</sub> CEMS or equivalent monitoring device, or that is required to install such monitoring device under District rules to be implemented as of [date of adoption]. Any SO<sub>x</sub> source or process unit elected by the Facility Permit holder or required by the Executive Officer to be monitored with CEMS or equivalent monitoring device. Any SO<sub>x</sub> source or process unit whose reported SO<sub>x</sub> emissions was equal to or greater than 10 tpy for any calendar year from 1987 to 1991, inclusive, excluding any SO<sub>x</sub> source or process unit which has reduced SO<sub>x</sub> emissions below 10 tons per year prior to January 1, 1994.</p>	<ol style="list-style-type: none"> <li>1. Total Daily SO<sub>x</sub> mass emissions from each source;</li> <li>2. Daily status codes</li> </ol>

**ATTACHMENT H**

**RULE 2011 PROTOCOL -  
ATTACHMENT A**

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**1 N PROCEDURE**

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ATTACHMENT A - 1N PROCEDURE

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B.	Procedure .....	A-1

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**ATTACHMENT A**  
**1 N PROCEDURE**

**A. APPLICABILITY**

1. This procedure may be used to provide substitute data for affected sources that meet the specified conditions in Chapter 2, Subdivision E, Paragraph 1, Subparagraph b, clause i, ~~and~~ Chapter 2, Subdivision E, Paragraph 2, Subparagraph b, clause i, and Chapter 2, Subdivision E, Paragraph 3, Subparagraph b, clause i.

**B. PROCEDURE**

1. Where N is the number of hours of missing emissions data, determine the substitute hourly SO<sub>x</sub> concentration (in ppmv), the fuel gas sulfur content (in ppmv), or the hourly flow rate (in scfh) by averaging the measured or substituted values for the 1N hours immediately before the missing data period and the 1N hours immediately after the missing data period.
2. Where 1N hours before or after the missing data period includes a missing data hour, the substituted value previously recorded for such hour(s) pursuant to the missing data procedure shall be used to determine the average in accordance with Subdivision B, Paragraph 1 above.
3. Substitute the calculated average value for each hour of the N hours of missing data.

**EXAMPLES OF 1 N PROCEDURE**

**EXAMPLE 1**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	30
2:00 A.M.	25
3:00 A.M.	32
4:00 A.M.	34
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	Missing
8:00 A.M.	27
9:00 A.M.	22
10:00 A.M.	25
11:00 A.M.	30

To fill in the missing three hours, take the data points from the 3 hours before and the 3 hours after the missing data period to determine an average emission over the 3 hours

$$\text{average emissions} = \frac{25 + 32 + 34 + 27 + 22 + 25}{6} = 27.5 \text{ lb/hr.}$$

The filled in data set should read as follows:

**EXAMPLE 1 (continued)**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	30
2:00 A.M.	25
3:00 A.M.	32
4:00 A.M.	34
5:00 A.M.	27.5
6:00 A.M.	27.5
7:00 A.M.	27.5
8:00 A.M.	27
9:00 A.M.	22
10:00 A.M.	25
11:00 A.M.	30

**EXAMPLES OF 1 N PROCEDURE**

**EXAMPLE 2**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	45
2:00 A.M.	50

3:00 A.M.	53
4:00 A.M.	Missing
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	58
8:00 A.M.	Missing
9:00 A.M.	48
10:00 A.M.	45

In this example the missing data point at 8 A.M. is in the 3-hour period after the 3- hour missing data period. We first fill the 8.A.M. slot.

$$\text{average emissions for 8 A.M.} = \frac{58 + 48}{2} = 53$$

The filled in data sheet at this point should read as follows:

**EXAMPLE 2 (continued)**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	45
2:00 A.M.	50
3:00 A.M.	53
4:00 A.M.	Missing
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	58
8:00 A.M.	53
9:00 A.M.	48
10:00 A.M.	45

The average for the three hour missing data period is:

$$\text{average emissions} = \frac{45 + 50 + 53 + 58 + 53 + 48}{6} = 51.2$$

The completed filled in data sheet should read as follows:

**EXAMPLE 2 (continued)**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	45
2:00 A.M.	50
3:00 A.M.	53
4:00 A.M.	51.2
5:00 A.M.	51.2
6:00 A.M.	51.2
7:00 A.M.	58
8:00 A.M.	53
9:00 A.M.	48
10:00 A.M.	45



**RULE 2011 PROTOCOL-  
ATTACHMENT B**

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**BIAS TEST**

**ATTACHMENT B****BIAS TEST**

The bias of the data shall be determined based on the relative accuracy (RA) test data sets and the relative accuracy test audit (RATA) data sets for SO<sub>x</sub> pollutant concentration monitors, fuel gas sulfur content monitors, flow monitors, and emission rate measurement systems using the procedures outlined below.

1. Calculate the mean of the difference using Equation 2-1 of 40 CFR, Part 60, Appendix B, Performance Specification 2. To calculate bias for an SO<sub>x</sub> pollutant concentration monitor, "d" shall, for each paired data point, be the difference between the SO<sub>x</sub> concentration values (in ppmv) obtained from the reference method and the monitor. To calculate bias for a fuel gas sulfur content monitor, "d" shall, for each paired data point, be the difference between the fuel gas sulfur concentration values (in ppmv) obtained from the reference method and the -monitor. To calculate bias for a flow monitor, "d" shall, for each paired data point, be the difference between the flow rate values (in scfh) obtained from the reference method and the monitor. To calculate bias for an emission rate measurement system, "d" shall, for each paired data point, be the difference between the emission rate values (in lb/hr) obtained from the reference method and the monitoring system.
2. Calculate the standard deviation, Sd, of the data set using Equation 2-2 of 40 CFR, Part 60, Appendix B, Performance Specification 2.
3. Calculate the confidence coefficient, cc, of the data set using Equation 2-3 of 40 CFR, Part 60, Appendix B, Performance Specification 2.
4. The monitor passes the bias test if it meets either of the following criteria:
  - a. the absolute value of the mean difference is less than |cc|.
  - b. the absolute value of the mean difference is less than 1 ppmv.
5. Alternatively, if the monitoring device fails to meet the bias test requirement, the Facility Permit holder may choose to use the bias adjustment procedure as follows:
  - a. If the CEMS is biased high relative to the reference method, no correction will be applied.

- b. If the CEMS is biased low relative to the reference method, the data shall be corrected for bias using the following procedure:

$$CEM_i^{adjusted} = CEM_i^{monitored} \times BAF \quad (\text{Eq. B-1})$$

where:

$CEM_i^{adjusted}$  = Data value adjusted for bias at time i.

$CEM_i^{monitored}$  = Data provided by the CEMS at time i.

BAF = Bias Adjustment Factor

$$BAF = 1 + (|d|/CEM) \quad (\text{Eq. B-2})$$

where:

d = Arithmetic mean of the difference between the CEMS and the reference method measurements during the determination of the bias.

CEM = Mean of the data values provided by the CEMS during the determination of bias.

If the bias test failed in a multi-level RA or RATA, calculate the 13AF for each operating level. Apply the largest BAF obtained to correct for the CEM data output using equation B-1. The facility permit holder shall have the option to apply this adjustment to either all directly monitored data or to emission rates from the time and date of the failed bias test until the date and time of a RATA that does not show bias. These adjusted values shall be used in all forms of missing data computation, and in calculating the mass emission rate.

The BAF is unique for each CEMS. If backup CEMS is used, any BAF applied to primary CEMS shall be applied to the backup CEMS unless there are RATA data for the backup CEMS within the previous year.

If the BAF changes during a RATA, the new BAF must be applied to the emissions data from the time and date of the RATA until the time and date of the next RATA.

The BAF is unique for each CEMS. If backup CEMS is used, any BAF applied to primary CEMS shall be applied to the backup CEMS unless there are RATA data for the backup CEMS within the previous year.

**RULE 2011 PROTOCOL -  
ATTACHMENT C**

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**QUALITY ASSURANCE AND QUALITY CONTROL  
PROCEDURES**

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ATTACHMENT C - QUALITY ASSURANCE AND QUALITY CONTROL  
PROCEDURES

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**ATTACHMENT C****QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES****A. QUALITY CONTROL PROGRAM**

Develop and implement a quality control program for the continuous emission monitoring systems and their components. As a minimum, include in each quality control program a written plan that describes in detail complete, step-by-step procedures and operations for each of the following activities:

**1. Calibration Error Test Procedures**

Identify calibration error test procedures specific to the CEMS that may require variance from the procedures used during certification (for example, how the gases are to be injected, adjustments of flow rates and pressures, introduction of reference values, length of time for injection of calibration gases, steps for obtaining calibration error, determination of interferences, and when calibration adjustments should be made).

**2. Calibration and Linearity Adjustments**

Explain how each component of the CEMS shall be adjusted to provide correct responses to calibration gases, reference values, and/or indications of interference both initially and after repairs or corrective action. Identify equations, conversion factors, assumed moisture content, and other factors affecting calibration of each CEMS.

**3. Preventative Maintenance**

Keep a written record of procedures, necessary to maintain the CEMS in proper operating condition and a schedule for those procedures.

**4. Audit Procedures**

Keep copies of written reports received from testing firms/laboratories of procedures and details specific to the installed CEMS that were to be used by the testing firms/laboratories for relative accuracy test audits, such as sampling and analysis methods. The testing firms/laboratories shall have received approval from the District by going through the District's laboratory approval program.

**5. Record Keeping Procedures**

Keep a written record describing procedures that shall be used to implement the record keeping and reporting requirements.

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Specific provisions of Section A-3 and A-5 above of the quality control programs shall constitute specific guidelines for facility personnel. However, facilities shall be required to take reasonable steps to monitor and assure implementation of such specific guidelines. Such reasonable steps may include periodic audits, issuance of periodic reminders, implementing training classes, discipline of employees as necessary, and other appropriate measures. Steps that a facility commits to take to monitor and assure implementation of the specific guidelines shall be set forth in the written plan and shall be the only elements of Section A-3 and A-5 that constitute enforceable requirements under the written plan, unless other program provisions are independently enforceable pursuant to other requirements of the SO<sub>x</sub> protocols or District or federal rules or regulations.

## **B. FREQUENCY OF TESTING**

There are three situations which will result in an out-of-control period. These include failure of a calibration error test, failure of a relative accuracy test audit, and failure of a BIAS test, and are detailed in this subdivision. Data collected by a CEMS during an out-of-control period shall not be considered valid.

The frequency at which each quality assurance test must be given is as follows:

### **1. Periodic Assessments**

For each monitor or CEMS, perform the following assessments during each day in which the unit combusts any fuel or processes any material (hereafter referred to as a "unit operating day"), or for a monitor or a CEMS on a bypass stack/duct, during each day that emissions pass through the bypass stack or duct. These requirements are effective as of the date when the monitor or CEMS completes certification testing.

#### **a. Calibration Error Testing Requirements for Pollutant Concentration Monitors, Fuel Gas Sulfur Content Monitors, and O<sub>2</sub> Monitors**

Test, record, and compute the calibration error of each SO<sub>2</sub> pollutant concentration monitor, fuel gas sulfur content monitor, if applicable, and O<sub>2</sub> monitor at least once on each unit operating day, or for monitors or monitoring systems on bypass stacks/ducts on each day that emissions pass through the bypass stack or duct. Conduct calibration error checks, to the extent practicable, approximately 24 hours apart. Perform the daily calibration error test according to the procedure in Chapter 2, Subdivision B, Paragraph 1, Subparagraph a, Clause ii of this Attachment.

For units with more than one span range, perform the daily calibration error test on each scale that has been used since the last

calibration error test. For example, if the emissions concentration or the fuel gas sulfur content has not exceeded the low-scale span range since the previous calendar day, the calibration error test may be performed on the low-scale only. If, however, the emissions concentration or the fuel gas sulfur content has exceeded the low-scale span range since the previous calibration error test, perform the calibration error test on both the low- and high-scales.

i. Design Requirements for Calibration Error Testing of SO<sub>x</sub> Concentration Monitors, the Fuel Gas Sulfur Content Monitors, and O<sub>2</sub> Monitors

Design and equip each SO<sub>x</sub> concentration monitor, fuel gas sulfur content monitor, and O<sub>2</sub> monitor with a calibration gas injection port that allows a check of the entire measurement system when calibration gases are introduced. For extractive and dilution type monitors, all monitoring components exposed to the sample gas, (for example, sample lines, filters, scrubbers, conditioners, and as much of the probe as practical) are included in the measurement system. For in situ type monitors, the calibration must check against the injected gas for the performance of all electronic and optical components (for example, transmitter, receiver, analyzer).

Design and equip each pollutant concentration monitor, fuel gas sulfur content and O<sub>2</sub> monitor to allow daily determinations of calibration error (positive or negative) at the zero-level (0 to 20 percent of each span range) and high-level (80 to 100 percent of each span range) concentrations.

ii. Calibration Error Test for SO<sub>x</sub> Concentration Monitors, Fuel Gas Sulfur Content Monitors, and O<sub>2</sub> Monitors

Measure the calibration error of each SO<sub>2</sub> concentration analyzer, fuel gas sulfur analyzer, and O<sub>2</sub> monitor once each day according to the following procedures:

If any manual or automatic adjustments to the monitor settings are made, conduct the calibration error test in a way that the magnitude of the adjustments can be determined and recorded.

Perform calibration error tests at two concentrations: (1) zero-level and (2) high level. Zero level is 0 to 20 percent of each span range, and high level is 80 to 100 percent of



each span range. All calibration gases used during certification tests and quality assurance and quality control activities shall be NIST/EPA approved standard reference materials (SRM), certified reference materials (CRM), or shall be certified according to “EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards,” September 1997, EPA 600/R-97/121 or any subsequent version published by EPA.

Introduce the calibration gas at the gas injection port as specified above. Operate each monitor in its normal sampling mode. For extractive and dilution type monitors, pass the audit gas through all filters, scrubbers, conditioners, and other monitor components used during normal sampling and through as much of the sampling probe as practical. For in situ type monitors, perform calibration checking on all active electronic and optical components, including the transmitter, receiver, and analyzer. Challenge the SO<sub>x</sub> concentration monitors, the fuel gas sulfur content monitors, and the O<sub>2</sub> monitors once with each gas. Record the monitor response from the data acquisition and handling system. Use the following equation to determine the calibration error at each concentration once each day:

$$CE = \frac{|R - A|}{S} \times 100 \quad (\text{Eq. C-1})$$

Where:

CE = Percentage calibration error based on the span range

R = Reference value of zero- or high-level calibration gas introduced into the monitoring system.

A = Actual monitoring system response to the calibration gas.

S = Span range of the instrument

b. Calibration Error Testing Requirements for Stack Flow Monitors

Test, compute, and record the calibration error of each stack flow monitor at least once within every 14 calendar day period during which at anytime emissions flow through the stack; or for monitors or monitoring systems on bypass stacks or ducts, at least once within every 14 calendar day period during which at anytime emissions flow through the bypass stack or duct. Introduce a zero reference value to the transducer or transmitter. Record flow

monitor output from the data acquisition and handling systems before and after any adjustments. Calculate the calibration error using the following equation :

$$CE = \frac{|R - A|}{S} \times 100 \quad (\text{Eq. C-2})$$

Where:

- CE = Percentage calibration error based on the span range
- R = Zero reference value introduced into the transducer or transmitter.
- A = Actual monitoring system response.
- S = Span range of the flow monitor.

c. Interference Check for Stack Flow Monitors

Perform the daily flow monitor interference checks specified in Chapter 2, Subdivision B, Paragraph 1, Subparagraph c of this Attachment at least once per operating day (when the unit(s) operate for any part of the day).

Design Requirements for Flow Monitor Interference Checks

Design and equip each flow monitor with a means to ensure that the moisture expected to occur at the monitoring location does not interfere with the proper functioning of the flow monitoring system. Design and equip each flow monitor with a means to detect, on at least a daily basis, pluggage of each sample line and sensing port, and malfunction of each resistance temperature detector (RTD), transceiver, or equivalent.

Design and equip each differential pressure flow monitor to provide (1) an automatic, periodic backpurging (simultaneously on both sides of the probe) or equivalent method of sufficient force and frequency to keep the probe and lines sufficiently free of obstructions on at least a daily basis to prevent sensing interference, and (2) a means to detecting leaks in the system at least on a quarterly basis (a manual check is acceptable).

Design and equip each thermal flow monitor with a means to ensure on at least a daily basis that the probe remains sufficiently clean to prevent velocity sensing interference.

Design and equip each ultrasonic flow monitor with a means to ensure on at least a daily basis that the transceivers remain

sufficiently clean (for example, backpurging the system) to prevent velocity sensing interference.

d. Recalibration

Adjust the calibration, at a minimum, whenever the calibration error exceeds the limits of the applicable performance specification for the SO<sub>x</sub> monitor, O<sub>2</sub> monitor or stack flow monitor to meet such specifications. Repeat the calibration error test procedure following the adjustment or repair to demonstrate that the corrective actions were effective. Document the adjustments made.

e. Out-of-Control Period – Calibration Test

An out-of-control period occurs when the calibration error of an SO<sub>2</sub> concentration monitor or a fuel gas sulfur content monitor exceeds 5.0 percent based upon the span range value, when the calibration error of an O<sub>2</sub> monitor exceeds 1.0 percent O<sub>2</sub>, or when the calibration error of a flow monitor exceeds 6.0 percent based upon the span range value, which is twice the applicable specification. The out-of-control period begins with the hour of completion of the failed calibration error test and ends with the hour of completion of following an effective recalibration. Whenever the failed calibration, corrective action, and effective recalibration occur within the same hour, the hour is not out-of-control if 2 or more valid readings are obtained during that hour as required by Chapter 2, Subdivision B, Paragraph 5, Subparagraph a.

An out-of-control period also occurs whenever interference of a flow monitor is identified. The out-of-control period begins with the hour of the failed interference check and ends with the hour of completion of an interference check that is passed.

f. Data Recording

Record and tabulate all calibration error test data according to the month, day, clock-hour, and magnitude in ppm, dscfh, and percent volume. Program monitors that automatically adjust data to the calibrated corrected calibration values (for example, microprocessor control) to record either: (1) the unadjusted concentration or flow rate measured in the calibration error test prior to resetting the calibration, or (2) the magnitude of any adjustment. Record the following applicable flow monitor interference check data: (1) sample line/sensing port pluggage, and (2) malfunction of each RTD, transceiver, or equivalent.

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**2. Semi-annual Assessments**

- a. For each CEMS, perform the following assessments once semi-annually thereafter, as specified below for the type of test. These semi-annual assessments shall be completed within six months of the end of the calendar quarter in which the CEMS was last tested for certification purposes (initial and recertification) or within three months of the end of the calendar quarter in which the District sent notice of a provisional approval for a CEMS, whichever is later. Thereafter, the semi-annual tests shall be completed within six months of the end of the calendar quarter in which the CEMS was last tested. For CEMS on bypass stacks/ducts, the assessments shall be performed once every two successive operating quarters in which the bypass stacks/ducts were operated. These tests shall be performed after the calendar quarter in which the CEMS was last tested as part of the CEMS certification, as specified below for the type of test.

Relative accuracy tests may be performed on an annual basis rather than on a semi-annual basis if the relative accuracies during the previous audit for the SO<sub>x</sub> pollutant concentration monitor, flow monitoring system, and SO<sub>x</sub> emission rate measurement system are 7.5 percent or less.

- b. For CEMS on any stack or duct through which no emissions have passed in two or more successive quarters, the semi-annual assessments must be performed within 14 unit operating days after emissions pass through the stack/duct.
- c. The due date for a semi-annual or annual assessment of a major source may be postponed to within 14 unit operating days from the first re-firing of the major source if the major source is physically incapable of being operated and all of the following are met:
  - i. All fuel feed lines to the major source are either disconnected or opened and either flanges or equivalent sealing devices are placed at both ends of the disconnected or opened lines, and
  - ii. The fuel meter(s) for the disconnected fuel or opened feed lines are maintained and operated and associated fuel records showing no fuel flow are maintained on site.

This paragraph applies separately for each unrelated, independent event. For any hour that fuel flow records are not available to verify no fuel flow, SO<sub>x</sub> emissions shall be calculated using the maximum valid hourly emissions from the last 30 days of operation.

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Prior to re-starting operation of the major source, the Facility Permit Holder shall: (1) provide written notification to the District no later than 72 hours prior to starting up the source, (2) start the CEMS no later than 24 hours prior to the start-up of the major source, and (3) conduct and pass a Cylinder Gas Analysis (CGA) prior to the start-up of the major source. The emissions data from the CEMS after the re-start of operations is considered valid only if the Facility Permit Holder passes the CGA test. Otherwise, for a non-passing CGA, the CEMS data is considered invalid until the semi-annual or annual assessment is performed and passed. As such, SO<sub>x</sub> emissions shall be calculated using the maximum valid hourly emissions from the last 30 days of operation commencing with the hour of start up and continuing through the hour prior to performing and passing the semi-annual or annual assessment.

d. An electrical generating facility that either only operates under a California Independent System Operator (Cal ISO) contract or is owned and operated by a municipality may postpone the due date for a semi-annual or annual assessment of a major source to the next calendar quarter provided that the facility shows:

- i. The semi-annual or annual assessment was scheduled to be performed during the first 45 days of the calendar quarter in which the assessment was due;
- ii. The assessment was not completed due to lack of adequate operational time; and
- iii. A CGA was conducted and passed within the calendar quarter when the assessment was due.

e. Relative Accuracy Test Audit

Perform relative accuracy test audits and bias tests semi-annually and no less than 3 months apart for each SO<sub>2</sub> pollutant concentration monitor, fuel gas sulfur content monitor, stack gas volumetric flow rate measurement systems, and the SO<sub>2</sub> mass emission rate measurement system in accordance with Chapter 2, Subdivision B, Paragraphs 10, 11, 12, and 13 and Attachment B of the Protocol for Rule 2011. The relative accuracy of the pollutant concentration monitor and the mass emission rate measurement system shall be less than or equal to 20.0 percent, and the relative accuracy of the stack gas volumetric flow rate measurement system shall be less than or equal to 15.0 percent. For monitors on bypass stacks/ducts, perform relative accuracy test audits once every two successive bypass operating quarters in accordance with

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Chapter 2, Subdivision B, Paragraphs 10, 11, 12, and 13 and Attachment B (bias test) of the Protocol for Rule 2011.

f. Out-of-Control Period – Relative Accuracy Test Audit

An out-of-control period occurs under any of the following conditions: (1) The relative accuracy of an SO<sub>2</sub> pollutant concentration monitor, a fuel gas sulfur content monitor, or the SO<sub>2</sub> emission rate measurement system exceeds 20.0 percent; (2) the relative accuracy of the flow rate monitor exceeds 15.0 percent; or (3) failure to conduct a relative accuracy test audit by the due date for a semi-annual assessment. The out-of-control period begins with the hour of completion of the failed relative accuracy test audit and ends with the hour of completion of a satisfactory relative accuracy test audit.

g. Out-of-Control Period – BIAS Test

An out-of-control period occurs if all the following conditions are met:

- i. Failure of a bias test as specified in Attachment B of this Appendix;
- ii. The CEMS is biased low relative to the reference method (i.e. Bias Adjustment Factor (BAF), as determined in Attachment B of this Appendix, is greater than 1); and
- iii. The Facility Permit holder does not apply the BAF to the CEMS data.

The out-of-control period begins with the hour of completion of the failed bias test audit and ends with the hour of completion of a satisfactory bias test.

h. Alternative Relative Accuracy Test Audit

- i. The Facility Permit holder of a major source, that has received written approval from the Executive Officer as an intermittently operated source, may postpone the due date for a semi-annual assessment to the end of the next calendar quarter if the Facility Permit holder:

- I. operated the source no more than 240 cumulative operating hours and no more than 72 consecutive hours during the calendar quarter when a semi-annual assessment is due; and

- II. conducted a relative accuracy test audit on the CEMS serving the source during the previous four calendar quarters and meeting the accuracy criteria as set forth under Subparagraph B.2.e.; and
- III. conducted an alternative relative accuracy test audit on the CEMS serving the source during the calendar quarter when a semi-annual assessment is due and meeting the criteria specified under Clause B.2.h.iii.

If any of the requirements under Subclauses B.2.h.i.I, II and III is not met and the source did not have passing RATA during the calendar quarter when the semi-annual assessment is due, emissions from the source shall be determined pursuant to the Missing Data Procedures as specified under Rule 2011, Appendix A, Chapter 2, Subdivision E after the semi-annual assessment due date until the hour of completion of a satisfactory relative accuracy test audit.

- ii. The Facility Permit holder may submit a written request to designate a major source as an intermittently operated source provided the Facility Permit holder demonstrates that:
  - I. During any calendar quarter within the previous two compliance years, the source was operated no more than 240 cumulative operating hours and no more than 72 consecutive hours ; or
  - II. During any calendar quarter within the next two compliance years, the source will be operated no more than 240 cumulative operating hours and no more than 72 consecutive hours.
- iii. An alternative relative accuracy shall consist of a Cylinder Gas Analysis (CGA) method as defined under 40 CFR, Part 60, Appendix F, combined with a flow accuracy verification. For sources equipped with stack flow monitors, the flow accuracy shall be verified by calibrating the transducers and transmitters installed on the stack flow monitors using procedures under Paragraph B.3 of this attachment. For sources equipped with fuel flow meters and no stack flow monitors, the flow accuracy shall be verified by calibrating the fuel flow meters either in-line or offline in accordance with the procedures outlined in

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40CFR Part 75, Appendix D. Passing flow accuracy verification results that were obtained within the past 4 quarters may be used in lieu of performing a flow accuracy verification during the calendar quarter when a semi-annual assessment is due. The calculated accuracy for the analyzer responses for NO<sub>x</sub> and O<sub>2</sub> concentration shall be within 15 percent or 1 ppm, whichever is greater, as determined by the CGA method as defined under 40 CFR, Part 60, Appendix F. Successive alternative relative accuracy test audits shall be performed no less than 45 days apart.

**3. Calibration of Transducers and Transmitters on Stack Flow Monitors**

All transducers and transmitters installed on stack flow monitors must be calibrated every two operating calendar quarters, in which an operating calendar quarter is any calendar quarter during which at anytime emissions flow through the stack. Calibration must be done in accordance with Executive Officer approved calibration procedures that employ materials and equipment that are NIST traceable.

When a calibration produces for a transducer and transmitter a percentage accuracy of greater than  $\pm 1\%$ , the Facility Permit holder shall calibrate the transducer and transmitter every calendar operating quarter until a subsequent calibration which shows a percentage accuracy of less than  $\pm 1\%$  is achieved. An out-of-control period occurs when the percentage accuracy exceeds  $\pm 2\%$ . If an out-of-control period occurs, the Facility Permit holder shall take corrective measures to obtain a percentage accuracy of less than  $\pm 2\%$  prior to performing the next RATA. The out-of-control period begins with the hour of completion of the failed calibration error test and ends with the hour of completion of following an effective recalibration. Whenever the failed calibration, corrective action, and effective recalibration occur within the same hour, the hour is not out-of-control if two or more valid data readings are obtained during that hour as required by Chapter 2, Subdivision B, Paragraph 5, Subparagraph a.



**RULE 2011 PROTOCOL  
ATTACHMENT D**

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**LIST OF ACRONYMS AND ABBREVIATIONS**

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**LIST OF ACRONYMS AND ABBREVIATIONS**

APEP	Annual Permit Emission Program
API	American Petroleum Institute
ASTM	American Society for Testing & Materials
BACT	Best Available Control Technology
bhp	Brake Horsepower
bpd	Barrels per Day
Btu	British Thermal Unit
CEMS	Continuous Emission Monitoring System
CPMS	Continuous Process Monitoring System
CPU	Central Processing Unit
CSCACS	Central Station Compliance Advisory Computer System
DAS	Data Acquisition System
DM	District Method
dscfh	Dry Standard Cubic Feet per Hour
FCCU	Fluid Catalytic Cracking Unit
F <sub>d</sub>	Dry F Factor
FGR	Flue Gas Recirculation
gpm	Gallons per Minute
ICE	Internal Combustion Engine
ID	Inside Diameter
ISO	International Standards Organization
lbmole	Pound mole
LNB	Low NO <sub>x</sub> Burner
MRR	Monitoring, Reporting and Recordkeeping
NIST	National Institute of Standards for Testing
NO <sub>x</sub>	Oxides of Nitrogen
NSCR	Non-Selective Catalytic Reduction
O <sub>2</sub>	Oxygen
ppmv	Parts per Million Volume
ppmw	Parts per Million by Weight
RAA	Relative Accuracy Audit
RATA	Relative Accuracy Test Audit
RECLAIM	Regional Clean Air Incentives Market

RM	Reference Method
RTC	RECLAIM Trading Credits
RTCC	Real Time Calendar/Clock
RTU	Remote Terminal Unit
scfh	Standard Cubic Feet per Hour
scfm	Standard Cubic Feet per Minute
SCR	Selective Catalytic Reduction
SDD	Software Design Description
SNCR	Selective Non-Catalytic Reduction
SO <sub>x</sub>	Oxides of Sulfur
SRG	Software/Hardware Requirement Guideline
swi	Steam Water Injection
tpd	Tons per day
tpy	Tons per year
WAN	Wide Area Network

**RULE 2011 PROTOCOL-  
ATTACHMENT E**

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**DEFINITIONS**

**DEFINITIONS**

- (1) **AFTERBURNERS**, also called **VAPOR INCINERATORS**, are air pollution control devices in which combustion converts the combustible materials in gaseous effluents to carbon dioxide and water.
- (2) **ALTERNATIVE EMISSION FACTOR** is a SO<sub>x</sub> emission value expressed in units of pounds per million standard cubic feet or pounds per thousand gallons derived using the methodology specified in Appendix A, Protocols for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions, Chapters 3 and 4.
- (3) **ANNUAL PERMIT EMISSIONS PROGRAM (APEP)** is the annual facility permit compliance reporting, review, and fee reporting program.
- (4) **BOILER** is any combustion equipment used to produce steam, including a carbon monoxide boiler. This does not include a process heater that transfers heat from combustion gases to process streams, a waste heat recovery boiler that is used to recover sensible heat from the exhaust of process equipment such as a combustion turbine, or a recovery furnace that is used to recover process chemicals. Boilers used primarily for residential space and/or water heating are not affected by this section.
- (5) **BURN** means to combust any gaseous fuel, whether for useful heat or by incineration without recovery, except for flaring or emergency vent gases.
- (6) **BYPASS OPERATING QUARTER** means each calendar quarter that emissions pass through the bypass stack or duct.
- (7) **CALCINER** is a rotary kiln where calcination reaction is carried out between 1315 °C to 1480 °C.
- (8) **CEMENT KILN** is a device for the calcining and clinkering of limestone, clay and other raw materials, and recycle dust in the dry-process manufacture of cement.
- (9) **CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)** is the total equipment required for the determination of concentrations of air contaminants and diluent gases in a source effluent as well as mass emission rate. The system consists of the following three major subsystems:

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- (A) **SAMPLING INTERFACE** is that portion of the monitoring system that performs one or more of the following operations: extraction, physical/chemical separation, transportation, and conditioning of a sample of the source effluent or protection of the analyzer from the hostile aspects of the sample or source environment.
- (B) **ANALYZERS**
- (i) **AIR CONTAMINANT ANALYZER** is that portion of the monitoring system that senses the air contaminant and generates a signal output which is a function of the concentration of that contaminant.
- (ii) **DILUENT ANALYZER** is that portion of the monitoring system that senses the concentration of oxygen or carbon dioxide or other diluent gas as applicable, and generates a signal output which is a function of a concentration of that diluent gas.
- (C) **DATA RECORDER** is that portion of the monitoring system that provides a permanent record of the output signals in terms of concentration units, and includes additional equipment such as a computer required to convert the original recorded value to any value required for reporting.
- (10) **CONTINUOUS PROCESS MONITORING SYSTEM** is the total equipment required for the measurement and collection of process variables (e.g., fuel usage rate, oxygen content of stack gas, or process weight). Such CPMS data shall be used in conjunction with the appropriate fuel sulfur limit or fuel sulfur content to determine SO<sub>x</sub> emissions.
- (11) **CONTINUOUSLY MEASURE** means to measure at least once every 15 minutes except during period of routine maintenance and calibration as specified in 40 CFR Part 60.13(e)(2).
- (12) **DAILY** means a calendar day starting at 12 midnight and continuing through to the following 12 midnight hour.
- (13) **DIRECT MONITORING DEVICE** is a device that directly measures the variables specified by the Executive Officer to be necessary to determine mass emissions of a RECLAIM pollutant and which meets all the standards of performance for CEMS set forth in the protocols for NO<sub>x</sub> and SO<sub>x</sub>.
- (14) **DRYER** is equipment that removes substances by heating or other processes.

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- (15) ELECTRONICALLY TRANSMITTING means transmitting measured data without human alteration between the point/source of measurement and transmission.
- (16) EMISSION FACTOR is the value specified in Tables 1 (NO<sub>x</sub>) or 2 (SO<sub>x</sub>) of Rule 2002-Baselines and Rates of Reduction for NO<sub>x</sub> and SO<sub>x</sub>.
- (17) EXISTING EQUIPMENT is any equipment which can emit SO<sub>x</sub> at a SO<sub>x</sub> RECLAIM facility, for which on or before (Rule Adoption date) has:
- (A) A valid permit to construct or permit to operate pursuant to Rule 201 and/or Rule 203 has been issued; or
  - (B) An application for a permit to construct or permit to operate has been deemed complete by the Executive Officer; or
  - (C) An equipment which is exempt from permit per Rule 219 and is operating on or before (Rule Adoption date).
- (18) F<sub>D</sub> FACTOR is the dry F factor for each fuel, the ratio of the dry gas volume of the products of combustion to the heat content of the fuel (dscf/10<sup>6</sup> Btu).
- (19) GAS FLARE is a combustion equipment used to prevent unsafe operating pressures in process units during shut downs and start-ups and to handle miscellaneous hydrocarbon leaks and process upsets.
- (20) FLUID CATALYTIC CRACKING UNIT (FCCU) breaks down heavy petroleum products into lighter products using heat in the presence of finely divided catalyst maintained in a fluidized state by the oil vapors. The fluid catalyst is continuously circulated between the reactor and the regenerator, using air, oil vapor, and steam as the conveying media.
- (21) FURNACE is an enclosure in which energy in a nonthermal form is converted to heat.
- (22) GAS TURBINES are turbines that use gas as the working fluid. It is principally used to propel jet aircraft. Their stationary uses include electric power generation (usually for peak-load demands), end-of-line voltage booster service for long distance transmission lines, and for pumping natural gas through long distance pipelines. Gas turbines are used in combined (cogeneration) and simple-cycle arrangements.

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- (23) GASEOUS FUELS include, but are not limited to, any natural, process, synthetic, landfill, sewage digester, or waste gases with a gross heating value of 300 Btu per cubic foot or higher, at standard conditions.
- (24) HEAT VALUE is the heat generated when one lb. of combustible is completely burned.
- (25) HEATER is any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to water or process streams.
- (26) HIGH HEAT VALUE is determined experimentally by calorimeters in which the products of combustion are cooled to the initial temperature and the heat absorbed by the cooling media is measured.
- (27) HOT STAND BY is the period of operation when the flow or emission concentrations are so low they can not be measured in a representative manner.
- (28) INCINERATOR is equipment that consumes substances by burning.
- (29) INTERNAL COMBUSTION ENGINE is any spark or compression-ignited internal combustion engine, not including engines used for self-propulsion.
- (30) LIQUID FUELS include, but are not limited to, any petroleum distillates or fuels in liquid form derived from fossil materials or agricultural products for the purpose of creating useful heat.
- (31) MASS EMISSION OF SO<sub>x</sub> in lbs/hr is the measured emission rates of sulfur oxides.
- (32) MAXIMUM RATED CAPACITY means maximum design heat input in Btu per hour at the higher heating value of the fuels.
- (33) MODEM converts digital signals into audio tones to be transmitted over telephone lines and also convert audio tones from the lines to digital signals for machine use.
- (34) MONTHLY FUEL USE REPORTS could be sufficed by the monthly gas bill or the difference between the end and the beginning of the calendar month's fuel meter readings.



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- (35) NINETIETH (90th) PERCENTILE means a value that would divide an ordered set of increasing values so that at least 90 percent are less than or equal to the value and at least 10 percent are greater than or equal to the value
- (36) OVEN is a chamber or enclosed compartment equipped to heat objects.
- (37) PEAKING UNIT means a turbine used intermittently to produce energy on a demand basis and does not operate more than 1300 hours per year.
- (38) PORTABLE EQUIPMENT is an equipment which is not attached to a foundation and is not operated at a single facility for more than 90 consecutive days in a year and is not a replacement equipment for a specific application which lasts or is intended to last for more than one year.
- (39) PROCESS HEATER means any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to process streams.
- (40) PROCESS WEIGHT means the total weight of all materials introduced into any specific process which may discharge contaminants into the atmosphere. Solid fuels charged shall be considered as part of the process weight, but liquid gaseous fuels and air shall not.
- (41) RATED BRAKE HORSEPOWER (bhp) is the maximum rating specified by the manufacturer and listed on the nameplate of that equipment.
- (42) RATED HEAT INPUT CAPACITY is the heat input capacity 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 capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity.
- (43) RECLAIM FACILITY is a facility that has been listed as a participant in the Regional Clean Air Incentives Market (RECLAIM) program.
- (44) REMOTE TERMINAL UNIT (RTU) is a data collection and transmitting device used to transmit data and calculated results to the District Central Station Computer.
- (45) RENTAL EQUIPMENT is equipment which is rented or leased for operation by someone other than the owner of the equipment
- (46) SHUTDOWN is that period of time during which the equipment is allowed to cool from a normal operating temperature range to a cold or ambient temperature.

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- (47) SOLID FUELS include, but are not limited to, any solid organic material used as fuel for the purpose of creating useful heat.
- (48) STANDARD GAS CONDITIONS are defined as one atmosphere of pressure and a temperature of 68 °F or 60 °F, provided that one of these temperatures is used throughout the facility.
- (49) START-UP is that period of time during which the equipment is heated to operating temperature from a cold or ambient temperature.
- (50) SULFURIC ACID PRODUCTION UNIT means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.
- (51) TAIL GAS UNIT is a SO<sub>x</sub> control equipment associated with refinery sulfur recovery plant.
- (52) TEST CELLS are devices used to test the performance of engines such as internal combustion engine and jet engines.
- (53) TIMESHARING OF MONITOR means the use of a common monitor for several sources of emissions.
- (54) TURBINES are machines that convert energy stored in a fluid into mechanical energy by channeling the fluid through a system of stationary and moving vanes.
- (55) UNIT OPERATING DAY means each calendar day that emissions pass through the stack or duct.
- (56) UNIVERSE OF SOURCES FOR NO<sub>x</sub> is a list of RECLAIM facilities that emit NO<sub>x</sub>.
- (57) UNIVERSE OF SOURCES FOR SO<sub>x</sub> is a list of RECLAIM facilities that emit SO<sub>x</sub>.
- (58) AP 42 is a publication published by Environmental Protection Agency (EPA) which is a compilation of air pollution emission rates used to determine mass emission.
- (59) ASTM METHOD D1945-81 Method for Analysis of natural gas by gas chromatography.

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- (60) ASTM METHOD 2622-82 Test Method for sulfur in petroleum products (Xray Spectrographic method)
  - (61) ASTM METHOD 3588-91 method for calculating colorific value and specific gravity (relative density) of gaseous fuels.
  - (62) ASTM METHOD 4294-90 test method for sulfur in petroleum products by non-dispersive Xray fluorescence spectrometry.
  - (63) ASTM METHOD 4891-84 test method for heating value of gases in natural gas range by stoichiometric combustion.
  - (64) DISTRICT METHOD 2.1 measures gas flow rate through stacks greater than 12 inch in diameter.
  - (65) DISTRICT METHOD 7.1 colorimetric determination of nitrogen oxides except nitrous oxide emissions from stationary sources by using the phenoldisulfonic acid (pds) procedure or ion chromatograph procedures. Its range is 2 to 400 milligrams NO<sub>x</sub> (as NO<sub>2</sub> per DSCM).
  - (66) DISTRICT METHOD 100.1 is an instrumental method for measuring gaseous emissions of nitrogen oxides, sulfur dioxide, carbon monoxide, carbon dioxide, and oxygen.
  - (67) DISTRICT METHOD 307-91 laboratory procedure for analyzing total reduced sulfur compounds and SO<sub>2</sub>.
  - (68) EPA METHOD 19 is the method of determining sulfur dioxide removal efficiency and particulate, sulfur dioxide and nitrogen oxides emission rates from electric utility steam generators.
  - (69) EPA METHOD 450/3-78-117 air pollutant emission rate for Military and Civil Aircraft.

**RULE 2011 PROTOCOL-  
ATTACHMENT F**

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**SUPPLEMENTAL AND ALTERNATIVE CEMS PERFORMANCE  
REQUIREMENTS FOR LOW SO<sub>x</sub> CONCENTRATIONS**

**ATTACHMENT F**

**SUPPLEMENTAL AND ALTERNATIVE CEMS PERFORMANCE REQUIREMENTS FOR LOW SO<sub>x</sub> CONCENTRATIONS**

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) ✓ Full Scale Span (FSS) ✓ National Institute of Standards Traceability (NIST)
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**A. Applicability of Supplemental and Alternative Performance Requirements**

The Facility Permit holder electing to use (B)(8)(d)(ii), in Chapter 2 of Rule 2011, Appendix A to measure SO<sub>x</sub> concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range, shall satisfy the performance requirements as specified in Table F-1 listed below.

**TABLE F-1  
Alternative Performance Requirement(s)**

CEMS RECLAIM Certified per SO <sub>x</sub> Protocol, Appendix A Yes or No	Performance Requirements			
	LLSR/BFD	HLSR/BFD	LLR/BFD	LLCE
Yes	×		+	×
No	×	×	+	×

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 Facility Permit holder shall conduct a low level RATA/bias factor determination.
3. The provisions of Table F-1 do not apply to (B)(8)(c) or (B)(8)(d)(i), in Chapter 2.

The Facility Permit holder electing (or who may be required) to measure concentrations that fall below 10 percent of the higher full scale span value of any range (other than the lowest vendor guaranteed span range), shall perform a linearity test according to the procedure in Attachment F, Section B “Linearity Error”, to satisfy the performance requirements as specified in Table F-2 listed below.

**TABLE F-2**  
**Linearity Performance Test – Ranges Other Than Lowest Vendor**  
**Guaranteed Span Range**

<u>Calibration Gas</u>	<u>Value</u>
<u>1</u>	<u>Lowest Non-Zero Value Chosen in Span Range Tested</u>
<u>2</u>	<u>Mid-point (40-60%) of Calibration Gases 1 and 3</u>
<u>3</u>	<u>Nominal Concentration at 10% of Span Range Tested</u>

**B. Test Definitions, Performance Specifications and Test Procedures**

This section explains in detail how each performance requirement is to be conducted.

**Low Level Calibration Error**

The low level calibration error test is defined as challenging the CEMS (from probe to monitor) with certified calibration gases at three levels in the 0-20 percent full scale span range. Since stable or certifiable cylinder gas standards (e.g. Protocol 1 or NIST traceable) may not be available at the concentrations required for this test, gas dilution systems may be used, with District approval, if they are used according to either District or EPA protocols 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.

1. Performance Specifications

Introduce pollutant concentrations at approximately the 20 percent, 10 percent, and 5 percent of full scale span levels through the normal CEMS calibration system. No low level calibration error shall exceed 2.5 percent of full scale span.

2. Testing Procedures

- a. Perform a standard zero/span check; if zero or span check exceeds 2.5 percent full scale span, adjust monitor and redo zero/span check.
- b. After zero/span check allow the CEMS to sample stack gas for at least 15 minutes.
- c. Introduce any of the low level calibration error standards through the CEMS calibration system.
- d. 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.
- e. After the low level calibration error check allow the CEMS to sample stack gas for at least 15 minutes.
- f. Repeat steps c through e until all three low level calibration error checks are complete.
- g. Conduct post test calibration and zero checks.

#### **Spike Recovery and Bias Factor Determinations**

Spiking is defined as introducing known concentrations of the pollutant of interest and an appropriate non-reactive, non-condensable and non-soluble tracer gas from a single cylinder (Protocol 1 or NIST traceable if no Protocol 1 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<sub>2</sub>, 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.

#### **High Level Spike Recovery/Bias Factor Determination**

The high level spike recovery/bias factor determination is used when the CEMS has not been certified per the standard RECLAIM requirements. The spiking facility/interface shall be a permanently installed part of the CEMS sample

acquisition system and accessible to District staff as well as the Facility Permit holder.

1. Performance Specifications

The CEMS shall demonstrate a RA  $\leq$  20 percent, where the spike value is used in place of the reference method in the normal RA calculation, as described below. The bias factor, if applicable, shall also be determined according to Attachment B.

2. Testing Procedures

- a. 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 full scale span 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 pollutant of interest and CO (or alternative tracer gas) must meet RECLAIM requirements specified in Attachment A.
- b. 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 full scale span, and preferably within 30-70 percent full scale span.
- c. 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.
- d. For each run, the average CEMS reading must be between 40 percent full scale span and 80 percent full scale span. 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.



- e. 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.
- f. 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 Appendix A. The RA shall be  $\leq 20$  percent. Determine the bias factor, if applicable, according to Attachment B.

**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 full scale span level. The spiking facility/interface shall be a permanently installed part of the CEMS sample acquisition system and accessible to District staff as well as the Facility Permit holder.

1. 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 and the extent to which the spike must be greater than the background pollutant level.

2. Testing Procedures

- a. 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 full scale span 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

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calibration standards for both pollutant of interest and CO (or alternative tracer gas) must meet RECLAIM requirements specified in Appendix A.

- b. 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 full scale span, and preferably within 30-70 percent full scale span.
- c. 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.
- d. For each run, the average CEMS reading must be below 25 percent full scale span and  $> 10$  percent full scale span. 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.
- e. 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.
- f. 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 Appendix A. 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 full scale span.

**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.

1. 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.

2. Testing Procedures

The reference method for the low level RATA/bias factor determination is Method 100.1

- a. Perform a minimum of nine runs of low level RATA for CEMS versus the reference method at actual levels (unspiked).
- b. The full scale span range for the reference method shall be such that all data falls with 10 - 95 percent of full scale span range.
- c. The reference method shall meet all Method 100.1 performance criteria.
- d. Calculate the average difference ( $d = \text{CEMS} - \text{reference method, ppm}$ ) and confidence coefficient ( $cc = \text{statistical calculated, ppm}$ ).
- e. 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.

**Linearity Error**

The linearity error is defined as the percentage error in linearity, calculated pursuant to the equation in Table F-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.

1. Performance Specifications

Introduce calibration gas concentrations in accordance with Table F-2. The linearity error shall not exceed 5.0 percent.

2. Testing Procedures

a. A linearity error test shall be comprised of three data points for each of three calibration gases listed in Table F-2 for each span range.

b. Each low level linearity test shall be performed by introducing calibration gas into the CEMS at the span range values specified in Table F-2.

c. 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.

d. Linearity error shall not exceed 5.0 percent of the calibration gas concentration, as calculated pursuant to the equation in Table F-3.

**TABLE F-3**  
**Linearity Error Test Equation**

<u>Test</u>	<u>Equation</u>	<u>Where</u>
<u>Linearity Error</u>	$LE = \frac{ R - \bar{C} }{R} \times 100$	<u><math>\bar{C}</math> = Mean of the CEMS response values</u> <u>R = Certified gas concentration as reference value</u>

**C. Testing Frequency**

For each CEMS, perform the aforementioned performance requirements once semiannually thereafter, as specified below for the type of test. These semiannual assessments shall be completed within six months of the end of the calendar quarter in which the CEMS was last tested for certification purposes (initial and recertification) or within three months of the end of the calendar quarter in which the District sent notice of a provisional approval for a CEMS, whichever is later. Thereafter, the semiannual tests shall be completed within six months of the end of the calendar quarter in which the CEMS was last tested. For CEMS on bypass stacks/ducts, the assessments shall be performed once every two successive operating quarters in which the bypass stacks/ducts were operated. These tests shall be performed after the calendar quarter in which the CEMS was last tested as part of the CEMS certification, as specified below for the type of test.

Relative accuracy tests may be performed on an annual basis rather than on a semiannual basis if the relative accuracies during the previous audit for the SO<sub>x</sub> CEMS are 7.5 percent or less.

For CEMS on any stack or duct through which no emissions have passed in two or more successive quarters, the semiannual assessments must be performed within 14 operating days after emissions pass through the stack/duct.

# ATTACHMENT I

(Adopted October 15, 1993) (Amended March 10, 1995)(Amended September 8, 1995)  
(Amended December 7, 1995)(Amended July 12, 1996)(Amended February 14, 1997)  
(Amended April 11, 1997)(Amended April 9, 1999)(Amended March 16, 2001)  
(Amended May 11, 2001)(Amended December 5, 2003)(Amended January 7, 2005)  
(Amended May 6, 2005) (Amended TBD)

## **PROPOSED** **AMENDED** **RULE 2012.**

## **REQUIREMENTS FOR MONITORING, REPORTING, AND RECORDKEEPING FOR OXIDES OF NITROGEN (NO<sub>x</sub>) EMISSIONS**

### *[RULE INDEX TO BE ADDED AFTER RULE ADOPTION]*

(a) Purpose

The purpose of this rule is to establish the monitoring, reporting and recordkeeping requirements for NO<sub>x</sub> emissions under the RECLAIM program.

(b) Applicability

The provisions of this rule shall apply to any RECLAIM NO<sub>x</sub> source or NO<sub>x</sub> process unit. The NO<sub>x</sub> sources and process units regulated by this rule include, but are not limited to:

Boilers	Fluid Catalytic Cracking Units
Internal Combustion Engines	Dryers
Heaters	Fume Incinerators/Afterburners
Gas Turbines	Test Cells
Furnaces	Tail Gas Units
Kilns and Calciners	Sulfuric Acid Production
Ovens	Waste Incinerators

(c) Major NO<sub>x</sub> Source

(1) Major NO<sub>x</sub> Source means any of the following NO<sub>x</sub> sources, except for such NO<sub>x</sub> sources reclassified as large NO<sub>x</sub> sources at approved Super Compliant Facilities as specified in paragraph (c)(4):

- (A) any boiler, furnace, oven, dryer, heater, incinerator, test cell and any solid, liquid or gaseous fueled equipment with a maximum rated capacity:
- (i) greater than or equal to 40 but less than 500 million Btu per hour and an annual heat input greater than 90 billion Btu per year; or
  - (ii) 500 million Btu per hour or more irrespective of annual heat input;

- (B) any internal combustion engine with rated brake horsepower (bhp) greater than or equal to 1,000 bhp and operating more than 2,190 hours per year;
  - (C) any gas turbine rated greater than or equal to 2.9 megawatts excluding any emergency standby equipment or peaking unit;
  - (D) any petroleum refinery fluid catalytic cracking unit;
  - (E) any petroleum refinery tail gas unit;
  - (F) any kiln or calciner with a rated process weight greater than or equal to 10 tons per hour and processing more than 21,900 tons per year, except brick kilns;
  - (G) any equipment burning or incinerating solid fuels or materials;
  - (H) any existing equipment using NO<sub>x</sub> CEMS or that is required to install CEMS under District rules to be implemented as of October 15, 1993;
  - (I) any NO<sub>x</sub> source or process unit elected by the Facility Permit holder or required by the Executive Officer or designee to be monitored and to report emissions with a CEMS meeting the requirements of paragraphs (c)(2) and (c)(3);
  - (J) any NO<sub>x</sub> source or process unit for which NO<sub>x</sub> emissions reported pursuant to Rule 301 - Permit Fees, were equal to or greater than 10 tons per year for any calendar year between 1987 to 1991, inclusive, excluding NO<sub>x</sub> sources or process units listed under subparagraphs (d)(1)(A) through (d)(1)(E), and (e)(1)(A) through (e)(1)(D) and excluding any NO<sub>x</sub> source or process unit which has reduced NO<sub>x</sub> emissions to below 10 tons per year prior to January 1, 1994.
- (2) The Facility Permit holder of a major NO<sub>x</sub> source shall:
- (A) install, maintain and operate a direct monitoring device for each major NO<sub>x</sub> source to continuously measure the concentration of NO<sub>x</sub> emissions and all other applicable variables specified in Table 2012-1 and Appendix A, Chapter 2, Table 2-A; or
  - (B) install, maintain, and operate an alternative monitoring device which has been determined by the Executive Officer or designee to be equivalent to CEMS in relative accuracy, reliability, reproducibility and timeliness according to the requirements set forth in Appendix A, Chapter 2.

- (C) The operating requirements specified in subparagraph (c)(2)(A) or (c)(2)(B) shall not apply during any time period not to exceed 96 hours provided that all of the following are met:
- (i) the Facility Permit holder reports emissions as specified in Appendix A;
  - (ii) the direct monitoring device has been either:
    - (I) shut down for maintenance performed pursuant to the facility's Quality Assurance and Quality Control Program or
    - (II) damaged in a fire or mechanical or electrical failure caused by circumstances beyond the Facility Permit holder's control; and
  - (iii) Whenever the monitoring device is non-operational for more than 24 hours, the Facility Permit holder shall submit a report to the Executive Officer within 96 hours after the device becomes non-operational. Such report shall include information as prescribed by the Executive Officer including at a minimum the cause of the shutdown, the time the monitoring device became non-operational, the time or estimated time the monitoring device returned to normal operation, and the maintenance performed or corrective and preventative actions taken to prevent future non-operational conditions.

If the source for which the CEMS is certified to monitor is not operating when the CEMS is in maintenance or being repaired, and either the flow or concentration monitor is properly operating, and clauses (c)(2)(C)(i) and (c)(2)(C)(ii) are met, then the above time period shall be extended for an additional 96 hours.

- (D) If a NO<sub>x</sub> source does not operate for a minimum of 168 consecutive hours, as demonstrated pursuant to subparagraph (c)(2)(E), the Facility Permit holder of the CEMS is not subject to the requirements of subparagraphs (c)(2)(A) and (c)(2)(B), and the emission hours are considered valid and consisting of zero value data points after zero emissions have been recorded for a minimum of 4 hours after the NO<sub>x</sub> source shutdown, provided that the Facility Permit holder of the CEMS:



- (i) Maintains the CEMS operation pursuant to subparagraphs (c)(2)(A) and (c)(2)(B) to record zero value data points for a minimum of 4 hours after the NO<sub>x</sub> source shutdown;
  - (ii) Submits the report in accordance with clause (c)(2)(C)(iii);
  - (iii) Resumes CEMS operation and meets the requirements of subparagraphs (c)(2)(A) and (c)(2)(B) for a minimum of 4 hours before the NO<sub>x</sub> source resumes operation or at which time any emissions are generated; and
  - (iv) Passes a calibration error test for each CEMS analyzer before any emissions are detected.
- (E) Demonstrating a NO<sub>x</sub> source is not operating and no emissions are generated
  - (i) For a NO<sub>x</sub> source in which fuel combustion is the only source for the CEMS monitored emissions, the Facility Permit holder of the CEMS shall meet one or more of the following provisions for the entire duration:
    - (I) Disconnect the fuel line to the NO<sub>x</sub> source and place blind flange(s) to prevent fuel flow;
    - (II) Demonstrate there is no fuel flow to the NO<sub>x</sub> source 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 NO<sub>x</sub> source or the fuel line associated with the NO<sub>x</sub> source that is not operating; or
    - (IV) Demonstrate the NO<sub>x</sub> source is not operational based on a stack flow monitoring system certified according to Appendix A, 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.
  - (ii) For a NO<sub>x</sub> source in which fuel combustion is not the only source for the CEMS monitored emissions, the Facility Permit holder of the CEMS shall:

- (I) Request the Executive Officer's written approval of the method(s) to demonstrate that the NO<sub>x</sub> source is not operating and no emissions are generated; and
  - (II) Include the above approved method(s) in the QA/QC plan.
- (3) The Facility Permit holder of a major NO<sub>x</sub> source shall:
- (A) install, maintain and operate a reporting device to electronically report total daily mass emissions of NO<sub>x</sub> and daily status codes to the District Central NO<sub>x</sub> Station for each major NO<sub>x</sub> source. Such data shall be reported by 5:00 p.m., of the following day. If the facility experiences a power, computer, or other system failure that prohibits the reporting of total daily mass emissions of NO<sub>x</sub> and daily status codes, the Facility Permit holder shall be granted 24 hours to submit the required report. Between July 1, 1995 and December 31, 1995, NO<sub>x</sub> emissions after the 24-hour extension, shall be calculated using interim reporting procedures set forth in Appendix A, Chapter 2. Starting January 1, 1996 and thereafter, NO<sub>x</sub> emissions after the 24-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2. For each major NO<sub>x</sub> source opting to comply with subparagraph (c)(9), reports of NO<sub>x</sub> mass emissions shall be electronically filed on a monthly instead of daily basis; and
  - (B) submit Monthly Emissions Reports aggregating NO<sub>x</sub> emissions from all major sources within 15 days following the end of each calendar month. In its Monthly Emissions Report the Facility Permit holder may correct daily transmitted data for that month provided such corrections are clearly identified and justified.
  - (C) Notwithstanding subparagraph (c)(3)(A), starting May 11, 2001 if a power, computer, or other system failure precludes the Facility Permit holder from reporting total daily mass emissions of NO<sub>x</sub> and daily status codes by 5:00 p.m., the Facility Permit holder shall be granted 96 hours to submit the required report provided that the raw data as obtained by the direct monitoring device is stored at the facility. NO<sub>x</sub> emissions reported after the 96-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2. The provisions of this subparagraph shall

be limited to no more than three non-consecutive occurrences per compliance year.

- (D) The requirement of calculating emissions using Missing Data Procedures under subparagraph (c)(3)(A) shall not apply if the failure to report the total daily mass emissions of NO<sub>x</sub> and daily status codes is due to a demonstrated failure at the District's Central Station preventing it from receiving the data. The Facility Permit holder shall submit the report within 48 hours of the ~~problem~~ demonstrated failure being corrected, provided that the raw data as obtained by the direct monitoring device is stored at the facility. NO<sub>x</sub> emissions reported after the 48-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2.
- (E) The requirement of calculating emissions using Missing Data Procedures under subparagraph (c)(3)(A) shall not apply if the NO<sub>x</sub> source is offline pursuant to subparagraph (c)(2)(D) and a Facility Permit holder is unable to report total daily mass emissions of NO<sub>x</sub> and daily status codes by 5:00 p.m. The Facility Permit holder shall be granted 48 hours from the time the CEMS passes the calibration error test specified in clause (c)(2)(D)(iv) to submit all electronic reports required by subparagraph (c)(3)(A), subparagraph (c)(3)(B), and Appendix A, Chapter 7. NO<sub>x</sub> emissions reported after the 48-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2.
- (4) Super Compliant Facilities
- (A) Facilities operating at or below their adjusted 2003 Allocation as of their 1994 compliance year.
- (i) The Facility Permit holder of major NO<sub>x</sub> sources may reclassify its major NO<sub>x</sub> sources to large NO<sub>x</sub> sources provided that (1) the facility's annual NO<sub>x</sub> emissions as properly reported in its 1994 compliance year APEP report are already at or below the level of its adjusted compliance year 2003 NO<sub>x</sub> Allocation. The adjusted compliance year 2003 NO<sub>x</sub> Allocation shall be the compliance year 2003 NO<sub>x</sub> Allocation as calculated pursuant to Rule 2002 subdivision (e) plus any compliance year 2003 NO<sub>x</sub> RTCs

resulting from conversion of ERCs which the Facility Permit holder had applied to own by July 1, 1994 and has continuously owned, unless such RTCs have already been accounted for in the compliance year 2003 Allocation as established pursuant to Rule 2002 subdivision (e) and (2) it submits a complete application for NO<sub>x</sub> Super Compliant status on or before December 2, 1996. The Executive Officer will provisionally approve for purposes of paragraph (c)(5) such application if the Facility Permit holder has retired all NO<sub>x</sub> RTCs in excess of the facility's adjusted compliance year 2003 Allocation for each of the compliance years from the year of application submittal through the 2010 compliance year. The Facility Permit holder need not retire any RTCs (excluding converted ERCs) which are held by transfer pursuant to Rule 2007 paragraph (e)(2); however, such non-retired RTCs must be converted into RTC certificates pursuant to Rule 2007 subdivision (g), transferred to a different holder, or retired. For the purposes of this rule, converted ERCs shall mean NO<sub>x</sub> RTCs resulting from conversion of ERCs which the Facility Permit holder had applied to own by July 1, 1994 and has continuously owned.

- (ii) Final approval of NO<sub>x</sub> Super Compliant status shall be granted if the Executive Officer or designee approves the initial source test required by subparagraph (c)(4)(C) and the facility's total annual NO<sub>x</sub> emissions has not exceeded its adjusted compliance year 2003 Allocation.
- (B) Facilities not operating at or below their adjusted 2003 Allocation as of their 1994 compliance year.
- (i) On or before December 2, 1996 the facility Permit holder of major NO<sub>x</sub> sources may submit a complete application for NO<sub>x</sub> Super Compliant status. Such application must also include a complete application for permit modifications to install NO<sub>x</sub> emission reduction equipment or to make any other physical modifications to substantially reduce emissions from each major NO<sub>x</sub> source to be reclassified as a large NO<sub>x</sub> source. The Executive Officer

shall deny the application for Super Compliant status unless the applicant demonstrates the proposed modifications would comply with all applicable District rules and would permanently reduce the facility's total annual NO<sub>x</sub> emissions to a level not to exceed its adjusted compliance year 2003 NO<sub>x</sub> Allocation as defined in clause (c)(4)(A)(i), would not result in any increases in the mass emissions of any other air contaminant or in emissions to any other media, and would not result in any increases in receptor concentrations of any air contaminant in excess of the values identified in Table A-2 of Rule 1303;

- (ii) Upon issuance of the permit to construct for the modification specified in clause (c)(4)(B)(i), the Executive Officer shall also issue a provisional approval of the facility's application for NO<sub>x</sub> Super Compliant status for purposes of paragraph (c)(5).
- (iii) Final approval of NO<sub>x</sub> Super Compliant status shall be granted if the following provisions are met:
  - (I) An approved permit to operate has been issued for the modification specified in clause (c)(4)(B)(i);
  - (II) The facility's total annual NO<sub>x</sub> emissions as reported in its APEP report are at a level at or below the facility's adjusted compliance year 2003 NO<sub>x</sub> Allocation on a permanent basis no later than the facility's 1998 compliance year;
  - (III) The Facility Permit holder has retired all NO<sub>x</sub> RTCs in excess of the facility's adjusted compliance year 2003 Allocation for each of the compliance years from the earlier of the facility's 1998 compliance year or the facility's first full compliance year with NO<sub>x</sub> Super Compliant Facility status through the facility's 2010 compliance year. The Facility Permit holder need not retire any RTCs (excluding converted ERCs as defined in clause (c)(4)(A)(i) which are held by transfer pursuant to Rule 2007 paragraph (e)(2); however, such non-retired RTCs must be

converted into RTC certificates pursuant to Rule 2007 subdivision (g), transferred to a different holder, or retired; and

- (IV) The facility Permit holder has an approved initial source test as required under subparagraph (c)(4)(C).
- (C) The Facility Permit holder shall have initial NO<sub>x</sub> source tests conducted for each major NO<sub>x</sub> source to be reclassified as a large NO<sub>x</sub> source. The initial source tests shall be conducted pursuant to Appendix A, Chapter 5, Subdivisions A and D and shall be completed prior to January 1, 1998 for Cycle 1 facilities and prior to July 1, 1998 for Cycle 2 facilities. Additionally, the Facility Permit holder shall select an equipment-specific concentration limit for each major source which will be reclassified as a large NO<sub>x</sub> source. For each major source which will be reclassified as a large NO<sub>x</sub> source that operates at two or more separate and significantly distinct operating loads, the Facility Permit holder may select no more than two equipment specific concentration limits, and assign one for each different operating load. The concentration limits selected shall be consistent with the source test results and at a level adequate to allow continuous compliance and shall be enforceable through permit conditions.
- (D) Requirements to maintain Super Compliant status  
Super Compliant status is contingent upon the Facility Permit holder meeting at all times the following provisions:
  - (i) Every major NO<sub>x</sub> source at a Super Compliant NO<sub>x</sub> facility which is reclassified as a large NO<sub>x</sub> source shall be source tested a minimum of once every six months in order to verify compliance with the equipment-specific concentration limit. The source test shall be conducted pursuant to Appendix A, Chapter 5, Subdivisions A, B, and D and shall constitute the basis for assigning concentration limits. These source tests shall be conducted every two calendar quarters after the initial source test. If a source test is not conducted within three months after the required date, the facility shall no longer be considered Super Compliant, unless upon good cause the Executive Officer

has granted a written extension of time. If the results of a source test indicate non-compliance with the concentration limit then the Facility Permit holder shall select a new concentration limit which is consistent with the source test results unless the Facility Permit holder demonstrates to the satisfaction of the Executive Officer or designee that no change is warranted. If all tests conducted pursuant to this paragraph over a two-year period comply with the equipment-specific concentration limit then the facility shall have the option of reducing the source test frequency to once every four quarters. If any test conducted on a four quarter cycle exceeds the concentration limit then the facility shall return to conducting source tests every two quarters.

- (ii) The facility's total annual NO<sub>x</sub> emissions, as reported in its APEP report, shall not exceed the facility's adjusted compliance year 2003 NO<sub>x</sub> Allocation. If there are such exceedances for two consecutive years or any three years, the facility shall no longer be considered Super Compliant. NO<sub>x</sub> emissions from portable equipment used in the manufacturing of asphalt rubber binder, which is owned and operated by a person other than the Facility Permit holder and used at a Super Compliant facility for not more than 1,500 hours in any one compliance year, need not be included in the APEP report.
- (5) The Facility Permit holder of a facility which is provisionally approved for NO<sub>x</sub> Super Compliant status shall have the option for each major NO<sub>x</sub> source to be reclassified as a large NO<sub>x</sub> source, in lieu of following the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii) of Appendix A Chapter 2, to monitor and report emissions pursuant to paragraph (d)(2). This option shall be available to the Facility Permit holder retroactively from July 1, 1995 if the complete application for NO<sub>x</sub> Super Compliant status is submitted on or before January 2, 1996, or retroactively from the date of application submittal if the complete application is submitted after January 2 and before December 3, 1996. If the facility is unsuccessful at obtaining designation as a NO<sub>x</sub> Super Compliant Facility then the procedures specified in clauses E(1)(d)(i),

E(1)(d)(ii), and E(1)(d)(iii) of Appendix A Chapter 2 shall apply retroactively to each major NO<sub>x</sub> source reclassified as a large NO<sub>x</sub> source for which NO<sub>x</sub> emissions had been calculated pursuant to paragraph (d)(2) from the date the facility began monitoring and reporting major NO<sub>x</sub> source emissions as large NO<sub>x</sub> source emissions to the date a CEMS is installed and certified.

- (6) After final approval of Super Compliant status, a Facility Permit holder may elect to discontinue its Super Compliant status and increase its annual Allocations above the level of its adjusted compliance year 2003 Allocation provided it first meets all of the following requirements:
  - (A) The Facility Permit holder submits an application to discontinue NO<sub>x</sub> Super Compliant status and to have all sources at the facility that were reclassified from major NO<sub>x</sub> sources to large NO<sub>x</sub> sources pursuant to paragraph (c)(4) permanently revert back to major NO<sub>x</sub> sources;
  - (B) The Facility Permit holder installs, operates, and certifies in compliance with Rule 2012 paragraphs (c)(2) and (c)(3) monitoring and reporting systems on each source at the facility that was reclassified from a major NO<sub>x</sub> source to a large NO<sub>x</sub> source pursuant to paragraph (c)(4); and
  - (C) The Facility Permit holder acquires, pursuant to Rule 2007, sufficient RTCs to ensure that the facility continuously operates in compliance with Rule 2004 subdivision (d).
- (7) If a facility designated as a NO<sub>x</sub> Super Compliant Facility pursuant to paragraph (c)(4) exceeds its adjusted compliance year 2003 NO<sub>x</sub> Allocation, then the facility shall acquire, pursuant to Rule 2007, sufficient RTCs to cover such exceedance and shall be considered in violation of Rule 2004(d)(1).
- (8) If the Executive Officer determines that a facility designated as a NO<sub>x</sub> Super Compliant Facility exceeds its adjusted compliance year 2003 NO<sub>x</sub> Allocation for two consecutive years or any three years, then that facility shall no longer be considered Super Compliant. If a facility loses its Super Compliant status pursuant to this paragraph or subparagraph (c)(4)(D), all sources at the facility that were reclassified from major NO<sub>x</sub> sources to large NO<sub>x</sub> sources pursuant to paragraph (c)(4) shall permanently revert back to major NO<sub>x</sub> sources and shall become subject to the monitoring and



reporting requirements of paragraphs (c)(2) and (c)(3) according to the following schedule:

- (A) Within one month from the end of the compliance year, submit a monitoring, reporting, and recordkeeping plan specifying the use of CEMS;
  - (B) During the shorter of the first twelve months from the end of the compliance year or until the facility complies with paragraphs (c)(2) and (c)(3), the Facility Permit holder shall comply with the monitoring requirements of paragraph (h)(3) of this rule; and
  - (C) Within one year from the end of the compliance year, comply with paragraphs (c)(2) and (c)(3) and have appropriate direct monitoring equipment installed and certified pursuant to Appendix A.
- (9) Non-Operated Major NO<sub>x</sub> Source
- Subparagraphs (c)(2)(A) and (c)(2)(B) shall not apply to a major NO<sub>x</sub> source if the Facility Permit holder complies with the following requirements.
- (A) The Facility Permit holder submits an application for each major NO<sub>x</sub> source to classify such source to be a non-operated major NO<sub>x</sub> source, demonstrating to the satisfaction of the Executive Officer that such source will not be operated in the current or next compliance year, and receives written approval from the Executive Officer. The Executive Officer shall further not approve an application to classify a major source to be a non-operated major NO<sub>x</sub> source if such source had previously been classified as a non-operated source for any time during the 18 calendar months prior to the filing date of the application.
  - (B) The Facility Permit holder accepts and complies with all permit conditions imposed to ensure compliance with subparagraph (c)(9)(C) and (c)(9)(D).
  - (C) The Facility Permit holder shall comply with the requirements under either subclause (i) or (ii):
    - (i) The Facility Permit holder shall:
      - (I) disconnect fuel feed lines and place flanges at both ends of the disconnected lines, and
      - (II) render the source non-operational by either disconnecting the process feed lines and place flanges at both ends of the disconnected lines or

removing a major component of the source necessary for its operation.

- (ii) The Facility Permit holder shall monitor the source with an operating CEMS that was certified to monitor emissions from that source in accordance with District Rule 218 - Stack Monitoring, Rule 1135 - Emissions of Oxides of Nitrogen from Electric Power Generating Systems, or Rule 2012 and Appendix A and maintain records demonstrating the source's non-operational status as required by the applicable rule.
- (D) A source, which has been approved as a non-operated source pursuant to paragraph (c)(9), shall not be operated until the following requirements are met:
- (i) The Facility Permit holder shall provide written notification to the Executive Officer that the source will be operated. The notification shall be made no less than 30 days prior to starting operation of the source.
  - (ii) The source meets the requirements of subparagraph (c)(2)(A) or (c)(2)(B) no later than 30 days after the start of operation except as provided under paragraph (c)(10). Until the source meets the requirements of subparagraph (c)(2)(A) or (c)(2)(B), emissions shall be determined pursuant to the Missing Data Procedures as specified under Rule 2012, Appendix A, Chapter 2, Subdivision E.
- (10) A non-operated major NO<sub>x</sub> source qualifies for a one-time only CEMS certification period if:
- (A) the source has never been monitored by a RECLAIM certified CEMS since October 15, 1993, and
  - (B) the source has been in compliance with paragraph (c)(9) during the 12 months prior to the date the source was operated.

This one-time only CEMS certification period shall commence on the first day of any operation in any compliance year and ends on the date the CEMS is certified or 12 calendar months from the first day of operation, whichever date is earlier. By the end of this CEMS certification period, the Facility Permit holder shall install, operate, and maintain all required monitoring, reporting, and recordkeeping systems. During this CEMS certification period, the Facility Permit holder shall comply with the

monitoring, reporting, and recordkeeping requirements of paragraphs (h)(2) and (h)(3).

- (11) If an approved non-operated major NO<sub>x</sub> source fails to meet the requirements of the paragraph (c)(9) that source shall no longer be considered a non-operated major NO<sub>x</sub> source, and the facility permit holder of the source shall be considered in violation for each day from the start of the compliance year and emissions shall be determined as if the source had been operating from the start of the compliance year according to Missing Data Procedures as specified under Rule 2012, Appendix A, Chapter 2, clause (E)(1)(d)(iii), except for those days in which the Facility Permit holder can conclusively prove that the source has not been operated.

(d) Large NO<sub>x</sub> Source

- (1) Large NO<sub>x</sub> Source is any one of the following NO<sub>x</sub> emitting equipment:
- (A) any boiler, furnace, oven, dryer, heater, incinerator, test cell and any liquid or gaseous fueled equipment with a maximum rated capacity:
    - (i) greater than or equal to 40 but less than 500 million Btu per hour and an annual heat input of 90 billion Btu per year or less; or
    - (ii) greater than or equal to 10 but less than 40 million Btu per hour and an annual heat input greater than 23 billion Btu per year.
  - (B) any internal combustion engine with rated brake horsepower:
    - (i) greater than or equal to 1,000 bhp and operating 2,190 hours per year or less; or
    - (ii) greater than or equal to 200 but less than 1,000 bhp and operating more than 2,190 hours per year;
  - (C) any gas turbine rated greater than or equal to 0.2 but less than 2.9 megawatts, excluding any emergency standby equipment or peaking unit;
  - (D) any kiln or calciner with rated process weight less than 10 tons per hour or processing less than 21,900 tons per year;
  - (E) any sulfuric acid production unit;
  - (F) any source at a Super Compliant Facility subject to, and meeting, the requirements of paragraph (c)(4) and which would otherwise be a major NO<sub>x</sub> source.;

- (G) any NO<sub>x</sub> source or process unit elected by the Facility Permit holder or required by the Executive Officer to be monitored with a CPMS;
  - (H) any NO<sub>x</sub> source or process unit for which NO<sub>x</sub> emissions reported pursuant to Rule 301 - Permit Fees, were equal to or greater than 4 tons per year but less than 10 tons per year for any calendar year from 1987 to 1991, inclusive, excluding NO<sub>x</sub> sources or process units listed under subparagraphs (c)(1)(A) through (c)(1)(H), and (e)(1)(A) through (e)(1)(D).
- (2) The Facility Permit holder of a large NO<sub>x</sub> source shall comply with either paragraphs (c)(2) and (c)(3); or (c)(2), (d)(2)(B) and Appendix A, Chapter 3, Subdivision K for any large source; or elect to comply with the following:
- (A) install, maintain and operate a totalizing fuel meter and any other device specified by the Executive Officer or designee as necessary to determine monthly fuel usage, and all other applicable variables specified in Appendix A, Chapter 3, Table 3-A; and
  - (B) install, maintain and operate a modem or any reporting device approved by the Executive Officer or designee to be equivalent in accuracy, reliability, and timeliness, or use the District Internet Web Site to report total monthly mass emissions of NO<sub>x</sub> to the District Central NO<sub>x</sub> Station for each large NO<sub>x</sub> source. Such data shall be reported within 15 days following the end of each calendar month; and
  - (C) accept the emission factor, equipment-specific emission rate or concentration limit, as specified pursuant to subdivision (f) in the Facility Permit, as the sole method for determining mass emissions for all purposes, including, but not limited to, determining:
    - (i) compliance with the annual Allocations;
    - (ii) excess emissions;
    - (iii) the amount of penalties; and
    - (iv) fees; and
  - (D) monitor one or more measured variables as specified in Appendix A in order to ensure the applicability and accuracy of any equipment-specific emission rate specified in the Facility Permit; and
  - (E) comply with all applicable provisions of subdivision (f).

- (e) NO<sub>x</sub> Process Unit
- (1) NO<sub>x</sub> Process Unit means any piece of the following NO<sub>x</sub> emitting equipment:
- (A) any boiler, furnace, oven, dryer, heater, incinerator, test cell and any liquid- or gaseous-fueled equipment with maximum rated capacity:
- (i) greater than or equal to 10 but less than 40 million Btu per hour and an annual heat input of 23 billion Btu per year or less;
- (ii) greater than 2 but less than 10 million Btu per hour; or
- (iii) less than or equal to 2 million BTU per hour if the equipment is subject to permit requirements.
- (B) any internal combustion engine with rated brake horsepower:
- (i) greater than or equal to 200 but less than 1,000 bhp and operating 2,190 hours per year or less;
- (ii) greater than 50 but less than 200 bhp; or
- (iii) less than or equal to 50 bhp if the equipment is subject to permit requirements.
- (C) any portable combustion equipment which is not a major or large source;
- (D) any emergency standby equipment or peaking unit ;
- (E) any other NO<sub>x</sub> source that is not a large or major NO<sub>x</sub> source or equipment designated in Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II.
- (2) The Facility Permit holder of a NO<sub>x</sub> process unit shall comply with paragraph (c)(2), and (c)(3), or paragraph (d)(2), for any process unit, or elect to comply with the following:
- (A) install, maintain and operate a totalizing fuel meter and/or timer or any device approved by the Executive Officer or designee to be equivalent in accuracy, reliability, reproducibility, and timeliness for the NO<sub>x</sub> process unit, to measure quarterly fuel usage or other applicable variables specified in Table 2012-1, and Appendix A, Chapter 4, Table 4-A; and
- (B) report quarterly mass emissions of NO<sub>x</sub> to the District Central Station 30 days after the end of each of the first three quarters and 60 days after the last quarter of a compliance year for each process unit using a modem, the District Internet Web Site or any reporting

device approved by the Executive Officer to be equivalent in accuracy, reliability, and timeliness; and

- (C) accept the emission factor, concentration limit, or equipment-specific or category-specific emission rate, as specified pursuant to subdivision (f) of this Rule and in the Facility Permit, as the sole method for determining mass emissions for all purposes, including, but not limited to, determining:
    - (i) compliance with the annual Allocations;
    - (ii) excess emissions;
    - (iii) the amount of penalties; and
    - (iv) fees; and
  - (D) comply with all applicable provisions of subdivision (f).
  - (E) Facility Permit holders that opt for a concentration limit in Subparagraph (e)(2)(C) for a process unit shall comply at all times with that NO<sub>x</sub> concentration limit in ppm measured over any continuous 60 minutes as specified in the Facility Permit for that source.
- (f) Permit Conditions for Large Sources and Process Units
- (1) Starting January 1, 1994 for Cycle 1 facilities and starting July 1, 1994 for Cycle 2 facilities, calculations of mass emissions from each large source or process unit shall be based upon the emission factor specified in Rule 2002 - Allocations for Oxides of Nitrogen (NO<sub>x</sub>) and Oxides of Sulfur (SO<sub>x</sub>). The emission factor for each large source or process unit will be specified in the Facility Permit, and will remain valid unless amended by the Executive Officer pursuant to paragraphs (f)(2), (f)(3) or (f)(4).
  - (2) On and after January 1, 1995 for Cycle 1 facilities and July 1, 1995 for Cycle 2 facilities, the Facility Permit holder of a large source shall:
    - (A) comply at all times with an equipment-specific NO<sub>x</sub> concentration limit in ppm measured over any continuous 60 minutes as specified in the Facility Permit for that source; according to the requirements specified in Appendix A, Chapter 3 (large sources); or
    - (B) establish an equipment-specific emission rate that is reliable, accurate and representative of that source's emissions, according to the requirements specified in Appendix A, Chapter 5.
  - (3) A Facility Permit holder may apply to the Executive Officer or designee to amend the concentration limit or equipment-specific emission rate for a large source, or to amend the emission factor to a concentration limit,

equipment-specific emission rate, or category-specific emission rate for a process unit, in the Facility Permit, at any time. If the applicant demonstrates to the Executive Officer or designee that the equipment-specific or category-specific emission rate is reliable, accurate and representative for the purpose of calculating NO<sub>x</sub> emissions, the Executive Officer or designee will amend the Facility Permit to incorporate the equipment-specific or category-specific emission rate. No demonstration will be required to amend the Facility Permit to incorporate the alternative concentration limit, provided the large source or process unit complies with that limit in ppm over any continuous 60 minutes. The alternative concentration limit or equipment-specific emission rate for a large source, and the concentration limit, equipment-specific emission rate, or category-specific emission rate for a process unit, shall take effect prospectively from the date the Facility Permit is amended.

- (4) The Executive Officer or designee may amend the Facility Permit at any time to specify a concentration limit or an equipment-specific emission rate for a large source, or a concentration limit, equipment-specific emission rate, or category-specific emission rate for a process unit, if the concentration limit, equipment-specific emission rate, or category-specific emission rate is determined to be more reliable, accurate, or representative of that source's or unit's emissions than the previous emission factor, or concentration limit or emission rate specified in the Facility Permit. The alternative concentration limit or equipment-specific emission rate for a large source, or concentration limit, equipment-specific emission rate or category-specific emission rate for a process unit shall take effect prospectively from the date the Facility Permit is amended.

(g) General Requirements

- (1) A Facility Permit holder shall at all times comply with all requirements specified in subdivisions (c), (d), (e), (f), (g), (h), and (i) for monitoring, reporting and recordkeeping, including but not limited to, measuring, reporting, time-sharing, determining mass emissions, and installing, maintaining or operating monitoring, measuring and reporting devices, in accordance with the applicable requirements set forth in Appendix A.
- (2) The monitoring system and the applicable method for determination of mass emissions for each NO<sub>x</sub> source or process unit will be specified in the Facility Permit, in accordance with the applicable requirements set forth in Appendix A.

- (3) The time-sharing of CEMS among NO<sub>x</sub> sources may be allowed by the Executive Officer or designee in accordance with the requirements for time-sharing specified in Appendix A. In such cases, the Executive Officer or designee will specify conditions in the Facility Permit upon which time-sharing may occur.
- (4) Any monitoring system certified prior to October 15, 1993 requiring a change to its full scale span range in order to meet the certification requirements set forth in Appendix A, shall be recertified by the Executive Officer or designee in accordance with the recertification requirements specified in Chapter 2, Section ~~B.15~~B.16, in Appendix A.
- (5) The Executive Officer or designee may at any time require a Facility Permit holder to use a specific monitoring and reporting system if it is determined that the elected system is inadequate to accurately determine mass emissions.
- (6) The sharing of totalizing fuel meters may be allowed by the Executive Officer or designee if the fuel meter serves large sources or process units which have the same emission factor or concentration limit or emission rate. The sharing of totalizing fuel meters shall not be allowed:
  - (A) if the fuel meters measure annual heat input as specified in clauses (d)(1)(A)(i) and (e)(1)(A)(i); or
  - (B) between large sources and process units.
- (7) A Facility Permit holder of any NO<sub>x</sub> source, process unit, or piece of equipment which is exempt from permit requirements pursuant to Rule 219 - Equipment Not Requiring A Written Permit Pursuant to Regulation II, shall determine NO<sub>x</sub> emissions according to the methodology specified in Appendix A. Process units or equipment exempt from permit requirements pursuant to Rule 219 shall report such NO<sub>x</sub> emissions in the Quarterly Certification of Emissions required by Rule 2004 - Requirements. Emissions from equipment exempt from permit requirements pursuant to Rule 219 shall also be reported quarterly to the District Central Station by the end of the quarterly reconciliation period as specified under Rule 2004(b) – Compliance Period and Certification of emissions. Alternatively, these emissions may be reported using the District Internet Web Site.
- (8) A Facility Permit holder shall at all times comply with all applicable requirements specified in this rule and Appendix A for monitoring, reporting and recordkeeping of operations of RECLAIM NO<sub>x</sub> sources that



are not included in the Facility Permit so as to determine and report to the District Central Station the quarterly emissions from these sources by the end of the quarterly reconciliation period as specified under Rule 2004(b). These sources may include, but are not limited to, rental equipment, equipment operated by contractors, and equipment operated under a temporary permit or without a District permit. In addition, the Facility Permit holder shall include emissions from these sources in the Quarterly Certification of Emissions required by Rule 2004.

(h) Compliance Schedule

- (1) Facilities with existing CEMS and fuel meters as of October 15, 1993 shall continue to follow recording and reporting procedures required by District rules and regulations in effect immediately prior to October 15, 1993, until December 31, 1994 for Cycle 1 facilities and June 30, 1995 for Cycle 2 facilities.
- (2) Between January 1, 1994 and December 31, 1994 for Cycle 1 facilities and between July 1, 1994 and June 30, 1995 for Cycle 2 facilities, interim emission reports shall be submitted to the District by the Facility Permit holder. The interim reports shall comply with all of the requirements of this rule and Appendix A, except that the reporting frequency shall be monthly for major and large sources and quarterly for process units. Such reports shall be submitted by the fifteenth (15<sup>th</sup>) day of each month for major and large sources and as specified in paragraph (b)(2) of Rule 2004 - Requirements, for process units.
- (3) A Facility Permit holder shall install, maintain and operate a totalizing fuel meter for each major source and a totalizing fuel meter and/or timer or any device approved by the Executive Officer or designee to be equivalent in accuracy, reliability, reproducibility, and timeliness for each large source or process unit by January 1, 1994 for Cycle 1 facilities and July 1, 1994 for Cycle 2 facilities, except that sharing of such devices may be allowed pursuant to paragraph (g)(6).
- (4) All required or elected monitoring and reporting systems specified in subdivisions (c), (d), (e), (f), and (g) shall be installed no later than December 31, 1994 for Cycle 1 facilities and June 30, 1995 for Cycle 2 facilities. Monitoring, Reporting, and Recordkeeping (MRR) Forms will be provided by the Executive Officer or designee by November 15, 1993 for Cycle 1 facilities and April 15, 1994 for Cycle 2 facilities. The information required on such MRR forms shall be submitted no later than

December 31, 1993 for Cycle 1 facilities and June 30, 1994 for Cycle 2 facilities.

- (5) The Facility Permit holder of an existing or new facility which elects to enter RECLAIM or a facility which is required to enter RECLAIM shall install all required or elected monitoring, reporting and recordkeeping systems no later than 12 months after entry into RECLAIM. During the 12 months prior to the installation of the required or elected monitoring, reporting and recordkeeping systems the Facility Permit holder shall comply with the monitoring reporting, and recordkeeping requirements of paragraphs (h)(2) and (h)(3) of this rule.
  - (6) The Facility Permit holder which installs a new major NO<sub>x</sub> source at an existing facility shall install, operate, and maintain all required or elected monitoring, reporting and recordkeeping systems no later than 12 months after the initial start up of the major NO<sub>x</sub> source. During the interim period between the initial start up of the major NO<sub>x</sub> source and the provisional certification date of the CEMS, the Facility Permit holder shall comply with the monitoring requirements of paragraph (h)(2) and (h)(3) of this rule.
- (i) **Recordkeeping**
- The Facility Permit holder of a major or large NO<sub>x</sub> source or NO<sub>x</sub> process unit shall maintain all data required to be gathered, computed or reported pursuant to this rule and Appendix A for three years after each APEP report is submitted to the District except that all data gathered or computed for intervals of less than 15 minutes shall be maintained for a minimum of 48 hours. The Facility Permit holder of a major NO<sub>x</sub> source which is required to comply with 40 CFR Part 75 may instead opt to comply with the applicable recordkeeping requirements under 40 CFR Part 75. All records shall be made available to the District staff upon request.
- (j) **Source Testing**
- (1) All required source testing shall comply with applicable District Source Test Methods 1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 4.1, 7.1, 100.1, and EPA Method 19.
  - (2) Every large NO<sub>x</sub> source shall be source tested no later than December 31, 1996 for Cycle 1 facilities and June 30, 1997 for Cycle 2 facilities, and subsequently tested within every three-year period thereafter. Any source test conducted to satisfy this requirement must be conducted at least 12

months following the tests submitted to satisfy the previous three-year period. Such source test results shall be submitted to the District within 60 days of the date the source test was conducted. In lieu of submitting the first source test report, the Facility Permit holder may submit the results of a source test not more than three years old which meets applicable requirements of this rule when conducted. If a large source has not been operated within the same quarter of the date a source test is required, the source test may be conducted by the end of seven consecutive days or 15 cumulative days of resumed operation. The Facility Permit holder shall keep daily records to demonstrate that the large source had not been operated for the three month period and upon resumption of operation the Facility Permit holder shall keep records of each day operated until the required test. The source testing requirement does not apply to large sources which comply with paragraphs (c)(2) and (c)(3), or paragraphs (c)(2), (d)(2)(B), and Appendix A, Chapter 3, Subdivision K.

- (3) An equipment-specific emission rate or category-specific emission rate for process units shall comply with source testing guidelines to be established by the Executive Officer or designee by March 31, 1994.
- (4) Every process unit that is approved by the Executive Officer to use a concentration limit for emission reporting shall be source tested every five-year period, with the first five-year period ending on December 31, 2004 for Cycle 1 facilities and June 30, 2005 for Cycle 2 facilities. The compliance date for the first source test shall be within 12 months of the approval of the concentration limit by the Executive Officer but, no later than the last day of the five-year period in which the use of a concentration limit is approved by the Executive Officer. Any source test conducted to satisfy this requirement must be conducted at least 12 months following the tests submitted to satisfy the previous five-year period. Such source test results shall be submitted to the District within 60 days of the date the source test was conducted. If a process unit has not been operated within the prior quarter of the date a source test is required, the source test may be conducted by the end of either seven consecutive days or 15 cumulative days of resumed operation. The Facility Permit holder shall keep daily records to demonstrate that the process unit had not been operated for the three month period and upon resumption of operation the Facility Permit holder shall keep records of each day operated until the required test. Test firings of emergency standby equipment, which are less than 60 minutes

in duration, are not considered operation for the purposes of these source test requirements so long as such test firings are done to verify availability of the unit for their intended use and once such test firings are completed the units are shutdown. Records of the date and duration when the unit is test fired shall be maintained for a period of three years, and shall be made accessible to the Executive Officer upon request.

(k) Exemption

The provisions of this rule shall not apply to gas flares.

(l) Appeals

The Facility Permit holder of a facility which has established Super Compliant status shall have a maximum of ten calendar days from the receipt of notification that the facility is no longer Super Compliant in which to file an appeal of such finding to the District Hearing Board in accordance with the requirements of Rule 216.

(m) Appendix A

All provisions of Appendix A are incorporated herein by reference.

**Attachment:** Appendix A - "Protocol for Monitoring, Reporting and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions."

Table 2012-1

**MEASURED VARIABLES AND REPORTED DATA FOR NO<sub>x</sub> SOURCES**

<b>NO<sub>x</sub> SOURCES</b>	<b>MEASURED VARIABLES</b>	<b>RECORDING FREQUENCY</b>	<b>REPORTED DATA</b>	<b>TRANSMITTING/ REPORTING FREQUENCY</b>
All sources subject to Paragraphs (c)(2) and (c)(3)	Stack NO <sub>x</sub> concentration, Exhaust flow rate, and Status codes  OR  Stack NO <sub>x</sub> concentration, Stack O <sub>2</sub> concentration, Fuel flow rate, and Status codes	Once every 15 minutes	Total daily mass emissions from each source    Daily status codes	Once a day for transmitting/ once a month for reporting
Large sources subject to Paragraph (d)(2)	Fuel usage  OR  Exhaust flow rate (for systems with stack flow monitors)	Monthly	Total Monthly mass emissions from each source	Once a month for reporting

<p>NO<sub>x</sub> Process units subject to Paragraph (e)(2)</p>	<p>Fuel usage</p> <p>OR</p> <p>Exhaust flow rate (for sources with stack flow monitors)</p> <p>OR</p> <p>Operating time and Production/ Processing/Feed rate (for sources permitted with emission rates corresponding to the measured variable)</p>	<p>Quarterly</p>	<p>Total quarterly mass emissions</p>	<p>Once a quarter for reporting</p>
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**ATTACHMENT J**

**RULE 2012 PROTOCOL  
CHAPTER 2**

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**MAJOR SOURCES - CONTINUOUS  
EMISSION MONITORING SYSTEM  
(CEMS)**

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Between January 1, 1994 and December 31, 1994 (Cycle 1 facilities) and between July 1, 1994 and June 30, 1995 (Cycle 2 facilities), major sources shall be allowed to use an interim reporting procedure to measure and record NO<sub>x</sub> emissions on a monthly basis according to the requirements specified in Chapter 3 "Large Sources - Continuous Process Monitoring System (CPMS)" or by extracting NO<sub>x</sub> emission data from existing District certified continuous emissions monitoring system (CEMS). Chapter 2, Subdivision C, Paragraph 1 specifies the requirements for this interim period. On and after January 1, 1995 (Cycle 1 facilities) and July 1, 1995 (Cycle 2 facilities), the Facility Permit holder of each major source shall report the daily NO<sub>x</sub> emissions by 5:00 p.m. of the following day and comply with all other applicable requirements (except Chapter 2, Subdivision C, Paragraph 1) specified in this chapter.

The Facility Permit holder of a source that is required to install CEMS may request the Executive Officer to approve an alternative monitoring device (or system components) to quantify the emissions of NO<sub>x</sub>. The applicant shall demonstrate to the Executive Officer that the proposed alternative monitoring device is at a minimum equivalent in relative accuracy, precision, reliability, and timeliness to a CEMS for that source, according to the criteria specified in 40 CFR Part 75 Subpart E. In lieu of the criteria specified in 40 CFR Part 75 Subpart E, substitute criteria is acceptable if the applicant demonstrates to 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 source. Upon approval by the Executive Officer, the substitute criteria shall be submitted to the federal Environmental Protection Agency as an amendment to the State Implementation Plan (SIP).

#### **A. MEASUREMENT REQUIREMENTS**

1. The Facility Permit holder of each major NO<sub>x</sub> equipment shall install, calibrate, maintain, and operate an approved CEMS to measure and record the following:
  - a. Nitrogen oxide concentrations in the gases discharged to the atmosphere from affected equipment;
  - b. Oxygen concentrations, at each location where nitrogen oxide concentrations are monitored, if required for calculation of the stack gas flow rate;
  - c. Stack gas volumetric flow rate. An in-stack flow meter may be used to determine mass emissions to the atmosphere from affected equipment, except:
    - i. when more than one affected piece of equipment vents to the atmosphere through a single stack and there is no approvable means of determining emissions from each piece of equipment; or

- ii. during periods of low flow rates when the flow rate is no longer within the applicable range of the in-stack flow meter.
  
- d. In lieu of complying with Chapter 2, Subdivision A, Paragraph 1, Subparagraph c, the Facility Permit holder shall calculate stack gas volumetric flowrate using one of the following alternate methods:
  - i. Heat Input
 

If heat input rate is needed to determine the stack gas volumetric flow rate, the Facility Permit holder shall include in the CEMS calculations the  $F_d$  factors listed in 40 CFR Part 60, Appendix A, Method 19, Table 19-1. The Facility Permit holder shall submit data to develop F factors when alternative fuels are fired and obtain the approval of the Executive Officer for use of the F factors before firing any alternative fuel,
  - ii. Oxygen Mass Balance
 

Flow rate can be determined using oxygen mass balance as approved through a plan submitted to and approved by the Executive Officer, or
  - iii. Nitrogen Mass Balance
 

Flow rate can be determined using nitrogen mass balance as approved through a plan submitted to and approved by the Executive Officer.

The Facility Permit holder shall measure and record all variables necessary for the method chosen to calculate stack gas volumetric flowrate.
  
- e. All applicable variables listed in Table 2-A.
  
- f. The Facility Permit holder shall also provide any other data necessary for calculating air contaminant emission rates as determined by the Executive Officer.
  
- g. The data generated from a monitoring system for parameters listed in subparagraphs a, b, c and d of Chapter 2, Subdivision A, Paragraph 1 shall be recorded by both (1) the remote terminal unit (RTU) and (2) strip chart recorder or electronic recorder. The RTU shall be capable of producing a printout of the stored data upon

request from the Executive Officer or designee. The strip chart recorder or alternative electronic recorder shall be located in parallel to the RTU. The strip chart recorder or alternative electronic recorder shall receive data independent of the RTU and serve as an independent tool for verifying data archived in the RTU or sent to the District Central NOx Station.

If a strip chart recorder is used, the strip chart shall have a minimum chart width of 10 inches, a readability of 0.5% of the span, and a minimum of 100 chart divisions. Alternatively, if an electronic recorder is used, the recorder shall be capable of writing data on a medium that is secure and tamper-proof. Possible media include, but are not limited to, "write-once-read-many" type or a data encryption system that does not permit encrypted data files to be altered after they have been created, without making the data inaccessible through standard vendor-provided decryption software, or without leaving traceable evidence of tampering. Also, at a minimum, the real-time sampling frequency of the electronic recorder shall be equal to or greater than the rate of data collection for the RTU. Furthermore, such recorded data shall be readily accessible upon request by the Executive Officer or designee. If software is required to access the recorded data, a copy of the software, and all subsequent revisions, shall be provided to the Executive Officer or designee at no cost. If a device is required to retrieve and provide a copy of such recorded data upon request to the Executive Officer or designee, the Facility Permit holder shall maintain and operate such a device at the facility.

The Facility Permit holder shall specify within the CEMS application, as required under Chapter 2, Subdivision A, Paragraph 2, the type of data recording system to be used in parallel to the RTU.

2. The Facility Permit holder shall by March 31, 1994 for Cycle 1 facilities and September 30, 1994 for Cycle 2 facilities, submit a CEMS plan to the Executive Officer for approval. The plan shall contain at a minimum the following items:
  - a. A list of all major sources which will have CEMS installed.
  - b. Details of the proposed Continuous Emission Monitors as well as the proposed flow monitors for each affected source.
  - c. Details of the Quality Control/Quality Assurance Plan for the CEMS.

- d. Proposed range of each CEMS and the expected concentrations of pollutants for each source.
- e. Date by which purchase order for each system will be issued.
- f. Construction schedule for each system, and date of completion of installation.
- g. Date by which CEMS certification test protocol will be submitted to the District for approval for each system.
- h. Date by which certification tests will be completed for each system.
- i. Date by which certification test results will be submitted for review by the District, for each system.
- j. Any other pertinent information regarding the installation and certification for each system.

If a CEMS plan is disapproved in whole or in part, the District staff will notify the Facility Permit holder in writing and the Facility Permit holder shall have 30 days from the date it receives the notice from the District to resubmit its plan.

- 3. The variables listed in Table 2-A shall be measured and recorded at the facility to determine mass emission and track the operation of basic and control equipment. The variables listed in Table 2-B shall be reported to the District's NO<sub>x</sub> Central Station Computer. Alternatives indicated in Tables 2-A and 2-B indicate choices which shall be specified in the Facility Permit for that equipment.
- 4. As part of the Facility Permit Application review, the Executive Officer may modify the list of Facility Permit holder-selected tracking variables.
- 5. Data on Facility Permit holder selected variables shall be made available to the District staff upon request.
- 6. Source tests shall be performed by testing firms/laboratories who have received approval from the District by going through the District's laboratory approval program.
- 7. All Relative Accuracy Test Audits (RATA) shall be performed by testing firms/laboratories who have received approval from the District by going through the District's laboratory approval program.

**B. MONITORING SYSTEMS**

**1. Information Required for Each 15-Minute Interval**

All CEMS for affected equipment shall, at a minimum, generate and record the following data points once for each successive 15-minute period on the hour and at equally spaced intervals thereafter:

- a. Nitrogen oxides concentration in the stack in units of ppmv;
- b. Oxygen concentration or carbon dioxide concentration in the stack in units of percent;
- c. Volumetric flow rate of stack gases in units of dry or wet standard cubic feet per hour (dscfh or wscfh). For affected equipment standard gas conditions are defined as a temperature at 68°F and one atmosphere of pressure;
- d. (i) Fuel flow rates in units of standard cubic feet per hour (scfh) for gaseous fuels or pounds per hour (lb/hr) for liquid fuels if EPA Method 19 is used to calculate the stack gas volumetric flow rate, and  
 (ii) Fuel type;
- e. Nitrogen oxide mass emission in units of lb/hour. The nitrogen oxide mass emissions is calculated according to the following:

$$e_i = a_i \times c_i \times 1.195 \times 10^{-7} \quad (\text{Eq. 1})$$

where:

- $e_i$  = The mass emissions of nitrogen oxides in pounds per hour.
- $a_i$  = The stack gas concentration of nitrogen oxides (ppmv).
- $c_i$  = The stack gas volumetric flow rate (scfh).

Example Calculation:

$$\begin{aligned}
 a_i &= 40 \text{ ppm} \\
 c_i &= 150,000 \text{ scfh} \\
 e_i &= 40 \times 150,000 \times 1.195 \times 10^{-7} \\
 e_i &= 0.72 \text{ lb/hr}
 \end{aligned}$$

When the CEMS uses the heat input rate and oxygen concentration to determine the nitrogen oxide mass emissions, the following equation shall be used to calculate the emissions of nitrogen oxides:

$$e_i = a_i \times [20.9 / (20.9 - b_i)] \times 1.195 \times 10^{-7} \times \sum_{j=1}^r (F_{dij} \times d_{ij} \times V_{ij}) \quad (\text{Eq. 2})$$

where:

- $e_i$  = The mass emissions of nitrogen oxides in pounds per hour
- $a_i$  = The stack gas concentration of nitrogen oxides (ppmv)
- $b_i$  = The stack gas concentrations of oxygen (%)
- $r$  = The number of different types of fuel
- $F_{dij}$  = The oxygen-based dry F factor for each type of fuel, the ratio of the gas volume of the products of combustion to the heat content of the fuel (scf/106 Btu)
- $d_{ij}$  = The fuel flow rate for each type of fuel measured every 15-minute period
- $V_{ij}$  = The higher heating value of the fuel for each type of fuel

The product ( $d_{ij} \times V_{ij}$ ) shall have units of millions of Btu per hour ( $10^6$  Btu/hr).

Equation 2 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), and the oxygen content of the stack gas is 19 percent or greater.

Example Calculation:

$$\begin{aligned}
 a_i &= 40 \text{ ppm} \\
 b_i &= 3.5\% \\
 F_{dij} &= 8710 \text{ dscf}/10^6 \text{ Btu} \\
 d_{ij} &= 5,000 \text{ dscf} \\
 V_{ij} &= 1050 \text{ Btu/scf or } 1050 \text{ mmBtu/mmscf} \\
 e_i &= a_i \times [20.9/(20.9 - b_i)] \times 1.195 \times 10^{-7} \times \sum_{j=1}^r (F_{dij} \times d_{ij} \times V_{ij}) \\
 e_i &= 40 \times [20.9/(20.9 - 3.5)] \times 1.195 \times 10^{-7} \times [8710/10^6 \times 5000 \times 1050] \\
 e_i &= 0.26 \text{ lb/hr}
 \end{aligned}$$

When the CEMS uses the heat input rate and carbon dioxide concentration to determine the nitrogen oxide mass emissions, the following equation shall be used to calculate the emissions of nitrogen oxides:

$$e_i = (a_i/t_i) \times 100 \times 1.195 \times 10^{-7} \times \sum_{j=1}^r (F_{cij} \times d_{ij} \times V_{ij}) \quad (\text{Eq. 3})$$

where:

- $e_i$  = The mass emissions of nitrogen oxides in pounds per hour.
- $a_i$  = The stack gas concentration of nitrogen oxides (ppmv).
- $t_i$  = The stack gas concentrations of carbon dioxide (%).
- $r$  = The number of different types of fuel.
- $F_{cij}$  = The carbon dioxide-based dry F factor for each type of fuel, the ratio of the dry gas volume of carbon dioxide to the heat content of the fuel (scf/10<sup>6</sup> Btu).
- $d_{ij}$  = The fuel flow rate for each type of fuel measured every 15-minute period.
- $V_{ij}$  = The higher heating value of the fuel for each type of fuel.

The product ( $d_{ij} \times V_{ij}$ ) shall have units of millions of Btu per hour (10<sup>6</sup> Btu/hr).

Example Calculation:

$$\begin{aligned}
 a_i &= 40 \text{ ppm} \\
 t_i &= 11.0\% \\
 F_{cij} &= 1040 \text{ scf}/10^6 \text{ Btu} \\
 d_{ij} &= 5,000 \text{ dscf} \\
 V_{ij} &= 1050 \text{ Btu}/\text{scf} \text{ or } 1050 \text{ mmBtu}/\text{mmscf} \\
 e_i &= a_i/t_i \times 100 \times 1.195 \times 10^{-7} \times \sum_{j=1}^r (F_{cij} \times d_{ij} \times V_{ij}) \\
 e_i &= 40/11.0 \times 100 \times 1.195 \times 10^{-7} \times [1040 \times 5000 \times 1050 \times 10^{-6}] \\
 e_i &= 0.24 \text{ lb}/\text{hr}
 \end{aligned}$$

- f. All measurements for concentrations and stack gas flow rates, and selection of F factor shall be made on a consistent wet or dry basis.
- g. CEMS status. The following status codes shall be used to report the CEMS status:
  - 1-1 VALID DATA
  - 2-2 CALIBRATION
  - 3-3 OFF LINE
  - 4-4 ALTERNATE DATA ACQUISITION (e.g., manual sampling)
  - 5-5 OUT OF CONTROL
  - 6-6 FUEL SWITCH (e.g., gas to oil, coke to coal)
  - 7-7 10% RANGE (may be used to report at default 10% valid range whenever actual concentration value is below 10%)
  - 8-8 LOWER THAN 10% RANGE (may be used to report at actual concentration value if less than 10% valid range)
  - 9-9 NON-OPERATIONAL



- h. For processes in which less than 50% of emissions are caused by fuel combustion, record the Source Classification Code (SCC) for the process conducted. SCCs are listed in the State of California Air Resources Board Document "Instructions for the Emission Data System Review and Update Report, Appendix III, Source Classification Codes and EPA Emission Factors".
- i. the count of valid data points collected.
- j. the count of data points in excess of 95% of span range of the monitor collected.

**2. Hourly Calculations**

The hourly average stack gas concentrations of nitrogen oxides and oxygen, the stack gas volumetric flow rate, the fuel flow rate and the emission rate of nitrogen oxides shall be calculated for each equipment as follows:

$$A = \frac{\sum_{i=1}^n a_i}{n} \quad (\text{for NO}_x \text{ concentration}) \quad (\text{Eq. 4})$$

$$B = \frac{\sum_{I=1}^n b_i}{n} \quad (\text{for O}_2 \text{ concentration}) \quad (\text{Eq. 5})$$

$$C = \frac{\sum_{i=1}^n c_i}{n} \quad (\text{for stack gas volumetric flow rate}) \quad (\text{Eq. 6})$$

$$D_i = \frac{\sum_{i=1}^n d_i}{n} \quad (\text{for fuel flow rates}) \quad (\text{Eq. 7})$$

Calculate D for each type of fuel firing separately.

$$E_k = \frac{\sum_{i=1}^n e_i}{n} \quad (\text{for NO}_x \text{ emissions}) \quad (\text{Eq. 8})$$

All concentrations and stack gas flow rates shall be calculated on a consistent wet or dry basis.

where:

- A = The hourly average stack gas concentration of nitrogen oxides (ppmv)
- a<sub>i</sub> = The measured stack gas concentrations of nitrogen oxides (ppmv)
- B = The hourly average oxygen stack concentration (%)
- b<sub>i</sub> = The measured stack gas concentrations of oxygen (%)
- C = The hourly average stack gas flow rate (dscfh)
- c<sub>i</sub> = The measured stack gas volumetric flow rates (dscfh)
- D = The hourly average fuel flow rates, for each type of fuel (appropriate units of volumetric flow rate for each type of fuel, e.g., scfh, gal/hr, lb/hr, bbl/hr, liters/hr, etc.)
- d<sub>i</sub> = The measured fuel flow rates for each type of fuel (appropriate units of volumetric flow rate for each type of fuel, e.g., scfh, gal/hr, lb/hr, bbl/hr, etc.)
- E<sub>k</sub> = The hourly average emissions of nitrogen oxides (lb/hr)
- e<sub>i</sub> = The measured mass emissions of nitrogen oxides in pounds per hour
- n = Number of valid data points during the hour

The values of A through E<sub>k</sub> shall be recorded for each affected piece of equipment.

**3. Daily Calculations**

a. Daily mass emissions calculation

The daily emissions of nitrogen oxides shall be calculated and recorded for each affected NO<sub>x</sub> source using the following procedure:

$$G = \sum_{k=1}^N E_k + \sum_{m=1}^P E_m + \sum_{o=1}^Q E_{st} + \sum_{r=1}^S E_{sh} \quad (\text{Eq. 9})$$

where:

- G = The daily emissions of nitrogen oxides (lb)
- E<sub>m</sub> = The hourly average emissions of nitrogen oxides using substitute data (see Chapter 2, Subdivision B, Paragraph 5, Subparagraph b and Chapter 2 Subdivision F)(lb/hr)
- E<sub>k</sub> = The hourly average emissions of nitrogen oxides using data recorded by CEMS (lbs/hr)
- E<sub>st</sub> = The hourly average emissions of nitrogen oxides during startup (lb/hr) (see Chapter 2 Subdivision G)
- E<sub>sh</sub> = The hourly average emissions of nitrogen oxides during shutdown (lbs/hr) (see Chapter 2 Subdivision G)
- N = Number of hours of valid data (see Chapter 2, Subdivision B, Paragraph 5) from the CEMS coinciding with the source operating hours
- P = Number of hours using substitute data when the source is operating
- Q = The number of hours during startup period
- S = The number of hours during shutdown period

and,

M = Number of hours during the day.

Note that: M= N + P + Q + S = 24 hours.

Example Calculation:

$E_k$	= 0.5 lb/hr	$E_{st}$	= 0 lb/hr	$Q$	= 0 hr
$E_m$	= 0.7 lb/hr	$E_{sd}$	= 0 lb/hr	$S$	= 0 hr
$N$	= 21 hr				
$P$	= 3 hr				
$M$	= 24 hr				
$G$	= (0.5 lb/hr)(21 hr) + (0.7 lb/hr)(3 hr) +				
	(0 lb/hr)(0 hr)+ (0 lb/hr)(0 hr)				
$G$	= 10.5 + 2.1 = 12.6 lb				

**4. Operational Requirements**

The CEMS shall be operated and data recorded at all times except for CEMS breakdowns and repairs. Calibration data shall be recorded during zero and span calibration checks, and zero and span adjustments. For periods of hot standby the Facility Permit holder may enter a default value for NO<sub>x</sub> emissions. Before using any default values the Facility Permit holder shall obtain the approval of the Executive Officer and must include in the CEMS applications or CEMS plans the estimates of NO<sub>x</sub> emissions, the NO<sub>x</sub> concentrations, the oxygen concentrations, and the fuel input rates or the stack gas volumetric flow rates during hot standby conditions. The Executive Officer will disapprove those emission values which do not correspond to hot standby conditions.

**5. Requirements for Valid Data Points**

Valid data points are data points from a CEMS which meets the requirements of Chapter 2, Subdivision B, Paragraph 13, and which is not out-of-control as defined in Attachment C - Quality Assurance and Quality Control Procedures. In addition, whenever specifically allowed by these RECLAIM rules, data points obtained by the methods specified in Chapter 2, Subdivision B, Paragraph 6 and Chapter 2, Subdivision B, Paragraph 7, are considered valid. Furthermore, a data point gathered by a certified CEMS except a zero value data point, shall not be valid unless it meets the requirements of Chapter 2, Subdivision B, Subparagraph (8)(a). A zero value data point is a data point gathered while the source is not operating and is within 5% of the span range from zero value.

- a. Each CEMS and component thereof shall be capable of completing a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute interval.
- b. Raw data shall be gathered from the monitors at equally spaced intervals. The Facility Permit holder shall specify, within the test

- report for a Relative Accuracy Test Audit of a CEMS, the frequency of data gathering in a 15-minute interval. This data gathering frequency shall remain the same throughout the period following the Relative Accuracy Test Audit until a subsequent Relative Accuracy Test Audit is conducted with a different specified frequency. The specified frequency shall be the frequency for data gathering to constitute continuous measurement.
- c. All valid raw data points gathered from the monitors within a 15-minute interval shall be used to compute a 15-minute average emissions data point. If only one valid data point is gathered within a 15-minute interval, that data point shall be used as the 15-minute average emission data point. No invalid data points may be used to compute the 15-minute average emission data point. A valid 15-minute average emission data point must further be based on a minimum of one valid raw data point.
  - d. Except for facilities which are required to comply with 40 CFR Part 75, the following data for each 15-minute period shall be computed for each CEMS:
    - i. the average emissions values,
    - ii. the count of valid data points, and
    - iii. the count of data points in excess of 95% of span range of the monitor.
  - e. All NO<sub>x</sub> concentration, volumetric flow, and NO<sub>x</sub> emission rate data shall be reduced to 1 hour averages. Valid hour averages shall be equally computed based on four valid 15-minute average emission data points equally spaced over each 1 hour period, commencing at 12:00 a.m., except for a maximum of four 1-hour maintenance periods in each day during which CEMS maintenance activities such as calibration, quality assurance, maintenance, or CEMS repair is conducted. During these 1-hour maintenance periods a valid hour average shall consist of at least two valid 15-minute average emission data points. A 1-hour maintenance period is defined when the operation of the CEMS is interrupted for CEMS maintenance activities at any time during any 1-hour period, and that period shall count towards the four 1-hour maintenance periods allowed regardless of the number of valid data points gathered. The CEMS shall be kept properly operational at all times unless such CEMS must be turned off for CEMS maintenance activities.
  - f. Failure of the CEMS to acquire the required number of valid 15-minute average emission data points within any 1-hour period shall result in the loss of such data for the entire 1-hour period and the Facility Permit holder shall record and report data by means of the

data acquisition and handling system for the missing hour in accordance with the applicable procedures for substituting missing data in the Missing Data Procedures in Chapter 2 Subdivision E of this document.

## **6. Alternative Data Acquisition Using Reference Methods**

- a. When valid nitrogen oxides emission data is not collected by the permanently installed CEMS, emission rate data may be obtained using District Methods 7.1 or 100.1 (for NO<sub>x</sub> concentration in the stack gas) in conjunction with District Methods 1.1, 2.1, 3.1, and 4.1 or by using District Methods 7.1 or 100.1 in conjunction with District Method 3.1 and EPA Method 19. For District Method 7.1 a minimum of 12 samples, equally spaced over a one-hour period, shall be taken. Each sample shall represent the five-minute period in which it was taken.
- b. If the Facility Permit holder chooses to use a standby CEMS (such as in a mobile van or other configuration), to obtain alternative monitoring data at such times when the permanently installed CEMS for the affected source(s) cannot produce valid data, then the standby CEMS is subject to the following requirements:
  - i. Standby CEMS shall be equivalent in relative accuracy, reliability, reproducibility and timeliness to the corresponding permanently installed CEMS.
  - ii. The Facility Permit holder shall submit a standby CEMS plan to the District for review prior to using the standby CEMS.
  - iii. District acceptance of standby CEMS data shall be contingent on District approval of the plan.
  - iv. The use of standby CEMS shall be limited to a total of 6 months for any source(s) within a calendar year.
  - v. The Facility Permit holder shall notify the District within 24 hours if the standby CEMS is to be used in place of the permanently installed CEMS.
  - vi. During the first 30 days of standby CEMS use, the Facility Permit holder shall conduct a Certified Gas Audit (CGA) of the standby CEMS.
  - vii. The Facility Permit holder shall notify the District within the 30-day period if the standby CEMS shall be used longer than 30 days.

- viii. After the first 30 days of using the standby CEMS , the Facility Permit holder shall conduct at least one RATA of the standby CEMS and the RATA shall be conducted within 90 days of the initial use of the standby CEMS.
- ix. All RATA and certification tests shall be performed by testing firms/laboratories who have received approval from the District by going through the District's laboratory approval program.
- x. Immediately prior to obtaining data from the source(s) to be monitored, the standby CEMS shall be quality assured in accordance with District Method 100.1

**7. Alternative Data Acquisition Using Process Curves or Other Means**

Process curves of NO<sub>x</sub> emission rates or other alternative means of NO<sub>x</sub> emission rate data generation may be used to obtain nitrogen oxides emission data, provided the Facility Permit holder has obtained the approval of the Executive Officer prior to using alternate means of NO<sub>x</sub> emission rate data generation. The process curves and the alternate means of NO<sub>x</sub> emission data generation mentioned in this paragraph shall not be used more than 72 hours per calendar month and may only be used if no CEMS data or reference method data gathered under Chapter 2, Subdivision B, Paragraph 6 is available. Process curves may be used on units which have air pollution control devices for the control of NO<sub>x</sub> emissions provided the Facility Permit holder submits a complete list of operating conditions that characterize the permitted operation. The conditions will be specified in the Facility Permit for that equipment. The process variables specified in the Facility Permit conditions shall be monitored by the source.

**8. Span Range Requirements for NO<sub>x</sub> Analyzers and O<sub>2</sub> Analyzers**

- a. Full scale span ranges for the NO<sub>x</sub> analyzers and O<sub>2</sub> analyzers used as part of a stack gas volumetric flow system at each source shall be set on an individual basis. The full scale span range of the NO<sub>x</sub> analyzers and O<sub>2</sub> analyzers shall be set so that all data points gathered by the CEMS lie within 10 - 95 percent of the full scale span range. However, any data points that fall below 10 percent of the full scale span range may be reported in accordance with 8(b), 8(c), or 8(d) as applicable. Missing Data Procedures as prescribed in Chapter 2, Subdivision E shall be substituted for any data points falling above 95 percent range of the full scale span range.
- b. For CEMS with RECLAIM certified multiple span ranges, the Facility Permit holder shall report data that falls below 10 percent of the higher full scale span range and above 95 percent of the lower full scale span range, at the 10 percent value of the higher full scale span range.
  - i. The Facility Permit holder electing (or who may be required) to measure concentrations that fall below 10 percent of the higher full scale span value of any range (other than the lowest vendor guaranteed span range), shall perform a linearity test according to the procedure in Attachment G, Section B “Linearity Error”, to satisfy the performance requirements.
- c. In the event that any data points gathered by the CEMS fall below 10 percent of the full scale span range, the Facility Permit holder may elect to report NO<sub>x</sub> concentrations at the 10 percent span range value.
- d. In the event that any data points gathered by the CEMS fall below 10 percent of the lowest vendor guaranteed full scale span for that CEMS (defined as the lowest full scale span range that the vendor guarantees to be capable of meeting all current certification requirements of RECLAIM in Rule 2012 Protocols, Appendix A), the Facility Permit holder may elect to use the following procedures to measure and report NO<sub>x</sub> concentrations.
  - i. Report all monitored concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range for that CEMS at the 10 percent lowest vendor guaranteed span range value, or
  - ii. Report all monitored concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span



range for that CEMS at the actual measured value, provided that the CEMS meets the Alternative Performance Requirements prescribed in Attachment G.

The Alternative Performance Requirements prescribed in Attachment G shall be imposed in place of the semiannual assessments as required pursuant to Attachment C (B)(2).

- e. The Facility Permit holder electing to use (B)(8)(c) and (B)(8)(d)(i) to report NO<sub>x</sub> concentrations that fall below 10 percent of full scale span range or 10 percent of the lowest vendor guaranteed full scale span range for that CEMS, shall meet the following:
  - i. In the event any of the specified testing requirements as prescribed in Attachment C (B)(2) are not met, the Facility Permit holder shall no longer use (B)(8)(c) or (B)(8)(d)(i) to report NO<sub>x</sub> concentrations below 10 percent of the full scale span range until compliance is demonstrated. Missing Data Procedures specified in Chapter 2, Subdivision E shall apply retroactively from the date in which the Facility Permit holder last demonstrated compliance with Attachment C (B)(2).
  - ii. From September 8, 1995 to the beginning of the compliance year (January 1, 1995 for Cycle 1 and July 1, 1995 for Cycle 2), the Facility Permit holder may retroactively report concentrations that fell below 10 percent of the full scale span range at the 10 percent span range value, in lieu of using the Missing Data Procedures specified in Chapter 2, Subdivision E.
- f. The Facility Permit holder electing to use (B)(8)(d)(ii) to measure and report NO<sub>x</sub> concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range for that CEMS, shall meet the following:
  - i. Submit an application, with the appropriate fees, supporting documentation, and if necessary test protocols to the Executive Officer or designee in order to amend their CEMS Plan to include the selected criteria. The application shall be approved by the Executive Officer or designee prior to using (B)(8)(d)(ii).
  - ii. (B)(8)(d)(ii) may only be chosen after initial tests as prescribed in Attachment G are completed and demonstrate

that the CEMS is capable of measuring NO<sub>x</sub> concentrations at below 10 percent of the full scale span range.

- iii. In the event any of the specified reporting and testing requirements for (B)(8)(d)(ii) as prescribed in Attachment G are not met, the Facility Permit holder shall no longer use (B)(8)(d)(ii) to measure NO<sub>x</sub> concentrations below 10 percent of the lowest vendor guaranteed full scale span range for that CEMS until compliance with (B)(8)(d)(ii) is demonstrated. Missing Data Procedures described in Chapter 2, Subdivision E shall apply retroactively from the date in which the Facility Permit holder last demonstrated compliance with (B)(8)(d)(ii), unless the Facility Permit holder can demonstrate compliance with Attachment C (B)(2), then the Facility Permit holder may report concentrations retroactively at the 10 percent lowest vendor guaranteed span range value and may continue to report at the 10 percent lowest vendor guaranteed span range value until compliance is demonstrated with (B)(8)(d)(ii).
- iv. In the event that the NO<sub>x</sub> concentrations are at levels such that the Facility Permit holder cannot complete the low level spike recovery test or alternative reference method test for low level concentrations pursuant to Attachment G, then the Facility Permit holder may elect to report all monitored concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range at the 10 percent lowest vendor guaranteed full scale span range value in lieu of using Missing Data Procedures..
- v. Upon approval of the CEMS application to use (B)(8)(d)(ii), the Facility Permit holder may retroactively report concentrations at the 10 percent lowest vendor guaranteed span range value in lieu of using the Missing Data Procedures specified Chapter 2, Subdivision E, from the beginning of the compliance year for which the application was submitted up until the application approval date.
- g. Up until July 1, 1996, Facility Permit holders whose CEMS have been provisionally or finally certified prior to September 8, 1995, and have used Missing Data Procedures as prescribed in Chapter 2, Subdivision E to report mass emissions that have been measured by the CEMS in the 10 percent to less than 20 percent of full scale span range, may report the actual concentrations measured in this range as valid data retroactively from the beginning of the current compliance year.

**9. Calibration Drift Requirements**

The CEMS design shall allow determination of calibration drift (both negative and positive) at zero-level (0 to 20 percent of full scale) and high-level (80 to 100 percent of full scale) values. Alternative low-level and high-level span values may be allowed with the prior written approval of the Executive Officer.

**10. Relative Accuracy Requirements for Stack Gas Volumetric Flow Measurement Systems**

The stack gas volumetric flow measurement system shall meet a relative accuracy requirement of being less than or equal to 15 percent of the mean value of the reference method test data in units of standard cubic feet per hour (scfh). Relative accuracy is calculated by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2. Alternatively, for cases where the mean stack gas velocity obtained by reference method test is less than 15 feet per second, the flow relative accuracy requirement may be met if equation 9a is satisfied.

$$|d| + |cc| \leq 2 \text{ feet per second} \times A \times cf \quad (\text{Eq. 9a})$$

Where

d = average of differences between stack gas volumetric flow measurement system reading and the corresponding reference method test data in units of standard cubic feet per hour.

cc = confidence coefficient as determined by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2.

A = Stack cross sectional area in the plane of measurement.

cf = conversion factor to standard cubic feet per hour.

The volumetric flow measurement system shall also meet the specifications in Appendix B of these protocols. Prior to conducting a certification or re-certification test, the Facility Permit holder shall perform a flow profile study to determine the acceptability of the potential flow monitor location and to determine the number and location of flow sampling points required to obtain a representative flow value. The results of such study shall be part of the certification test report.

There shall be a minimum of nine sets of tests conducted. All data collected shall be submitted to the Executive Officer and shall be used to determine relative accuracy except data may be rejected per the technical guidance or for unusual problems and/or occurrences during testing (e.g., process upsets, CEMS malfunction, testing failure) if the number of tests exceeds nine sets. Any exclusion of data must be substantiated with appropriate documentation and is subject to approval by the Executive Officer.

In situations where the stack gas velocity is low (less than 10 ft./sec.) and the above relative accuracy procedure provides results that have a low level of accuracy and precision, the relative accuracy of the fuel flow meter may be determined according to one of the following alternatives:

- a. Calibrate the facility CEMS fuel flow meter in accordance with the procedures outlined in 40 CFR Part 75, Appendix D, either in-line or off-line.
- b. Calibrate a test fuel flow meter in accordance with the procedures outlined in 40 CFR Part 75, Appendix D. Use the calibrated test fuel meter to calibrate the facility CEMS fuel flow meter to the same level of accuracy and precision as in 40 CFR Part 75, Appendix D.
- c. Calibrate a test fuel flow meter according to the procedure outlined in (B)(10)(b) and install this meter in line with the facility CEMS fuel flow meter and use 40 CFR Part 60, Method 19 (F-factor approach) to determine relative accuracy to the same level of accuracy as in (B)(10).

Other alternative techniques (e.g., tracer gas approach, electronic micro-manometer) may be used to determine relative accuracy of fuel flow meters where low stack volumetric flow rates exist, if these techniques are approved in writing by the District.

**11. Relative Accuracy Requirements for Mass Emission Rate Measurement**

The mass emission rate measurement shall meet a relative accuracy requirement of being less than or equal to 20 percent of the mean value of the reference method test data in units of lb/hr. Relative accuracy is calculated by the equations in Section 8 of 40 CFR, Part 60, Appendix B, Performance Specification 2. The emission rate measurement shall also meet the specifications in Attachment-B of this document. Alternatively, for cases where the mean NOx concentration obtained by reference test method is less than or equal to 5.0 ppm, or the mean stack gas velocity obtained by reference test method is less than 15 feet per second, the mass emission rate measurement relative accuracy requirement may be met if equation 9b is satisfied.

$$|d| + |cc| \leq (c \times s \times A) \times cf \tag{Eq. 9b}$$

Where

d = average of differences between mass emission rate determined by the CEMS and the corresponding reference method test data in units of pounds per hour.

cc = confidence coefficient as determined by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2.

A = Stack cross sectional area in the plane of measurement.

c = 1.0 ppm 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.

cf = conversion factor to pounds per hour.

There shall be a minimum of nine sets of tests conducted. All data collected shall be submitted to the Executive Officer and shall be used to determine relative accuracy except data may be rejected per the technical guidance or for unusual problems and/or occurrences during testing (e.g., process upsets, CEMS malfunction, testing failure) if the number of tests exceeds nine sets. Any exclusion of data must be substantiated with appropriate documentation and is subject to approval by the Executive Officer.

**12. Relative Accuracy Requirements for Analyzers**

The nitrogen oxides gas analyzers shall meet a relative accuracy requirement of being less than or equal to 20 percent of the mean value of the reference method test data in units of ppmv for nitrogen oxides. Relative accuracy is calculated by the equations in Section 8 of 40 CFR, Part 60, Appendix B, Performance Specification 2. Alternatively, for cases where the mean value of the reference method test data is less than 5 ppmv, the NO<sub>x</sub> concentration relative accuracy requirement may be met if equation 9c is satisfied.

$$|d| + |cc| <= 1.0 \text{ ppmv} \tag{Eq. 9c}$$

Where:

d = average of differences between the NO<sub>x</sub> concentration measurement system reading and the corresponding reference method test data in units of ppmv.

cc = confidence coefficient as determined by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2.

The oxygen and carbon dioxide gas analyzers shall meet a relative accuracy requirement of being less than or equal to 20 percent of the mean value of the reference method test data in units of volume percent. Relative accuracy is calculated by the equations in Section 8 of 40 CFR, Part 60, Appendix B, Performance Specification 2. Alternatively, for cases where the mean value of the reference method test data for oxygen or carbon dioxide concentration is less than 5.0 volume percent, the

relative accuracy requirement for oxygen or carbon dioxide concentration may be met if equation 9d is satisfied.

$$|d| + |cc| \leq 1.0 \text{ volume percent} \quad (\text{Eq. 9d})$$

Where:

d = average of differences between the oxygen or carbon dioxide concentration measurement system reading and the corresponding reference method test data.

cc = confidence coefficient as determined by the equations in Section 8 of 40 CFR Part 60, Appendix B, Performance Specification 2.

Units using monitors with more than one span range must perform the calibration error test on all span ranges. This portion of the CEMS shall also meet the specifications in Attachment B (BIAS TEST) of these protocols.

There shall be a minimum of nine sets of tests conducted. All data collected shall be submitted to the Executive Officer and shall be used to determine relative accuracy except data may be rejected per the technical guidance or for unusual problems and/or occurrences during testing (e.g., process upsets, CEMS malfunction, testing failure) if the number of tests exceeds nine sets. Any exclusion of data must be substantiated with appropriate documentation and is subject to approval by the Executive Officer.

**13. Certification**

**a. Provisional Approval**

The Facility Permit holder of a major source shall submit, certification test results and supporting documents to the District for each CEMS within the applicable time period required by Rule 2012 to install, operate, and maintain a CEMS. The Facility Permit holder shall certify that the results show that the CEMS has met all the requirements of the protocol if its submission is after August 31, 1994. Upon receipt of the test results and the certification that the CEMS is in compliance, the District will issue a Provisional Approval. The effective date of Provisional Approval shall be the last date of source testing if the test results are submitted within 60 days from the last date of source testing. However, if the test results are submitted more than 60 days after the last date of source testing, the effective date of Provisional Approval shall be the date of submittal of the testing results. After the Provisional Approval, the Facility Permit holder shall comply with the requirements under Attachment C - Quality Assurance and Quality Control Procedures.

b. Final Certification

After the Provisional Approval, all the data measured and recorded by the CEMS will be considered valid quality assured data provided that the Executive Officer does not issue a notice of disapproval of final certification. Final certification of the CEMS will be granted if the certification test results show that the CEMS has met all the requirements of the protocol, including Subdivision B, Paragraphs 10, 11, and 12 of this Chapter.

In the case where the test results show that the CEMS does not meet all the requirements of the rule, the Executive Officer will disapprove the final certification. If this occurs, the previously considered valid data from the date of Provisional Approval shall be replaced by data as specified in subdivision (E) - Missing Data Procedures. This procedure shall be used until the time that new certification test results are submitted, and the CEMS has received final approval by the District. After the Provisional Approval, the Facility Permit holder shall comply with the requirements under Attachment C - Quality Assurance and Quality Control Procedures. Data collected by the CEMS shall not be valid unless the CEMS is demonstrated to meet the requirements under Attachment C.

c. Re-certification

The Facility Permit holder shall conduct tests to re-certify a certified CEMS whenever the CEMS is modified in accordance with paragraph (B)(16).

**14. Sampling Location Requirements**

Each affected piece of equipment shall have sampling locations which meet the "Guidelines for Construction of Sampling and Testing Facilities" in the District Source Test Manual. If an alternate location (not conforming to the criteria of eight duct diameters downstream and two diameters upstream from a flow disturbance) is used, the absence of flow disturbance shall be demonstrated by using the District method in the Source Test Manual, Chapter X, Section 1.4, or 40 CFR, Part 60, Appendix A, Method 1. Section 2.5 and the absence of stratification shall be demonstrated using District method in the Source Test Manual, Chapter X, Section 13.

**15. Sampling Line Requirement**

The CEMS sample line from the CEMS probe to the sample conditioning system shall be heated to maintain the sample temperature above the dew

point of the sample. This requirement does not apply to dilution probe systems where no sample condensation occurs.

#### **16. Recertification Requirements**

The District will reevaluate the monitoring systems at any affected piece of equipment where changes to the basic process equipment or air pollution control equipment occur, to determine the proper full span range of the monitors. Any monitor system requiring change to its full span range in order to meet the criteria in Chapter 2, Subdivision B shall be recertified according to all the specifications in Chapter 2, Subdivision B, Paragraphs 8, 10, 11, and 12, as applicable, including the relative accuracy tests, the calibration drift tests, and the calibration error tests. A new CEMS application shall be submitted for each CEMS which is reevaluated.

The recertification for any reevaluated CEMS, including existing, modified, or new CEMS, monitoring an existing or modified major source that was previously permitted under RECLAIM, shall be completed within 90 days of the start-up of the newly changed or modified equipment monitored by such CEMS. The Facility Permit holder shall calculate and report NO<sub>x</sub> emission data for the period prior to the CEMS recertification by means of the automated data acquisition and handling system according to the following procedures:

- a. For any CEMS which is recertified within 90 days of start-up of the newly modified equipment, the emission data recorded by the CEMS prior to the recertification would be considered valid and shall be used for calculating and reporting NO<sub>x</sub> emissions for the equipment it serves.
- b. For any CEMS which is not recertified within 90 days of start-up of the newly modified equipment, the 90th percentile emission data (lbs per day) for the previous 90 unit operating days recorded by the CEMS prior to the recertification shall be used for calculating and reporting NO<sub>x</sub> emissions for the equipment it serves.

#### **17. Quality Assurance Procedures for Analyzers**

The quality assurance and quality control requirements for analyzers, flow monitors, and NO<sub>x</sub> emission rate systems are given in Attachment C (QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES) of these protocols. The quality assurance plans required by Attachment C of these protocols shall be submitted along with the CEMS certification application to the District for the approval of the Executive Officer. Source test and monitoring equipment inspection reports required by the Protocols shall be kept on-site for at least three



years. The reference method tests are those methods in Chapter 8 - Reference Methods of these protocols. Any CEMS which is deemed out-of-control by Attachment C of these protocols shall be corrected, retested by the appropriate audit procedure, and restored to in-control condition within 24 hours after being deemed out-of-control. If the CEMS is not in-control at the end of the 24-hour period, the CEMS data shall be gathered using the methods in Chapter 2, Subdivision B, Paragraph 6 and Chapter 2, Subdivision B, Paragraph 7 of these requirements or using the Missing Data Procedures in Chapter 2 Subdivision E. All data which is gathered in order to comply with Attachment C of these protocols shall be maintained for three years and be made available to the Executive Officer upon request. Any such data which is invalidated shall be identified and reasons provided for any data invalidation. The nitrogen oxides and oxygen monitors shall also meet the specifications in Attachment B (BIAS TEST) of these protocols.

#### **18. Quality Assurance for Fuel Flow Meters**

Fuel flow measuring devices used for obtaining stack flow in conjunction with F-factors shall be tested as installed for relative accuracy using reference methods to determine stack flow.

If the flow device manufacturer has a method or device that permits the fuel flow measuring device to be tested as installed for relative accuracy, the Facility Permit holder shall request approval from the Executive Officer. Approval will be granted in cases where the Facility Permit holder can demonstrate to the satisfaction of the Executive Officer that no suitable testing location exists in the exhaust stacks or ducts and that it would be an inordinate cost burden to modify the exhaust stack configuration to provide a suitable testing location. The method or device used for relative accuracy testing shall be traceable to NIST standards. This method shall be used only if natural gas, fuel oil, or other fuels can be shown, by the Facility Permit holder to have stable F-factors and gross heating values, or if the Facility Permit holder measures the F-factor and gross heating value of the fuel. A stable F-Factor is defined as not varying by more than +/-2.5% from the constant value used for F-Factor. For the fuels listed in 40 CFR 60, Appendix A, Method 19, Table 19-1, the F-Factors are assumed to be stable at the value cited in Table 19-1. Any F-Factor cited in Regulation XX shall supersede the f-Factor in Table 19-1. For fuels not listed in the citations above, but which the Facility Permit holder can demonstrate that the source-specific F-Factor meets the same stability criteria, periodic reporting of F-Factor may be accepted and the adequacy of the frequency of analyses shall be demonstrated by the facility such that the probability that any given analysis will differ from the previous analysis by more than 5% (relative to the previous analysis) is less than 5%. Analysis records shall be maintained, including all charts and laboratory notes.

**19. Calibration Gas Traceability**

All calibration gases used during certification tests and quality assurance and quality control activities shall be NIST/EPA approved standard reference materials (SRM), certified reference materials (CRM), or shall be certified according to "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards," September 1997, EPA 600/R-97/121 or any subsequent version published by EPA.

**20. Relative Accuracy Test Audits Report Submittal**

A test report shall be submitted to the District for each semi-annual or annual assessment test of a CEMS as required under Paragraph (B)(2) of Attachment C - Quality Assurance and Quality Control Procedures. Such report shall be submitted on or before the end of the quarter following the date of a required test.

**21. Concentration Stratification**

- a. The owner or operator shall demonstrate at the time of certification and re-certification the absence of stratification for locating a facility CEMS gas sampling probe through testing performed according to the method in Chapter X, "Non-Standard Methods and Techniques", of the District Source Testing Manual. The number of tests shall be determined as follows:
  - i. A minimum of one test shall be conducted 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;
  - ii. A minimum of two tests shall be conducted if the equipment operates between 20 and 50 percent load range for at least 80 percent of the time; or,
  - iii. A minimum of three tests shall be conducted if the equipment operates outside of the criteria in clauses (i) and (ii) above.

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, the owner or operator 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. The CEMS sampling probe should be located in the stack at least one-third of the stack diameter. The RM 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.

- b. If testing demonstrates the presence of stratification, the owner or operator shall elect one of the following alternatives:
  - i. The owner or operator may use a single point sampling probe, 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:
    - I. Then the CEMS sampling probe may be located at any point within the stack except any points that are adjacent to the stack wall or adjacent to either the highest measured concentration (time normalized) or the lowest measured concentration (time normalized), or
    - II. 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 locate the CEMS sampling probe 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).
  - ii. The owner or operator may use a single point sampling probe, if there exists a representative CEMS probe location such that all of the following criteria are met:
    - I. Each traverse point concentrations is within 10.0% of the average of all traverse point concentrations (time normalized), or the difference between each traverse concentration and the average of all traverse point concentrations is less than or equal to 1.0 ppm, and
    - II. at least one traverse point concentration, not located next to the stack or duct wall, is within 10.0% of each adjacent traverse point concentration, or the difference between each traverse point concentration and the average of all traverse point concentrations is less than or equal to 1.0 ppm, whichever is greater, and,
    - III. if more than one traverse point meets the criteria listed in subclause (ii)(II), the CEMS probe shall be located at (or as near as practical) the traverse point with minimum adjacent traverse point concentration fluctuations as determined in section (ii)(II), above.

- iii. The owner or operator may use a multipoint sampling probe and determine a representative multiple point sampling configuration as approved by the Executive Officer.
- iv. The owner or operator may elect to modify the stack and/or CEMS sampling probe location and retest for the absence of stratification.

## **C. REPORTING PROCEDURES**

### **1. Interim Reporting Procedures**

- a. From January 1, 1994 until December 31, 1994 (Cycle 1 facilities) and July 1, 1994 until June 30, 1995 (Cycle 2 facilities), the Facility Permit holder shall be allowed to use an interim procedure for data reporting and storage. The Facility Permit holder shall submit as part of the Facility Permit application, the methodology for interim data reporting and storage. The Facility Permit application shall be subject to the approval of the Executive Officer and shall, at a minimum, meet the requirements of Chapter 2, Subdivision C, Paragraph 1 Subparagraphs b, c, and d
- b. All the data required in Chapter 2, Subdivision C, Paragraph 1, Subparagraphs c and d shall be made available to the Executive Officer.
- c. For each piece of equipment the following information shall be stored on site and be made available to the Executive Officer upon request:
  - i. Calendar dates covered in the reporting period;
  - ii. Each monthly emissions (lb NO<sub>x</sub>/month) and each hourly emissions (lb NO<sub>x</sub>/hour);
  - iii. Identification of the operating hours for which a sufficient number of valid data points has not been taken, reasons for not taking sufficient data, and a description of corrective action taken;
  - iv. Identification of F<sub>d</sub> factor for each type of fuel used for calculations and the type of fuel burned;
- d. The following information for the entire facility shall be on a monthly basis in a format approved by the Executive Officer:
  - i. Calendar dates covered in the reporting period;

- ii. The sum of the daily emissions (lb NO<sub>x</sub>/day) from all NO<sub>x</sub> RECLAIM sources.
- e. All data required by Chapter 2, Subdivision C, Paragraph 1, Subparagraphs c and d shall be recorded and/or transmitted to the District in a format specified by the Executive Officer.

**2. Final Reporting Procedures**

- a. On and after January 1, 1995 (Cycle 1 facilities) and July 1, 1995 (Cycle 2 facilities), the RTU installed at each location shall be used to electronically report total daily mass emissions of NO<sub>x</sub> and daily status codes to the District Central NO<sub>x</sub> Station.
- b. On and after January 1, 1995 (Cycle 1 facilities) and July 1, 1995 (Cycle 2 facilities), the Facility Permit holder shall submit to the Executive Officer a Monthly Emissions Report in the manner and form specified by the Executive Officer within 15 days following the end of each calendar month.
- c. On and after January 1, 1995 (Cycle 1 facilities) and July 1, 1995 (Cycle 2 facilities), all or part of the interim data storage systems shall remain as continuous backup systems.
- d. An alternate backup data storage system may be implemented, upon request.

**D. ALTERNATIVE PROCEDURES FOR EMISSION STACK FLOW RATE DETERMINATION**

**1. Multiple Sources Venting to a Common Stack**

In the event that more than one source vents to a common stack, the alternative reference method for determining individual source flow rates shall use the F-factors in EPA Method 19 and the following equation:

$$c_i = [20.9/(20.9 - b_i)] \times \sum_{j=1}^r (F_{dij} \times d_{ij} \times V_{ij}) \quad (\text{Eq. 10})$$

where:

- c<sub>i</sub> = The stack gas volumetric flow rate for the individual source(scfh),
- b<sub>i</sub> = The stack gas concentration of oxygen ( percent),
- F<sub>dij</sub> = The oxygen-based dry F factor for each type of fuel, the ratio of the dry gas volume of the products of combustion to the heat content of the fuel (scf/mm Btu)

$d_{ij}$  = The fuel flow rate for each type of fuel for individual source measured every 15-minute period

$V_{ij}$  = The higher heating value of the fuel for each type of fuel

The product  $d_{ij} \times V_{ij}$  shall have units of millions of Btu per hour (mmBtu/hr)

The measurement of wet concentration and wet F factor shall be allowed provided that wet concentration of  $NO_x$  is measured.

Example Calculation:

$b_i$  = 4.2 percent  $O_2$

$F_{dij}$  = 8710 dscf/ $10^6$  Btu

$d_{ij}$  = 3000 dscfh

$V_{ij}$  = 1050 Btu/scf

$c_i$  =  $[20.9/(20.9 - 4.2)] \times [(8710/10^6)(3000)(1050)$

$c_i$  = 34,337 dscfh

This method may be used for applicable sources before and after the interim period mentioned in Chapter 2, Subdivision C, Paragraph 1. The orifice plates used in each affected piece of equipment vented to a common stack shall meet the requirements in Chapter 2, Subdivision D, Paragraph 2.

**2. Quality Assurance for Orifice Plate Measurements**

Each orifice plate used to measure the fuel gas flow rate shall be checked once every 12 months using Reference Methods. If the orifice plate cannot be checked using Reference Methods, it may be checked using other methods that can show traceability to NIST standards. If the orifice plate cannot be checked by Reference Methods or other methods that can show traceability to NIST standards, the orifice plate shall be removed from the gas supply line for an inspection once every 12 months, and the following inspection procedure shall be followed:

- a. Each orifice plate shall be visually inspected for any nicks, dents, corrosion, erosion, or any other signs of damage according to the orifice plate manufacturer's specifications.
- b. The diameter of each orifice shall be measured using the method recommended by the orifice plate manufacturer.

- c. The flatness of the orifice plate shall be checked according to the orifice manufacturer's instructions. The departure from flatness of an orifice plate shall not exceed 0.010 inches per inch of dam height  $(D-d/2)$  along any diameter. Here,  $D$  is the inside pipe diameter, and  $d$  is the orifice diameter at its narrowest constriction.
- d. The pressure gauge or other device measuring pressure drop across the orifice shall be calibrated against a manometer, and shall be replaced if it deviates by more than  $\pm 2$  percent across the range.
- e. The surface roughness shall be measured using the method recommended by the orifice plate manufacturer. The surface roughness of an orifice plate shall not exceed 50 microinches.
- f. The upstream edge of the measuring orifice shall be square and sharp so that it shall not show a beam of light when checked with an orifice gauge.
- g. In centering orifice plates, the orifice shall be concentric with the inside of the meter tube or fitting. The concentricity shall be maintained within 3 percent of the inside diameter of the tube or fitting along all diameters.
- h. Any other calibration tests specified by the orifice manufacturer shall be conducted at this time.

If an orifice plate fails to meet any of the manufacturer's specifications, it shall be replaced within two weeks of the inspection.

## **E. MISSING DATA PROCEDURES**

The following Missing Data Procedures shall be used to determine substitute data whenever a valid hour of  $\text{NO}_x$  emission data has not been obtained or recorded.

### **1. Procedures for Missing $\text{NO}_x$ Concentration Data**

For each equipment, whenever a valid hour of  $\text{NO}_x$  pollution concentration data has not been obtained or recorded, the Facility Permit holder shall provide substitute data using the procedures below. Alternatively, a facility may provide  $\text{NO}_x$  pollution concentration missing data using the procedure in 40 CFR Part 75 Subpart D for  $\text{SO}_2$  emissions (in lb/hr) if the relative accuracy of the pollutant analyzer and flow measurement system during the last CEMS certification test and/or RATA are both less than 10 percent.

- a. The Facility Permit holder shall calculate on a daily basis the percent data availability from the  $\text{NO}_x$  pollutant concentration monitoring analyzer according to the following procedures:

- i. Calculate on a daily basis a rolling percentage of the operating hours of each equipment that each concentration monitoring system was available for the period from the date the NO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.
- ii. Record on a daily basis the percent annual concentration monitor availability using the following equation:

$$W = Y/Z \times 100\% \quad (\text{Eq.13})$$

where:

- W = the percent annual monitor availability
- Y = the total operating hours for which the monitor provided quality-assured data during the period from the date the NO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.
- Z = the total operating hours of the affected piece of equipment during the period from the date the NO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.



Example Calculation:

$$\begin{aligned}
 Y &= 1,680 \text{ hrs} \\
 Z &= 2,160 \text{ hrs} \\
 W &= Y/Z \times 100\% \\
 W &= (1,680/2,160) \times 100\% \\
 W &= 77.78 \text{ percent}
 \end{aligned}$$

- b. Whenever the percent annual monitor availability is 95 percent or more, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - i. For a missing data period less than or equal to 24 hours, substitute data shall be calculated using the 1N Procedure in Attachment A. If insufficient data is available to perform this calculation, substitute data shall be calculated pursuant to clause E(1)(b)(ii).
  - ii. For a missing data period greater than 24 hours, substitute data shall be calculated using the maximum hourly concentration recorded by the concentration monitor for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(1)(c)(i)(III).
- c. i. Whenever the percent annual monitor availability is 90-percent or more but less than 95-percent, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - I. For a missing data period of less than or equal to 3 hours, substitute data shall be calculated using the average of the recorded concentration for the hour immediately before the missing data period and the hour immediately after the missing data period. If no emissions occurred during the hour immediately before the missing data period or the hour immediately after the missing data period, substitute data shall be calculated pursuant to clause E(1)(c)(i)(II).
  - II. For a missing data period of more than 3 hours but less than or equal to 24 hours, substitute data shall be calculated using the maximum hourly



- initial allocations discounted by any control efficiency, or based on source test data. In determining a control efficiency, the facility permit holder may use source test data, or the default control efficiency as listed in Table 3-E.
- iv. Retroactively from January 1, 1995 and ending June 30, 1995, for Cycle 1 Facility Permit holders with major NO<sub>x</sub> sources that do not have an approved RECLAIM certified CEMS, may calculate NO<sub>x</sub> daily mass emissions in lieu of the procedures specified in the above clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii), using (1) the emission factor specified in Table 1 of Rule 2002 or any alternative factor used in the determination of initial allocations or specified in the facility permit and (2) the totalized fuel usage or process throughput.
  - v. Facility Permit holders with NO<sub>x</sub> major sources which demonstrate to the satisfaction of the Executive Officer or designee that standard equipment is not available for measuring exhaust emissions for the purpose of RECLAIM CEMS certification may submit an application by December 31, 1995 to use an alternative exhaust gas and/or pollutant concentration measuring equipment. Such equipment must employ commercially available technology, and must be demonstrated to meet all the requirements of CEMS certification. Upon approval of the application, the Facility Permit holder may calculate NO<sub>x</sub> daily mass emissions in lieu of the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii), using the alternate method of (1) the emission factor specified in the facility permit and (2) the totalized fuel usage or process throughput. Such calculation of NO<sub>x</sub> mass emissions may be done retroactively from July 1, 1995 and ending December 31, 1997 or until the CEMS is finally certified, whichever is earlier. The alternate method of calculating mass emissions shall be applied after the proposed equipment has been approved by the Executive Officer. If the CEMS is not certified by December 31, 1997, then NO<sub>x</sub> daily mass emissions shall be calculated by the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii) retroactive to July 1, 1995.
  - vi. If the Facility Permit holder demonstrates that standard equipment is not available but alternative equipment is commercially available as set forth in (E)(1)(d)(v) and also demonstrates to the satisfaction of the Executive Officer or designee that their CEMS cannot be certified because (1)

there is an inordinate cost burden for flow monitoring as specified under (B)(11) and (2) that the Reference Methods, as specified in Rule 2012(j)(1) and Appendix A, cannot be applied because no suitable testing location exists in the exhaust stacks or ducts, then the Facility Permit holder may submit an alternative CEMS plan for certification by December 31, 1995. This plan must demonstrate that the proposed monitoring system complies with all other requirements of CEMS certification and is the most technically feasible in measurement accuracy. Until the alternative CEMS is certified or up until December 31, 1997, whichever is earlier, and retroactive to July 1, 1995, the Facility Permit holder may calculate NO<sub>x</sub> daily mass emissions in lieu of the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii), using the alternate method of (1) the emission factor specified in the facility permit and (2) the totalized fuel usage or process throughput. If the CEMS is not certified by December 31, 1997, then NO<sub>x</sub> daily mass emissions shall be calculated by the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii).

## **2. Procedures for Missing Stack Exhaust Gas Flow Rate Data**

For each equipment, whenever a valid hour of stack exhaust gas flow rate data has not been obtained or recorded, the Facility Permit holder shall provide substitute data using the procedures below. Alternatively, a facility may provide stack exhaust gas flow rate data using the procedure in 40 CFR Part 75 Subpart D if the relative accuracy of the pollutant analyzer, flow measurement system, and emission rate measurement during the last CEMS certification test and/or RATA are all less than 10 percent.

- a. The Facility Permit holder shall calculate on a daily basis the percent data availability from the flow monitoring system according to the following procedures:
  - i. Calculate on a daily basis a rolling percentage of the operating hours of each equipment that each flow monitoring system was available for the period from the date the NO<sub>x</sub> pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.

- ii. Record on a daily basis the percent annual flow monitor availability using the following equation:

$$W = Y/Z \times 100\% \quad (\text{Eq. 12})$$

where:

W = the percent annual flow monitor availability

Y = the total operating hours for which the monitor provided quality-assured data during the period from the date the NOx pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.

Z = the total operating hours of the affected piece of equipment during the period from the date the NOx pollutant concentration monitoring analyzer was provisionally certified or 365 days prior to the current date (not counting the current day), whichever date is later, to the day previous to the current date.

Example Calculation:

$$\begin{aligned}
 Y &= 1,680 \text{ hrs} \\
 Z &= 2,160 \text{ hrs} \\
 W &= Y/Z \times 100\% \\
 W &= (1,680/2,160) \times 100\% \\
 W &= 77.78 \text{ percent}
 \end{aligned}$$

- b. Whenever the percent annual flow monitor availability is 95 percent or more, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.

- i. For a missing data period less than or equal to 24 hours, substitute data shall be calculated using the 1N Procedure in Attachment-A. If insufficient data is available to perform this calculation, substitute data shall be calculated pursuant to clause E(2)(b)(ii).

- ii. For a missing data period greater than 24 hours, substitute data shall be calculated using the maximum hourly flow recorded by the flow monitor for the previous 30 days. If

no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(2)(c)(iii).

- c. Whenever the percent annual flow monitor availability is 90-percent or more but less than 95-percent, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
  - i. For a missing data period of less than or equal to 3 hours, substitute data shall be calculated using the average of the recorded flow rate for the hour immediately before the missing data period and the hour immediately after the missing data period. If no emissions occurred during the hour immediately before the missing data period or the hour immediately after the missing data period, substitute data shall be calculated pursuant to clause E(2)(c)(ii).
  - ii. For a missing data period of more than 3 hours but less than or equal to 24 hours, substitute data shall be calculated using the maximum hourly flow rate recorded by the flow monitor for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(2)(c)(iii).
  - iii. For a missing data period of greater than 24 hours, substitute data shall be calculated using the maximum hourly flow rate recorded by the flow monitor for the previous 365 days. If no emissions occurred during the previous 365 days, substitute data shall be calculated pursuant to subparagraph E(2)(d).
- d. Whenever the percent annual flow monitor availability is less than 90 percent, substitute data shall be calculated using the highest hourly flow rate recorded during the service of the monitoring system. For the purpose of this subparagraph, service of the monitoring system shall start from the initial certification date of the analyzer or the date when a decrease in the valid range of the monitoring system is approved by the Executive Officer.

### **3. Procedures for Missing Stack Exhaust Gas Flow Rate Data and Missing NO<sub>x</sub> Concentration Data**

For each equipment, whenever a valid hour of both stack exhaust gas flow rate data and NO<sub>x</sub> pollution concentration data have not been obtained or recorded, the Facility Permit holder shall provide substitute data using emissions data and the procedures below.

- 
- a. The Facility Permit holder shall calculate and record on a daily basis the percent annual emission availability. The percent annual emission availability shall be equal to the lesser of the percent annual concentration monitor availability as determined in subparagraph E(1)(a) or the percent annual flow monitor availability as determined in subparagraph E(2)(a).
  - b. Whenever the percent annual emission availability is 95 percent or more, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
    - i. For a missing data period less than or equal to 24 hours, substitute data shall be calculated using the 1N Procedure in Attachment-A. If insufficient data is available to perform this calculation, substitute data shall be calculated pursuant to clause E(3)(b)(ii).
    - ii. For a missing data period greater than 24 hours, substitute data shall be calculated using the maximum hourly emissions for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(3)(c)(iii).
  - c. Whenever the percent annual emission availability is 90-percent or more but less than 95-percent, the Facility Permit holder shall calculate substitute data for each hour according to the following procedures.
    - i. For a missing data period of less than or equal to 3 hours, substitute data shall be calculated using the average of the recorded emissions for the hour immediately before the missing data period and the hour immediately after the missing data period. If no emissions occurred during the hour immediately before the missing data period or the hour immediately after the missing data period, substitute data shall be calculated pursuant to clause E(3)(c)(ii).
    - ii. For a missing data period of more than 3 hours but less than or equal to 24 hours, substitute data shall be calculated using the maximum hourly emissions recorded for the previous 30 days. If no emissions occurred during the previous 30 days, substitute data shall be calculated pursuant to clause E(3)(c)(iii).
    - iii. For a missing data period of greater than 24 hours, substitute data shall be calculated using the maximum hourly emissions for the previous 365 days. If no

emissions occurred during the previous 365 days, substitute data shall be calculated pursuant to subparagraph E(3)(d).

- d. Whenever the percent annual emission availability is less than 90 percent, substitute data shall be calculated using the highest hourly emissions recorded during the service of the monitoring system. For the purpose of this subparagraph, service of the monitoring system shall start from the initial certification date of the analyzer or the date when a decrease in the valid range of the monitoring system is approved by the Executive Officer.

#### **F. TIME-SHARING**

1. Time-sharing is where an analyzer and possibly the associated sample conditioning system is used on more than one source. Time-sharing is allowed for NO<sub>x</sub> RECLAIM sources provided the CEMS can meet the following requirements in addition to the other requirements in this document for each source that is time-shared.
2. All sources shall have mutually compatible span range(s). The span range(s) shall be able to meet the criteria in Chapter 2, Subdivision B, Paragraph 8.
3. Each source shall have a data reading period greater than or equal to 3 times the longest response time of the system. For shared systems the response time is measured at the input or probe at each source. A demonstration of response time for each source shall be made during certification testing. Data is not to be collected following a switch of sampled sources until an amount of time equal to the response time has passed.
4. The CEMS shall be able to perform and record zero and span calibrations at each source.

#### **G. EMISSIONS DURING STARTUP OR SHUTDOWN PERIODS**

The Facility Permit holder of a major source with startup or shutdown periods during which the pollutant or diluent concentrations do not fall within 10 - 95 percent of the normal operation span range(s) shall apply the following methodology; otherwise, the Facility Permit holder shall comply with Chapter 2, Subdivision E, Paragraph 1 - Missing Data Procedures:

1. During equipment startup or shutdown the Facility Permit holder shall apply the unregulated emission factor specified in Table 3-D; or
2. If the emission factors in Table 3-D do not reflect the emission factors during startup and shutdown periods, the Facility Permit holder shall



propose emission factors for the approval of the Executive Officer and shall submit source test data to substantiate the proposed emission factors. The hourly average emissions during startup and shutdown periods shall be calculated and reported according to:

$$E_{st} = D_{st} \times EF_{st} \tag{Eq.13}$$

where:

$E_{st}$  = The hourly mass emission of nitrogen oxides during startup period (lb/hr).

$D_{st}$  = The hourly average fuel flow rate for each type of fuel during startup period (mmscf/hr or mgal/hr).

$EF_{st}$  = The unregulated or Facility Permit holder-specified emission factor during startup period (lb/mmscf or lb/mgal).

$$E_{sh} = D_{sh} \times EF_{sh} \tag{Eq.14}$$

where:

$E_{sh}$  = The hourly mass emission of nitrogen oxides during shutdown period (lb/hr).

$D_{sh}$  = The of hourly fuel flow rate for each type of fuel during shutdown period (mmscf/hr or mgal/hr).

$EF_{sh}$  = The unregulated or Facility Permit holder-specified emission factor during shutdown period (lb/mmscf or lb/mgal).

**TABLE 2-A**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : BOILERS**

EQUIPMENT	MEASURED VARIABLES
Boilers	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Steam production rate;</li> </ol>
Boilers with low NO <sub>x</sub> burners	All variables identified for boilers.
Boilers with staged combustion	All variables identified for boilers.
Boilers with FGR	All variables identified for boilers; AND <ol style="list-style-type: none"> <li>4. Flue gas recirculation rate.</li> </ol>
Boilers with SCR	All variables identified for boilers; AND <ol style="list-style-type: none"> <li>4. Ammonia injection rate;</li> <li>5. Temperature of the inlet gas stream to SCR;</li> </ol>
Boilers with SNCR	All variables identified for boilers; AND <ol style="list-style-type: none"> <li>4. Ammonia (or urea) injection rate;</li> <li>5. Temperature of the inlet gas stream to SNCR;</li> </ol>
Boilers with NSCR	All variables identified for boilers; AND <ol style="list-style-type: none"> <li>4. Natural gas (or other HC) injection rate.</li> </ol>

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : FURNACES**

EQUIPMENT	MEASURED VARIABLES
Furnaces	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Production rate;</li> </ol>
Furnaces with low NO <sub>x</sub> burners	All variables identified for furnaces.
Furnaces with combustion modification	All variables identified for furnaces.
Furnaces with SCR	All variables identified for furnaces; AND <ol style="list-style-type: none"> <li>4. Ammonia injection rate;</li> <li>5. Temperature of the inlet gas stream to SCR;</li> </ol>
Furnaces with SNCR	All variables identified for furnaces; AND <ol style="list-style-type: none"> <li>4. Ammonia (or urea) injection rate;</li> <li>5. Temperature of the inlet gas stream to SNCR;</li> </ol>

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : OVENS**

EQUIPMENT	MEASURED VARIABLES
Ovens	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Production rate;</li> </ol>
Ovens with low NO <sub>x</sub> burners	All variables identified for ovens.
Ovens with combustion modification	All variables identified for ovens.
Ovens with SCR	All variables identified for ovens; AND <ol style="list-style-type: none"> <li>4. Ammonia injection rate;</li> <li>5. Temperature of the inlet gas stream to SCR;</li> </ol>
Ovens with SNCR	All variables identified for ovens; AND <ol style="list-style-type: none"> <li>4. Ammonia (or urea) injection rate;</li> <li>5. Temperature of the inlet gas stream to SNCR;</li> </ol>

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : DRYERS**

EQUIPMENT	MEASURED VARIABLES
Dryers	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Production rate;</li> </ol>
Dryers with low NO <sub>x</sub> burners	All variables identified for dryers.
Dryers with combustion modification	All variables identified for dryers.
Dryers with FGR	All variables identified for dryers; AND <ol style="list-style-type: none"> <li>4. Flue gas recirculation rate.</li> </ol>
Dryers with SCR	All variables identified for dryers; AND <ol style="list-style-type: none"> <li>4. Ammonia injection rate;</li> <li>5. Temperature of the inlet gas stream to SCR;</li> </ol>
Dryers with SNCR	All variables identified for dryers; AND <ol style="list-style-type: none"> <li>4. Ammonia (or urea) injection rate;</li> <li>5. Temperature of the inlet gas stream to SNCR;</li> </ol>
Dryers with NSCR	All variables identified for dryers; AND <ol style="list-style-type: none"> <li>4. Natural gas (or other HC) injection rate.</li> </ol>

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : PROCESS HEATERS**

EQUIPMENT	MEASURED VARIABLES
Process heaters	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Production rate;</li> </ol>
Process heaters with low NO <sub>x</sub> burners	All variables identified for process heaters.
Process heaters with combustion modification	All variables identified for process heaters.
Process heaters with FGR	All variables identified for process heaters; AND 4. Flue gas recirculation rate.
Process heaters with SCR	All variables identified for process heaters; AND 4. Ammonia injection rate; 5. Temperature of the inlet gas stream to SCR;
Process heaters with SNCR	All variables identified for process heaters; AND 4. Ammonia (or urea) injection rate; 5. Temperature of the inlet gas stream to SNCR;
Process heaters with NSCR	All variables identified for process heaters; AND 4. Natural gas (or other HC) injection rate.
Process heaters with water (or steam) injection	All variables identified for process heaters; AND 4. Water (or steam) injection rate.

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : INCINERATORS**

EQUIPMENT	MEASURED VARIABLES
Incinerators	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Production rate;</li> </ol>
Incinerators with SCR	All variables identified for incinerators; AND <ol style="list-style-type: none"> <li>4. Ammonia injection rate;</li> <li>5. Temperature of the inlet gas stream to SCR;</li> </ol>
Incinerators with SNCR	All variables identified for incinerators; AND <ol style="list-style-type: none"> <li>4. Ammonia (or urea) injection rate;</li> <li>5. Temperature of the inlet gas stream to SNCR;</li> </ol>

**Table 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : REFINERY TAIL GAS UNITS**

Refinery tail gas units	<ol style="list-style-type: none"><li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR; Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li><li>2. Status codes;</li><li>3. Production rate;</li></ol>



**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : TEST CELLS**

EQUIPMENT	MEASURED VARIABLES
Test cells	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Shaft horsepower output or other measure of system output;</li> </ol>
Test cells with SCR	All variables identified for test cells; AND <ol style="list-style-type: none"> <li>4. Ammonia injection rate;</li> <li>5. Temperature of the inlet gas stream to SCR;</li> </ol>
Test cells with Packed Chemical Scrubber	All variables identified for test cells; AND <ol style="list-style-type: none"> <li>4. Chemical injection rate.</li> </ol>

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : INTERNAL COMBUSTION ENGINES**

EQUIPMENT	MEASURED VARIABLES
Internal combustion engines	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Throttle setting shaft horsepower output or other measure of system output;</li> </ol>
Internal combustion engines with combustion modification	All variables identified for internal combustion engines.
Internal combustion engines with Injection Timing Retard 4 degree	All variables identified for internal combustion engines.
Internal combustion engines with turbocharger, aftercooler, intercooler.	All variables identified for internal combustion engines.
Internal combustion engines with SCR	All variables identified for internal combustion engines; AND <ol style="list-style-type: none"> <li>4. Ammonia injection rate;</li> <li>5. Temperature of the inlet gas stream to SCR;</li> </ol>
Internal combustion engines	All variables identified for internal combustion engines; with NSCR AND <ol style="list-style-type: none"> <li>4. Natural gas (or other HC) injection rate.</li> </ol>

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : GAS TURBINES**

EQUIPMENT	MEASURED VARIABLES
Gas turbines	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Shaft horsepower output or other measure of system output;</li> </ol>
Gas turbines with Water or Steam Injection	All variables identified for gas turbines; AND 4. Water or steam injection rate;
Gas turbines with SCR and Steam Injection	All variables identified for gas turbines; AND 4. Ammonia injection rate; or 5. Steam injection rate 6. Temperature of the inlet gas stream to SCR;
Gas turbines with SCR and Water Injection	All variables identified for gas turbines; AND 4. Ammonia injection rate; or 5. Water injection rate 6. Temperature of the inlet gas stream to SNCR;

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : KILNS AND CALCINERS**

EQUIPMENT	MEASURED VARIABLES
Kilns and calciners	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Production rate;</li> </ol>
Kilns and calciners with low NO <sub>x</sub> burners	All variables identified for kilns and calciners.
Kilns and calciners with combustion modifications	All variables identified for kilns and calciners.
Kilns and calciners with FGR	All variables identified for kilns and calciners; AND 4. Flue gas recirculation rate.
Kilns and calciners with SCR	All variables identified for kilns and calciners; AND 4. Ammonia injection rate; 5. Temperature of the inlet gas stream to SCR;
Kilns and calciners with SNCR	All variables identified for kilns and calciners; AND 4. Ammonia (or urea) injection rate; 5. Temperature of the inlet gas stream to SNCR;
Kilns and calciners with NSCR	All variables identified for kilns and calciners; AND 4. Natural gas (or other HC) injection rate.

**TABLE 2-A (CONTINUED)**

**MEASURED VARIABLES FOR MAJOR NO<sub>x</sub> SOURCES**

**EQUIPMENT TYPE : FLUID CATALYTIC CRACKING UNITS**

EQUIPMENT	MEASURED VARIABLES
FCCUs (CO Boilers)	<ol style="list-style-type: none"> <li>1. Stack NO<sub>x</sub> concentration and exhaust flow rate; OR Stack NO<sub>x</sub>, and O<sub>2</sub> concentrations, and fuel flow rate;</li> <li>2. Status codes;</li> <li>3. Production rate;</li> </ol>
FCCUs with combustion modifications	All variables identified for refinery tail gas units.
FCCUs with SCR	All variables identified for refinery tail gas units; AND <ol style="list-style-type: none"> <li>4. Ammonia injection rate;</li> <li>5. Temperature of the inlet gas stream to SCR;</li> </ol>
FCCUs with SNCR	All variables identified for refinery tail gas units; AND <ol style="list-style-type: none"> <li>4. Ammonia (or urea) injection rate;</li> <li>5. Temperature of the inlet gas stream to SNCR;</li> </ol>
FCCUs with NSCR	All variables identified for refinery tail gas units; AND <ol style="list-style-type: none"> <li>4. Natural gas (or other HC) injection rate.</li> </ol>

**TABLE 2-B**

**REPORTED VARIABLES FOR ALL MAJOR NO<sub>x</sub> SOURCES**

EQUIPMENT	REPORTED VARIABLES
All Major NO <sub>x</sub> sources	<ol style="list-style-type: none"><li>1. Total daily mass emissions from each source;</li><li>2. Daily Status codes.</li></ol>

**ATTACHMENT K**

**RULE 2012 PROTOCOL-  
ATTACHMENT A**

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**1 N PROCEDURES**

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### ATTACHMENT A - 1N PROCEDURE

A.	Applicability .....	A-1
B.	Procedure .....	A-1



**ATTACHMENT A**  
**1 N PROCEDURE**

**A. APPLICABILITY**

1. This procedure may be used to provide substitute data for affected sources that meet the specified conditions in Chapter 2, Subdivision E, Paragraph 1, Subparagraph b, Clause i, Chapter 2, Subdivision E, Paragraph 2, Subparagraph b, Clause i, and Chapter 2, Subdivision E, Paragraph 3, Subparagraph b, Clause i. ~~and Chapter 3, Subdivision I, Paragraph 2, Subparagraph a.~~

**B. PROCEDURE**

1. Where N is the number of hours of missing emissions data, determine the substitute hourly NO<sub>x</sub> concentration (in ppmv), or the hourly flow rate (in scfh) by averaging the measured or substituted values for the 1N hours immediately before the missing data period and the 1N hours immediately after the missing data period.
2. Where 1N hours before or after the missing data period includes a missing data hour, the substituted value previously recorded for such hour(s) pursuant to the missing data procedure shall be used to determine the average in accordance with Subdivision B, Paragraph 1 above.
3. Substitute the calculated average value for each hour of the N hours of missing data.

**EXAMPLES OF 1 N PROCEDURE**

**EXAMPLE 1**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	30
2:00 A.M.	25
3:00 A.M.	32
4:00 A.M.	34
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	Missing
8:00 A.M.	27
9:00 A.M.	22
10:00 A.M.	25
11:00 A.M.	30

To fill in the missing three hours, take the data points from the 3 hours before and the 3 hours after the missing data period to determine an average emission over the 3 hours

$$\text{average emissions} = \frac{25 + 32 + 34 + 27 + 22 + 25}{6} = 27.5 \text{ lb/hr.}$$

6

The filled in data set should read as follows:

**EXAMPLE 1 (continued)**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	30
2:00 A.M.	25
3:00 A.M.	32
4:00 A.M.	34
5:00 A.M.	27.5
6:00 A.M.	27.5
7:00 A.M.	27.5
8:00 A.M.	27
9:00 A.M.	22
10:00 A.M.	25
11:00 A.M.	30

**EXAMPLES OF 1 N PROCEDURE**

**EXAMPLE 2**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	45
2:00 A.M.	50
3:00 A.M.	53
4:00 A.M.	Missing
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	58
8:00 A.M.	Missing
9:00 A.M.	48
10:00 A.M.	45

In this example the missing data point at 8 A.M. is in the 3-hour period after the 3- hour missing data period. We first fill the 8.A.M. slot.

$$\text{average emissions for 8 A.M.} = \frac{58 + 48}{2} = 53$$

2

The filled in data sheet at this point should read as follows:

**EXAMPLE 2 (continued)**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	45
2:00 A.M.	50
3:00 A.M.	53
4:00 A.M.	Missing
5:00 A.M.	Missing
6:00 A.M.	Missing
7:00 A.M.	58
8:00 A.M.	53
9:00 A.M.	48
10:00 A.M.	45

The average for the three hour missing data period is:

$$\text{average emissions} = \frac{45 + 50 + 53 + 58 + 53 + 48}{6} = 51.2$$

6

The completed filled in data sheet should read as follows:

**EXAMPLE 2 (continued)**

<b>HOUR</b>	<b>DATA POINT (LB/HR)</b>
1:00 A.M.	45
2:00 A.M.	50
3:00 A.M.	53
4:00 A.M.	51.2
5:00 A.M.	51.2
6:00 A.M.	51.2
7:00 A.M.	58
8:00 A.M.	53
9:00 A.M.	48
10:00 A.M.	45

**RULE 2012 PROTOCOL -  
ATTACHMENT B**

---

**BIAS TEST**

**ATTACHMENT B****BIAS TEST**

The bias of the data shall be determined based on the relative accuracy (RA) test data sets and the relative accuracy (RATA) test audit data sets for NO<sub>x</sub> pollutant concentration monitors, fuel gas sulfur content monitors, flow monitors, and emission rate measurement systems using the procedures outlined below.

1. Calculate the mean of the difference using Equation 2-1 of 40 CFR, Part 60, Appendix B, Performance Specification 2. To calculate bias for a NO<sub>x</sub> pollutant concentration monitor, "d" shall, for each paired data point, be the difference between the NO<sub>x</sub> concentration values (in ppmv) obtained from the reference method and the monitor. To calculate bias for a flow monitor, "d" shall, for each paired data point, be the difference between the flow rate values (in scfh) obtained from the reference method and the monitor. To calculate bias for an emission rate measurement system, "d" shall, for each paired data point, be the difference between the emission rate values (in lb/hr) obtained from the reference method and the monitoring system.
2. Calculate the standard deviation,  $S_d$ , of the data set using Equation 2-2 of 40 CFR, Part 60, Appendix B, Performance Specification 2.
3. Calculate the confidence coefficient,  $cc$ , of the data set using Equation 2-3 of 40 CFR, Part 60, Appendix B, Performance Specification 2.
4. The monitor passes the bias test if it meets either of the following criteria:
  - a. the absolute value of the mean difference is less than  $|cc|$ .
  - b. the absolute value of the mean difference is less than 1 ppmv.
5. Alternatively, if the monitoring device fails to meet the bias test requirement, the Facility Permit holder may choose to use the bias adjustment procedure as follows:
  - a. If the CEMS is biased high relative to the reference method, no correction will be applied.
  - b. If the CEMS is biased low relative to the reference method, the data shall be corrected for bias using the following procedure:

$$CEM_i^{\text{adjusted}} = CEM_i^{\text{monitored}} \times BAF \quad (\text{Eq. B-1})$$

where:

$CEM_i^{\text{adjusted}}$  = Data value adjusted for bias at time i.

$CEM_i^{\text{monitored}}$  = Data provided by the CEMS at time i.

BAF = Bias Adjustment Factor

$$BAF = 1 + (|d|/CEM) \quad (\text{Eq. B-2})$$

where:

d = Arithmetic mean of the difference between the CEMS and the reference method measurements during the determination of the bias.

CEM = Mean of the data values provided by the CEMS during the determination of bias.

If the bias test failed in a multi-level RA or RATA, calculate the BAF for each operating level. Apply the largest BAF obtained to correct for the CEM data output using equation B-1. The facility permit holder shall have the option to apply this adjustment to either all directly monitored data or to emission rates from the time and date of the failed bias test until the date and time of a RATA that does not show bias. These adjusted values shall be used in all forms of missing data computation, and in calculating the mass emission rate.

The BAF is unique for each CEMS. If backup CEMS is used, any BAF applied to primary CEMS shall be applied to the backup CEMS unless there are RATA data for the backup CEMS within the previous year.

If the BAF changes during a RATA, the new BAF must be applied to the emissions data from the time and date of the RATA until the time and date of the next RATA.

**RULE 2012 PROTOCOL-ATTACHMENT C**

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**QUALITY ASSURANCE AND QUALITY CONTROL  
PROCEDURES**



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ATTACHMENT C - QUALITY ASSURANCE AND QUALITY CONTROL  
PROCEDURES

A. Quality Control Program.....C-1

B. Frequency of Testing .....C-2

**ATTACHMENT C****QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES****A. Quality Control Program**

Develop and implement a quality control program for the continuous emission monitoring systems and their components. As a minimum, include in each quality control program a written plan that describes in detail complete, step-by-step procedures and operations for each of the following activities:

**1. Calibration Error Test Procedures**

Identify calibration error test procedures specific to the CEMS that may require variance from the procedures used during certification (for example, how the gases are to be injected, adjustments of flow rates and pressures, introduction of reference values, length of time for injection of calibration gases, steps for obtaining calibration error, determination of interferences, and when calibration adjustments should be made).

**2. Calibration and Linearity Adjustments**

Explain how each component of the CEMS will be adjusted to provide correct responses to calibration gases, reference values, and/or indications of interference both initially and after repairs or corrective action. Identify equations, conversion factors, assumed moisture content, and other factors affecting calibration of each CEMS.

**3. Preventative Maintenance**

Keep a written record of procedures, necessary to maintain the CEMS in proper operating condition and a schedule for those procedures.

**4. Audit Procedures**

Keep copies of written reports received from testing firms/laboratories of procedures and details specific to the installed CEMS that were to be used by the testing firms/laboratories for relative accuracy test audits, such as sampling and analysis methods. The testing firms/laboratories shall have received approval from the District by going through the District's laboratory approval program.

**5. Record Keeping Procedures**

Keep a written record describing procedures that will be used to implement the record keeping and reporting requirements.

Specific provisions of Section A-3 and A-5 above of the quality control programs shall constitute specific guidelines for facility personnel. However facilities shall be required to take reasonable steps to monitor and assure implementation of such specific guidelines. Such reasonable steps may include periodic audits, issuance of periodic reminders, implementing training classes, discipline of employees as necessary, and other appropriate measures. Steps that a facility commits to take to monitor and assure implementation of the specific guidelines shall be set forth in the written plan and shall be the only elements of Section A-3 and A-5 that constitute enforceable requirements under the written plan, unless other program provisions are independently enforceable pursuant to other requirements of the NO<sub>x</sub> protocols or District or federal rules or regulations.

## **B. FREQUENCY OF TESTING**

There are three situations which will result in an out-of-control period. These include failure of a calibration error test, failure of a relative accuracy test audit, and failure of a BIAS test, and are detailed in this subdivision. Data collected by a CEMS during an out-of-control period shall not be considered valid.

The frequency at which each quality assurance test must be performed is as follows:

### **1. Periodic Assessments**

For each monitor or CEMS, perform the following assessments on each day during which the unit combusts any fuel or processes any material (hereafter referred to as a "unit operating day"), or for a monitor or a CEMS on a bypass stack/duct, on each day during which emissions pass through the bypass stack or duct. These requirements are effective as of the date when the monitor or CEMS completes certification testing.

#### **a. Calibration Error Testing Requirements for Pollutant Concentration Monitors and O<sub>2</sub> Monitors**

Test, record, and compute the calibration error of each NO<sub>x</sub> pollutant concentration monitor and O<sub>2</sub> monitor at least once on each unit operating day, or for monitors or monitoring systems on bypass stacks/ducts on each day that emissions pass through the bypass stack or duct. Conduct calibration error checks, to the extent practicable, approximately 24 hours apart. Perform the daily calibration error test according to the procedure in Paragraph B.1.a.ii. of this Attachment.

For units with more than one span range, perform the daily calibration error test on each scale that has been used since the last calibration error test. For example, if the emissions concentration has not exceeded the low-scale span range since the previous

calendar day, the calibration error test may be performed on the low-scale only. If, however, the emissions concentration has exceeded the low-scale span range since the previous calibration error test, perform the calibration error test on both the low- and high-scales

i. Design Requirements for Calibration Error Testing of NO<sub>x</sub> Concentration Monitors and O<sub>2</sub> Monitors

Design and equip each NO<sub>x</sub> concentration monitor and O<sub>2</sub> monitor with a calibration gas injection port that allows a check of the entire measurement system when calibration gases are introduced. For extractive and dilution type monitors, all monitoring components exposed to the sample gas, (for example, sample lines, filters, scrubbers, conditioners, and as much of the probe as practical) are included in the measurement system. For in situ type monitors, the calibration must check against the injected gas for the performance of all electronic and optical components (for example, transmitter, receiver, analyzer).

Design and equip each pollutant concentration monitor and O<sub>2</sub> monitor to allow daily determinations of calibration error (positive or negative) at the zero-level (0 to 20 percent of each span range) and high-level (80 to 100 percent of each span range) concentrations.

ii. Calibration Error Test for NO<sub>x</sub> Concentration Monitors and O<sub>2</sub> Monitors

Measure the calibration error of each NO<sub>x</sub> concentration analyzer and O<sub>2</sub> monitor once each day according to the following procedures:

If any manual or automatic adjustments to the monitor settings are made, conduct the calibration error test in a way that the magnitude of the adjustments can be determined and recorded.

Perform calibration error tests at two concentrations: (1) zero-level and (2) high level. Zero level is 0 to 20 percent of each span range, and high level is 80 to 100 percent of each span range. All calibration gases used during certification tests and quality assurance and quality control activities shall be NIST/EPA approved standard reference materials (SRM), certified reference materials (CRM), or shall be certified according to "EPA Traceability Protocol

for Assay and Certification of Gaseous Calibration Standards,” September 1997, EPA 600/R-97/121 or any subsequent version published by EPA.

Introduce the calibration gas at the gas injection port as specified above. Operate each monitor in its normal sampling mode. For extractive and dilution type monitors, pass the audit gas through all filters, scrubbers, conditioners, and other monitor components used during normal sampling and through as much of the sampling probe as practical. For in situ type monitors, perform calibration checking all active electronic and optical components, including the transmitter, receiver, and analyzer. Challenge the NO<sub>x</sub> concentration monitors and the O<sub>2</sub> monitors once with each gas. Record the monitor response from the data acquisition and handling system. Use the following equation to determine the calibration error at each concentration once each day:

$$CE = \frac{|R-A|}{S} \times 100 \quad (\text{Eq. C-1})$$

Where:

- CE = The percentage calibration error based on the span range
- R = The reference value of zero- or high-level calibration gas introduced into the monitoring system.
- A = The actual monitoring system response to the calibration gas.
- S = The span range of the instrument

b. Calibration Error Testing Requirements for Stack Flow Monitors

Test, compute, and record the calibration error of each stack flow monitor at least once within every 14 calendar day period during which at anytime emissions flow through the stack; or for monitors or monitoring systems on bypass stacks or ducts, at least once within every 14 calendar day period during which at anytime emissions flow through the bypass stack or duct. Introduce a zero reference value to the transducer or transmitter. Record flow monitor output from the data acquisition and handling systems before and after any adjustments. Calculate the calibration error using the following equation:

$$CE = \frac{|R - A|}{S} \times 100 \quad (\text{Eq. C-2})$$

Where:

CE = Percentage calibration error based on the span range

R = Zero reference value introduced into the transducer or transmitter.

A = Actual monitoring system response.

S = Span range of the flow monitor.

c. Interference Check for Stack Flow Monitors

Perform the daily flow monitor interference checks specified in Paragraph B.1.c.i. of this Attachment at least once per operating day (when the unit(s) operate for any part of the day).

i. Design Requirements for Flow Monitor Interference Checks

Design and equip each flow monitor with a means to ensure that the moisture expected to occur at the monitoring location does not interfere with the proper functioning of the flow monitoring system. Design and equip each flow monitor with a means to detect, on at least a daily basis, pluggage of each sample line and sensing port, and malfunction of each resistance temperature detector (RTD), transceiver, or equivalent.

Design and equip each differential pressure flow monitor to provide (1) an automatic, periodic backpurging

(simultaneously on both sides of the probe) or equivalent method of sufficient force and frequency to keep the probe and lines sufficiently free of obstructions on at least a daily basis to prevent sensing interference, and (2) a means to detecting leaks in the system at least on a quarterly basis (a manual check is acceptable).

Design and equip each thermal flow monitor with a means to ensure on at least a daily basis that the probe remains sufficiently clean to prevent velocity sensing interference.

Design and equip each ultrasonic flow monitor with a means to ensure on at least a daily basis that the transceivers remain sufficiently clean (for example, backpurging the system) to prevent velocity sensing interference.

d. Recalibration

Adjust the calibration, at a minimum, whenever the calibration error exceeds the limits of the applicable performance specification for the NO<sub>x</sub> monitor, O<sub>2</sub> monitor or stack flow monitor to meet such specifications. Repeat the calibration error test procedure following the adjustment or repair to demonstrate that the corrective actions were effective. Document the adjustments made.

e. Out-of-Control Period – Calibration Test

An out-of-control period occurs when the calibration error of an NO<sub>x</sub> concentration monitor exceeds 5.0 percent based upon the span range value, when the calibration error of an O<sub>2</sub> monitor exceeds 1.0 percent O<sub>2</sub>, or when the calibration error of a flow monitor exceeds 6.0 percent based upon the span range value, which is twice the applicable specification. The out-of-control period begins with the hour of completion of the failed calibration error test and ends with the hour of completion following an effective recalibration. Whenever the failed calibration, corrective action, and effective recalibration occur within the same hour, the hour is not out-of-control if 2 or more valid readings are obtained during that hour as required by Chapter 2, Subdivision B, Paragraph 5.

An out-of-control period also occurs whenever interference of a flow monitor is identified. The out-of-control period begins with the hour of the failed interference check and ends with the hour of completion of an interference check that is passed.

f. Data Recording

Record and tabulate all calibration error test data according to the month, day, clock-hour, and magnitude in ppm, DSCFH, and percent volume. Program monitors that automatically adjust data to the calibrated corrected calibration values (for example, microprocessor control) to record either: (1) the unadjusted concentration or flow rate measured in the calibration error test prior to resetting the calibration, or (2) the magnitude of any adjustment. Record the following applicable flow monitor interference check data: (1) sample line/sensing port pluggage, and (2) malfunction of each RTD, transceiver, or equivalent.

2. Semi-annual Assessments

- a. For each CEMS, perform the following assessments once semi-annually thereafter, as specified below for the type of test. These semi-annual assessments shall be completed within six months of the end of the calendar quarter in which the CEMS was last tested for certification purposes (initial and recertification) or within three months of the end of the calendar quarter in which the District sent notice of a provisional approval for a CEMS, whichever is later. Thereafter, the semi-annual tests shall be completed within six months of the end of the calendar quarter in which the CEMS was last tested. For CEMS on bypass stacks/ducts, the assessments shall be performed once every two successive operating quarters in which the bypass stacks/ducts were operated. These tests shall be performed after the calendar quarter in which the CEMS was last tested as part of the CEMS certification, as specified below for the type of test.

Relative accuracy tests may be performed on an annual basis rather than on a semi-annual basis if the relative accuracies during the previous audit for the NO<sub>x</sub> pollutant concentration monitor, flow monitoring system, and NO<sub>x</sub> emission rate measurement system are 7.5 percent or less.

- b. For CEMS on any stack or duct through which no emissions have passed in two or more successive quarters, the semi-annual assessments must be performed within 14 unit operating days after emissions pass through the stack/duct.
- c. The due date for a semi-annual or annual assessment of a major source may be postponed to within 14 unit operating days from the



first re-firing of the major source if the major source is physically incapable of being operated and all of the following are met:

- i. All fuel feed lines to the major source are either disconnected or opened and either flanges or equivalent sealing devices are placed at both ends of the disconnected or opened lines, and
- ii. The fuel meter(s) for the disconnected or opened fuel feed lines are maintained and operated and associated fuel records showing no fuel flow are maintained on site.

This paragraph applies separately for each unrelated, independent event. For any hour that fuel flow records are not available to verify no fuel flow, NO<sub>x</sub> emissions shall be calculated using the maximum valid hourly emissions from the last 30 days of operation.

Prior to re-starting operation of the major source, the Facility Permit Holder shall: (1) provide written notification to the District no later than 72 hours prior to starting up the source, (2) start the CEMS no later than 24 hours prior to the start-up of the major source, and (3) conduct and pass a Cylinder Gas Analysis (CGA) prior to the start-up of the major source. The emissions data from the CEMS after the re-start of operations is considered valid only if the Facility Permit Holder passes the CGA test. Otherwise, for a non-passing CGA, the CEMS data is considered invalid until the semi-annual or annual assessment is performed and passed. As such, NO<sub>x</sub> emissions shall be calculated using the maximum valid hourly emissions from the last 30 days of operation commencing with the hour of start up and continuing through the hour prior to performing and passing the semi-annual or annual assessment.

- d. An electrical generating facility that either only operates under a California Independent System Operator (Cal ISO) contract or is owned and operated by a municipality may postpone the due date for a semi-annual or annual assessment of a major source to the next calendar quarter provided that the facility shows:
  - i. The semi-annual or annual assessment was scheduled to be performed during the first 45 days of the calendar quarter in which the assessment was due;
  - ii. The assessment was not completed due to lack of adequate operational time; and

iii. A CGA was conducted and passed within the calendar quarter when the assessment was due.

e. Relative Accuracy Test Audit

Perform relative accuracy test audits and bias tests semi-annually and no less than 3 months apart for each NO<sub>x</sub> pollutant concentration monitor, stack gas volumetric flow rate measurement systems, and the NO<sub>x</sub> mass emission rate measurement system in accordance with Chapter 2, Subdivision B, Paragraphs 10, 11, 12, and 18. The relative accuracy of the pollutant concentration monitor and the mass emission rate measurement system shall be less than or equal to 20.0 percent, and the relative accuracy of the stack gas volumetric flow rate measurement system shall be less than or equal to 15.0 percent. For monitors on bypass stacks/ducts, perform relative accuracy test audits once every two successive bypass operating quarters in accordance with Chapter 2, Subdivision B, Paragraphs 10, 11, 12, and 18.

f. Out-of-Control Period – Relative Accuracy Test Audit

An out-of-control period occurs under any of the following conditions: (1) The relative accuracy of an NO<sub>x</sub> pollutant concentration monitor or the NO<sub>x</sub> emission rate measurement system exceeds 20.0 percent; (2) the relative accuracy of the flow rate monitor exceeds 15.0 percent; or (3) failure to conduct a relative accuracy test audit by the due date for a semi-annual assessment. The out-of-control period begins with the hour of completion of the failed relative accuracy test audit and ends with the hour of completion of a satisfactory relative accuracy test audit.

g. Out-of-Control Period – BIAS Test

An out-of-control period occurs if all the following conditions are met:

- i. Failure of a bias test as specified in Attachment B of this Appendix;
- ii. The CEMS is biased low relative to the reference method (i.e. Bias Adjustment Factor (BAF), as determined in Attachment B of this Appendix, is greater than 1); and
- iii. The Facility Permit holder does not apply the BAF to the CEMS data.

The out-of-control period begins with the hour of completion of the failed bias test audit and ends with the hour of completion of a satisfactory bias test.

- h. Alternative Relative Accuracy Test Audit
  - i. The Facility Permit holder of a major source, that has received written approval from the Executive Officer as an intermittently operated source, may postpone the due date for a semi-annual assessment to the end of the next calendar quarter if the Facility Permit holder:
    - I. operated the source no more than 240 cumulative operating hours and no more than 72 consecutive hours during the calendar quarter when a semi-annual assessment is due; and
    - II. conducted a relative accuracy test audit on the CEMS serving the source during the previous four calendar quarters and meeting the accuracy criteria as set forth under Subparagraph B.2.e.; and
    - III. conducted an alternative relative accuracy test audit on the CEMS serving the source during the calendar quarter when a semi-annual assessment is due and meeting the criteria specified under Clause B.2.h.iii.

If any of the requirements under Subclauses B.2.h.i.I, II and III is not met and the source did not have passing RATA during the calendar quarter when the semi-annual assessment is due, emissions from the source shall be determined pursuant to the Missing Data Procedures as specified under Rule 2012, Appendix A, Chapter 2, Subdivision E after the semi-annual assessment due date until the hour of completion of a satisfactory relative accuracy test audit.

- ii. The Facility Permit holder may submit a written request to designate a major source as an intermittently operated source provided the Facility Permit holder demonstrates that:
  - I. During any calendar quarter within the previous two compliance years, the source was operated no more than 240 cumulative operating hours and no more than 72 consecutive hours; or

- II. During any calendar quarter within the next two compliance years, the source will be operated no more than 240 cumulative operating hours and no more than 72 consecutive hours.
  - iii. An alternative relative accuracy shall consist of a Cylinder Gas Analysis (CGA) method as defined under 40 CFR, Part 60, Appendix F, combined with a flow accuracy verification. For sources equipped with stack flow monitors, the flow accuracy shall be verified by calibrating the transducers and transmitters installed on the stack flow monitors using procedures under Paragraph B.3 of this attachment. For sources equipped with fuel flow meters and no stack flow monitors, the flow accuracy shall be verified by calibrating the fuel flow meters either in-line or offline in accordance with the procedures outlined in 40CFR Part 75, Appendix D. Passing flow accuracy verification results that were obtained within the past 4 quarters may be used in lieu of performing a flow accuracy verification during the calendar quarter when a semi-annual assessment is due. The calculated accuracy for the analyzer responses for NO<sub>x</sub> and O<sub>2</sub> concentration shall be within 15 percent or 1 ppm, whichever is greater, as determined by the CGA method as defined under 40 CFR, Part 60, Appendix F. Successive alternative relative accuracy test audits shall be performed no less than 45 days apart.
3. Calibration of Transducers and Transmitters on Stack Flow Monitors

All transducers and transmitters installed on stack flow monitors must be calibrated every two operating calendar quarters, in which an operating calendar quarter is any calendar quarter during which at anytime emissions flow through the stack. Calibration must be done in accordance with Executive Officer approved calibration procedures that employ materials and equipment that are NIST traceable.

When a calibration produces for a transducer and transmitter a percentage accuracy of greater than  $\pm 1\%$ , the Facility Permit holder shall calibrate the transducer and transmitter every calendar operating quarter until a subsequent calibration which shows a percentage accuracy of less than  $\pm 1\%$  is achieved. An out-of-control period occurs when the percentage accuracy exceeds  $\pm 2\%$ . If an out-of-control period occurs, the Facility Permit holder shall take corrective measures to obtain a percentage

accuracy of less than  $\pm 2\%$  prior to performing the next RATA. The out-of-control period begins with the hour of completion of the failed calibration error test and ends with the hour of completion of following an effective recalibration. Whenever the failed calibration, corrective action, and effective recalibration occur within the same hour, the hour is not out-of-control if two or more valid data readings are obtained during that hour as required by Chapter 2, Subdivision B, Paragraph 5, Subparagraph a.

**RULE 2012 PROTOCOL-  
ATTACHMENT D**

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**EQUIPMENT TUNING PROCEDURES**

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ATTACHMENT D - EQUIPMENT TUNING PROCEDURES

A. Procedures..... D-1

## EQUIPMENT TUNING PROCEDURES

### A. PROCEDURES

Nothing in this Equipment Tuning Procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division), the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.

1. Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operation, operate it at its average firing rate.
2. At this firing rate, record stack-gas temperature, oxygen concentration, and CO concentration (for gaseous fuels) or smoke-spot number 2 (for liquid fuels), and observe flame conditions after unit operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas is at the lower end of the range of typical minimum values, and if CO emissions are low and there is no smoke, the unit is probably operating at near optimum efficiency at this particular firing rate.
3. Increase combustion air flow to the furnace until stack-gas oxygen levels increase by one to two percent over the level measured in Step 2. As in Step 2, record the stack-gas temperature, CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observe flame conditions for these higher oxygen levels after boiler operation stabilizes.
4. Decrease combustion air flow until the stack gas oxygen concentration is at the level measure in Step 2. From this level, gradually reduce the combustion air flow in small increments. After each increments, record the stack-gas temperature, oxygen concentration, CO concentration (for gaseous fuels), and smoke-spot number (for liquid fuels). Also observe the flame and record any changes in its condition.
5. Continue to reduce combustion air flow stepwise, until one of these limits is reached:
  - a. Unacceptable flame conditions, such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability; or



- b. Stack gas CO concentrations greater than 400 ppm; or
  - c. Smoking at the stack; or
  - d. Equipment-related limitations, such as low windbox/furnace pressure differential, built in air-flow limits, etc.
6. Develop an O<sub>2</sub>/CO curve (for gaseous fuels) or O<sub>2</sub>/smoke curve (for liquid fuels) using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.
7. From the curves prepared in Step 6, find the stack-gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

<u>Fuel</u>	<u>Measurement</u>	<u>Value</u>
Gaseous	CO emissions	400 ppm
#1 and #2 oils	smoke-spot number	number 1
#4 oil	smoke-spot number	number 2
#5 oil	smoke-spot number	number 3
Other oils	smoke-spot number	number 4

The above conditions are referred to as the CO or smoke thresholds, or as the minimum excess oxygen level.

Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substantially higher than the value provided by the combustion unit manufacturer, burner adjustments can probably be made to improve fuel and air mixing, thereby allowing operation with less air.

8. Add 0.5 to 2.0 percent of the minimum excess oxygen level found in Step 7 and reset burner controls to operate automatically at this higher stack-gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations, variations in atmospheric conditions, load changes, and nonrepeatability or play in automatic controls.
9. If the load of the combustion unit varies significantly during normal operation, repeat Steps 1-8 for firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other firing rates, it may not be possible to establish the optimum

excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give best performance over the range of firing rates. If one firing rate predominates, settings should optimize conditions at that rate.

10. Verify that the new settings can accommodate the sudden load changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in Step 5 result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affected firing rates. Next, verify these new recorded at steady-rate operating conditions for future reference.

**RULE 2012 PROTOCOL -  
ATTACHMENT E**

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**LIST OF ACRONYMS AND ABBREVIATIONS**

**LIST OF ACRONYMS AND ABBREVIATIONS**

APEP	Annual Permit Emission Program
API	American Petroleum Institute
ASTM	American Society for Testing & Materials
BACT	Best Available Control Technology
bhp	Brake Horsepower
bpd	Barrels per Day
Btu	British Thermal Unit
CEMS	Continuous Emission Monitoring System
CPMS	Continuous Process Monitoring System
CPU	Central Processing Unit
CSCACS	Central Station Compliance Advisory Computer System
DAS	Data Acquisition System
DM	District Method
dscfh	Dry Standard Cubic Feet per Hour
FCCU	Fluid Catalytic Cracking Unit
F <sub>d</sub>	Dry F Factor
FGR	Flue Gas Recirculation
gpm	Gallons per Minute
HRG	Hardware Requirement Guideline
ICE	Internal Combustion Engine
ID	Inside Diameter
ISO	International Standards Organization
lb mole	Pound mole
LNB	Low NO <sub>x</sub> Burner
MRR	Monitoring, Reporting and Recordkeeping
NO <sub>x</sub>	Oxides of Nitrogen
NIST	National Institute for Standards and Testing
NSCR	Non-Selective Catalytic Reduction
O <sub>2</sub>	Oxygen
ppmv	Parts per Million Volume
ppmw	Parts per Million by Weight

RAA	Relative Accuracy Audit
RATA	Relative Accuracy Test Audit
RECLAIM	Regional Clean Air Incentives Market
RM	Reference Method
RTC	RECLAIM Trading Credits
RTCC	Real Time Calendar/Clock
RTU	Remote Terminal Unit
scfh	Standard Cubic Feet per Hour
scfm	Standard Cubic Feet per Minute
SCR	Selective Catalytic Reduction
SDD	Software Design Description
SNCR	Selective Non-Catalytic Reduction
SO <sub>x</sub>	Oxides of Sulfur
SRG	Software/Hardware Requirement Guideline
swi	Steam Water Injection
tpd	Tons per day
tpy	Tons per year
WAN	Wide Area Network

**RULE 2012 PROTOCOL-  
ATTACHMENT F**

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**DEFINITIONS**

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## DEFINITIONS

- (1) **AFTERBURNERS**, also called **VAPOR INCINERATORS**, are air pollution control devices in which combustion converts the combustible materials in gaseous effluents to carbon dioxide and water.
- (2) **ANNUAL PERMIT EMISSIONS PROGRAM (APEP)** is the annual facility permit compliance reporting, review, and fee reporting program.
- (3) **BOILER** should generally be considered as any combustion equipment used to produce steam, including a carbon monoxide boiler. This would generally not include a process heater that transfers heat from combustion gases to process streams, a waste heat recovery boiler that is used to recover sensible heat from the exhaust of process equipment such as a combustion turbine, or a recovery furnace that is used to recover process chemicals. Boilers used primarily for residential space and/or water heating are not affected by this section.
- (4) **BURN** means to combust any gaseous fuel, whether for useful heat or by incineration without recovery, except for flaring or emergency vent gases.
- (5) **BYPASS OPERATING QUARTER** means each calendar quarter that emissions pass through the bypass stack or duct.
- (6) **CALCINER** is a rotary kiln where calcination reaction is carried out between 1315 °C to 1480 °C.
- (7) **CEMENT KILN** is a device for the calcining and clinkering of limestone, clay and other raw materials, and recycle dust in the dry-process manufacture of cement.
- (8) **CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)** is the total equipment required for the determination of concentrations of air contaminants and diluent gases in a source effluent as well as mass emission rate. The system consists of the following three major subsystems:
  - (A) **SAMPLING INTERFACE** is that portion of the monitoring system that performs one or more of the following operations: extraction, physical/chemical separation, transportation, and conditioning of a sample of the source effluent or protection of the analyzer from the hostile aspects of the sample or source environment.
  - (B) **ANALYZERS**
    - (i) **AIR CONTAMINANT ANALYZER** is that portion of the monitoring system that senses the air contaminant and generates a signal output which is a function of the concentration of that contaminant.

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- (ii) DILUENT ANALYZER is that portion of the monitoring system that senses the concentration of oxygen or carbon dioxide or other diluent gas as applicable, and generates a signal output which is a function of a concentration of that diluent gas.
- (C) DATA RECORDER is that portion of the monitoring system that provides a permanent record of the output signals in terms of concentration units, and includes additional equipment such as a computer required to convert the original recorded value to any value required for reporting.
- (9) CONTINUOUS PROCESS MONITORING SYSTEM is the total equipment required for the measurement and collection of process variables (e.g., fuel usage rate, oxygen content of stack gas, or process weight). Such CPMS data shall be used in conjunction with the appropriate emission rate to determine NO<sub>x</sub> emissions.
- (10) CONTINUOUSLY MEASURE means to measure at least once every 15 minutes except during period of routine maintenance and calibration, as specified in 40CFR Part 60.13(e)(2).
- (11) DAILY means a calendar day starting at 12 midnight and continuing through to the following 12 midnight hour.
- (12) DIRECT MONITORING DEVICE is a device that directly measures the variables specified by the Executive Officer to be necessary to determine mass emissions of a RECLAIM pollutant and which meets all the standards of performance for CEMS set forth in the protocols for NO<sub>x</sub> and SO<sub>x</sub>.
- (13) DRYER is equipment that removes substances by heating or other processes.
- (14) ELECTRONICALLY TRANSMITTING means transmitting measured data without human alteration between the point/source of measurement and transmission.
- (15) EMISSION FACTOR is the value specified in Tables 1 (NO<sub>x</sub>) or 2 (SO<sub>x</sub>) of Rule 2002-Baselines and Rates of Reduction for NO<sub>x</sub> and SO<sub>x</sub>.
- (16) EMISSION RATE (ER) - is a value expressed in terms of NO<sub>x</sub> mass emissions per unit of heat input, and derived using the methodology specified in the "Protocol for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions" Chapter .
- (17) EXISTING EQUIPMENT is any equipment which can emit NO<sub>x</sub> at a NO<sub>x</sub> RECLAIM facility, for which on or before (Rule Adoption date) has:
- (A) A valid permit to construct or permit to operate pursuant to Rule 201 and/or Rule 203 has been issued; or



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- (B) An application for a permit to construct or permit to operate has been deemed complete by the Executive Officer; or
- (C) An equipment which is exempt from permit per Rule 219 and is operating on or before (Rule Adoption date).
- (18)  $F_d$  FACTOR is the dry F factor for each fuel, the ratio of the dry gas volume of the products of combustion to the heat content of the fuel (dscf/10<sup>6</sup> Btu). F factors are available in 40 CFR Part 60, Appendix A, Method 19.
- (19) FLUID CATALYTIC CRACKING UNIT (FCCU) breaks down heavy petroleum products into lighter products using heat in the presence of finely divided catalyst maintained in a fluidized state by the oil vapors. The fluid catalyst is continuously circulated between the reactor and the regenerator, using air, oil vapor, and steam as the conveying media.
- (20) FURNACE is an enclosure in which energy in a nonthermal form is converted to heat.
- (21) GAS FLARE is a combustion equipment used to prevent unsafe operating pressures in process units during shut downs and start-ups and to handle miscellaneous hydrocarbon leaks and process upsets.
- (22) GAS TURBINES are turbines that use gas as the working fluid. It is principally used to propel jet aircraft. Their stationary uses include electric power generation (usually for peak-load demands), end-of-line voltage booster service for long distance transmission lines, and for pumping natural gas through long distance pipelines. Gas turbines are used in combined (cogeneration) and simple-cycle arrangements.
- (23) GASEOUS FUELS include, but are not limited to, any natural, process, synthetic, landfill, sewage digester, or waste gases with a gross heating value of 300 Btu per cubic foot or higher, at standard conditions.
- (24) HEAT VALUE is the heat generated when one lb. of combustible is completely burned.
- (25) HEATER is any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to water or process streams.
- (26) HIGH HEAT VALUE is determined experimentally by colorimeters in which the products of combustion are cooled to the initial temperature and the heat absorbed by the cooling media is measured.
- (27) HOT STAND-BY is the period of operation when the flow or emission concentration are so low they can not be measured in a representative manner.
- (28) INCINERATOR is equipment that consumes substances by burning.

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- (29) INTERNAL COMBUSTION ENGINE is any spark or compression-ignited internal combustion engine, not including engines used for self-propulsion.
- (30) LIQUID FUELS include, but are not limited to, any petroleum distillates or fuels in liquid form derived from fossil materials or agricultural products for the purpose of creating useful heat.
- (31) MASS EMISSION OF NO<sub>x</sub> in lbs/hr is the measured emission rates of nitrogen oxides.
- (32) MAXIMUM RATED CAPACITY means maximum design heat input in Btu per hour at the higher heating value of the fuels.
- (33) MODEM converts digital signals into audio tones to be transmitted over telephone lines and also convert audio tones from the lines to digital signals for machine use.
- (34) MONTHLY FUEL USE REPORTS could be sufficed by the monthly gas bill or the difference between the end and the beginning of the calendar month's fuel meter readings.
- (35) NINETIETH (90TH) PERCENTILE means a value that would divide an ordered set of increasing values so that at least 90 percent are less than or equal to the value and at least 10 percent are greater than or equal to the value.
- (36) OVEN is a chamber or enclosed compartment equipped to heat objects.
- (37) PEAKING UNIT means a turbine used intermittently to produce energy on a demand basis and does not operate more than 1300 hours per year.
- (38) PORTABLE EQUIPMENT is an equipment which is not attached to a foundation and is not operated at a single facility for more than 90 days in a year and is not a replacement equipment for a specific application which lasts or is intended to last for more than one year.
- (39) PROCESS HEATER means any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to process streams.
- (40) PROCESS WEIGHT means the total weight of all materials introduced into any specific process which may discharge contaminants into the atmosphere. Solid fuels charged shall be considered as part of the process weight, but liquid gaseous fuels and air shall not.
- (41) RATED BRAKE HORSEPOWER (bhp) is the maximum rating specified by the manufacturer and listed on the nameplate of that equipment. If not available, then the rated brake horsepower of an internal combustion engine can be calculated by multiplying the maximum fuel usage per unit time, heating value of fuel,

- equipment efficiency provided by the manufacturer, and the conversion factor (one brake horsepower = 2,545 Btu).
- (42) RATED HEAT INPUT CAPACITY is the heat input capacity 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 capacity specified on the nameplate, the new maximum heat input shall be considered as the rated heat input capacity.
- (43) RECLAIM FACILITY is a facility that has been listed as a participant in the Regional Clean Air Incentives Market (RECLAIM) program.
- (44) REMOTE TERMINAL UNIT (RTU) is a data collection and transmitting device used to transmit data and calculated results to the District Central Station Computer.
- (45) RENTAL EQUIPMENT is equipment which is rented or leased for operation by someone other than the owner of the equipment.
- (46) SHUTDOWN is that period of time during which the equipment is allowed to cool from a normal operating temperature range to a cold or ambient temperature.
- (47) SOLID FUELS include, but are not limited to, any solid organic material used as fuel for the purpose of creating useful heat.
- (48) STANDARD GAS CONDITIONS are defined as one atmosphere of pressure and a temperature of 68 °F or 60 °F, provided that one of these temperatures is used throughout the facility.
- (49) START-UP is that period of time during which the equipment is heated to operating temperature from a cold or ambient temperature.
- (50) SULFURIC ACID PRODUCTION UNIT means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans or acid sludge, but does not include facilities where conversion to sulfuric acid as utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.
- (51) TAIL GAS UNIT is a SO<sub>x</sub> control equipment associated with refinery sulfur recovery plant.
- (52) TEST CELLS are devices used to test the performance of engines such as internal combustion engine and jet engines.
- (53) TIMESHARING OF MONITOR means the use of a common monitor for several sources of emissions.

- (54) TURBINES are machines that convert energy stored in a fluid into mechanical energy by channeling the fluid through a system of stationary and moving vanes.
- (55) UNIT OPERATING DAY means each calendar day that emissions pass through the stack or duct.
- (56) UNIVERSE OF SOURCES FOR NO<sub>x</sub> is a list of RECLAIM facilities that emit NO<sub>x</sub>.
- (57) UNIVERSE OF SOURCES FOR SO<sub>x</sub> is a list of RECLAIM facilities that emit SO<sub>x</sub>.
- (58) AP 42 is a publication published by Environmental Protection Agency (EPA) which is a compilation of air pollution emission rates used to determine mass emission.
- (59) ASTM METHOD D1945-81 Method for Analysis of natural gas by gas chromatography.
- (60) ASTM METHOD 2622-82 Test Method for sulfur in petroleum products (Xray Spectrographic method)
- (61) ASTM METHOD 3588-91 method for calculating colorific value and specific gravity (relative density) of gaseous fuels.
- (62) ASTM METHOD 4294-90 test method for sulfur in petroleum products by non-dispersive Xray fluorescence spectrometry.
- (63) ASTM METHOD 4891-84 test method for heating value of gases in natural gas range by stoichiometric combustion.
- (64) DISTRICT METHOD 2.1 measures gas flow rate through stacks greater than 12 inch in diameter.
- (65) DISTRICT METHOD 7.1 colorimetric determination of nitrogen oxides except nitrous oxide emissions from stationary sources by using the phenoldisulfonic acid (pds) procedure or ion chromatograph procedures. Its range is 2 to 400 milligrams NO<sub>x</sub> (as NO<sub>2</sub> per DSCM).
- (66) DISTRICT METHOD 100.1 is an instrumental method for measuring gaseous emissions of nitrogen oxides, sulfur dioxide, carbon monoxide, carbon dioxide, and oxygen.
- (67) DISTRICT METHOD 307-91 laboratory procedure for analyzing total reduced sulfur compounds and SO<sub>2</sub>.

- (68) EPA METHOD 19 is the method of determining sulfur dioxide removal efficiency and particulate, sulfur dioxide and nitrogen oxides emission rates from electric utility steam generators.
- (69) EPA METHOD 450/3-78-117 air pollutant emission rate for Military and Civil Aircraft.

**RULE 2012 PROTOCOL-  
ATTACHMENT G**

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**SUPPLEMENTAL AND ALTERNATIVE CEMS PERFORMANCE  
REQUIREMENTS FOR LOW NO<sub>x</sub> CONCENTRATIONS**

**ATTACHMENT G**

**SUPPLEMENTAL AND ALTERNATIVE CEMS PERFORMANCE REQUIREMENTS FOR LOW NO<sub>x</sub> CONCENTRATIONS**

- 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)
  - ✓ Full Scale Span (FSS)
  - ✓ National Institute of Standards Traceability (NIST)

**A. Applicability of Supplemental and Alternative Performance Requirements**

The Facility Permit holder electing to use (B)(8)(d)(ii), in Chapter 2 of Rule 2012, Appendix A to measure NO<sub>x</sub> concentrations that fall below 10 percent of the lowest vendor guaranteed full scale span range, shall satisfy the performance requirements as specified in Table G-1 listed below.

**TABLE G-1  
Alternative Performance Requirement(s)**

CEMS RECLAIM Certified per NO <sub>x</sub> Protocol, Appendix A Yes or No	Performance Requirements			
	LLSR/BFD	HLSR/BFD	LLR/BFD	LLCE
Yes	<b>x</b>		+	<b>x</b>
No	<b>x</b>	<b>x</b>	+	<b>x</b>

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 Facility Permit holder shall conduct a low level RATA/bias factor determination.
3. The provisions of Table G-1 do not apply to (B)(8)(c) or (B)(8)(d)(i), in Chapter 2.

The Facility Permit holder electing (or who may be required) to measure concentrations that fall below 10 percent of the higher full scale span value of any range (other than the lowest vendor guaranteed span range), shall perform a linearity test according to the procedure in Attachment G, Section B “Linearity Error”, to satisfy the performance requirements as specified in Table G-2 listed below.

**TABLE G-2**  
**Linearity Performance Test – Ranges Other Than Lowest Vendor**  
**Guaranteed Span Range**

<b><u>Calibration Gas</u></b>	<b><u>Value</u></b>
<u>1</u>	<u>Lowest Non-Zero Value Chosen in Span Range Tested</u>
<u>2</u>	<u>Mid-point (40-60%) of Calibration Gases 1 and 3</u>
<u>3</u>	<u>Nominal Concentration at 10% of Span Range Tested</u>

**B. Test Definitions, Performance Specifications and Test Procedures**

This section explains in detail how each performance requirement is to be conducted.

**Low Level Calibration Error**

The low level calibration error test is defined as challenging the CEMS (from probe to monitor) with certified calibration gases (NO in N2) at three levels in the 0-20 percent full scale span range. Since stable or certifiable cylinder gas standards (e.g. Protocol 1 or NIST traceable) may not be available at the concentrations required for this test, gas dilution systems may be used, with District approval, if they are used according to either District or EPA protocols 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.

1. Performance Specifications

Introduce pollutant concentrations at approximately the 20 percent, 10 percent, and 5 percent of full scale span levels through the normal CEMS calibration system. No low level calibration error shall exceed 2.5 percent of full scale span.

2. Testing Procedures

- a. Perform a standard zero/span check; if zero or span check exceeds 2.5 percent full scale span, adjust monitor and redo zero/span check.



- b. After zero/span check allow the CEMS to sample stack gas for at least 15 minutes.
- c. Introduce any of the low level calibration error standards through the CEMS calibration system.
- d. 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.
- e. After the low level calibration error check allow the CEMS to sample stack gas for at least 15 minutes.
- f. Repeat steps c through e until all three low level calibration error checks are complete.
- g. Conduct post test calibration and zero checks.

### **Spike Recovery and Bias Factor Determinations**

Spiking is defined as introducing known concentrations of the pollutant of interest (gas standard to contain a mixture of NO and NO<sub>2</sub> is representative of the ratio of NO and NO<sub>2</sub> in stack gas) and an appropriate non-reactive, non-condensable and non-soluble tracer gas from a single cylinder (Protocol 1 or NIST traceable to 2 percent analytical accuracy if no Protocol 1 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<sub>2</sub>, 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.

### **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 RECLAIM requirements. The spiking facility/interface shall be a permanently installed part of the CEMS sample acquisition system and accessible to District staff as well as the Facility Permit holder.

#### 1. Performance Specifications

The CEMS shall demonstrate a RA  $\leq$  20 percent, where the spike value is used in place of the reference method in the normal RA calculation, as described below. The bias

factor, if applicable, shall also be determined according to Attachment B.

2. Testing Procedures

- a. 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 full scale span 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 pollutant of interest and CO (or alternative tracer gas) must meet RECLAIM requirements specified in Attachment A.
- b. 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 full scale span, and preferably within 30-70 percent full scale span.
- c. 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.
- d. For each run, the average CEMS reading must be between 40 percent full scale span and 80 percent full scale span. 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.
- e. 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.
- f. 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 Appendix A. The RA shall be  $\leq 20$  percent. Determine the bias factor, if applicable, according to Attachment B.

### **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 full scale span level. The spiking facility/interface shall be a permanently installed part of the CEMS sample acquisition system and accessible to District staff as well as the Facility Permit holder.

#### 1. 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 and the extent to which the spike must be greater than the background pollutant level.

#### 2. Testing Procedures

- a. 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 full scale span 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 pollutant of interest and CO (or alternative tracer gas) must meet RECLAIM requirements specified in Appendix A.
- b. 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 full scale span, and preferably within 30-70 percent full scale span.
- c. 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.

- d. For each run, the average CEMS reading must be below 25 percent full scale span and > 10 percent full scale span. 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.
- e. 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.
- f. 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 Appendix A. 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 full scale span.

#### **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.

1. 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.

2. Testing Procedures

The reference method for the low level RATA/bias factor determination is Method 100.1

- a. Perform a minimum of nine runs of low level RATA for CEMS versus the reference method at actual levels (unspiked).
- b. The full scale span range for the reference method shall be such that all data falls with 10 – 95 percent of full scale span range.
- c. The reference method shall meet all Method 100.1 performance criteria.
- d. Calculate the average difference ( $d = \text{CEMS} - \text{reference method}$ , ppm) and confidence coefficient ( $cc = \text{statistical calculated}$ , ppm).
- e. 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.

### **Linearity Error**

The linearity error is defined as the percentage error in linearity, calculated pursuant to the equation in Table G-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.

#### 1. Performance Specifications

Introduce calibration gas concentrations in accordance with Table G-2. The linearity error shall not exceed 5.0 percent.

#### 2. Testing Procedures

- a. A linearity error test shall be comprised of three data points for each of three calibration gases listed in Table G-2 for each span range.
- b. Each low level linearity test shall be performed by introducing calibration gas into the CEMS at the span range values specified in Table G-2.
- c. 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.

- d. Linearity error shall not exceed 5.0 percent of the calibration gas concentration, as calculated pursuant to the equation in Table G-3:

**TABLE G-3**  
**Linearity Error Test Equation**

<u>Test</u>	<u>Equation</u>	<u>Where</u>
<u>Linearity Error</u>	$LE = \frac{ R - \bar{C} }{R} \times 100$	<u><math>\bar{C}</math> = Mean of the CEMS response values</u> <u>R = Certified gas concentration as reference value</u>

**C. Testing Frequency**

For each CEMS, perform the aforementioned performance requirements once semiannually thereafter, as specified below for the type of test. These semiannual assessments shall be completed within six months of the end of the calendar quarter in which the CEMS was last tested for certification purposes (initial and recertification) or within three months of the end of the calendar quarter in which the District sent notice of a provisional approval for a CEMS, whichever is later. Thereafter, the semiannual tests shall be completed within six months of the end of the calendar quarter in which the CEMS was last tested. For CEMS on bypass stacks/ducts, the assessments shall be performed once every two successive operating quarters in which the bypass stacks/ducts were operated. These tests shall be performed after the calendar quarter in which the CEMS was last tested as part of the CEMS certification, as specified below for the type of test.

Relative accuracy tests may be performed on an annual basis rather than on a semiannual basis if the relative accuracies during the previous audit for the NO<sub>x</sub> CEMS are 7.5 percent or less.

For CEMS on any stack or duct through which no emissions have passed in two or more successive quarters, the semiannual assessments must be performed within 14 operating days after emissions pass through the stack/duct.

# ATTACHMENT L

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### Final Staff Report

**Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions**

**Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions**

**November 2023**

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Planning, Rule Development, and Implementation  
Sarah Rees, Ph.D.

#### **Assistant Deputy Executive Officer**

Planning, Rule Development, and Implementation  
Michael Krause

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
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**EXECUTIVE OFFICER:**

WAYNE NASTRI



## **BACKGROUND**

A continuous emission monitoring system (CEMS) is the combination of equipment necessary for the determination of pollutant concentrations or emission rates on a continuous basis using analyzer measurements and a conversion equation, graph, or computer program to produce results in units of the applicable emission limitation or standard. A CEMS consists of three major subsystems: the sampling interface, analyzers, and a data recorder. The South Coast Air Quality Management District (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. The South Coast AQMD has established CEMS monitoring rules to provide guidance and specifications for CEMS installation and operation, and to ensure accuracy and precision of the CEMS.

Regulation XX – REgional CLean Air Incentives Market (RECLAIM) contains two such rules: Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for SO<sub>x</sub> Emissions (Rule 2011) and Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for NO<sub>x</sub> Emissions (Rule 2012), both of which establish guidance and specifications for the installation and operation of CEMS to ensure accuracy and precision of monitoring mass emissions for SO<sub>x</sub> and NO<sub>x</sub>, respectively, at RECLAIM facilities.

In March 2021 the Governing Board adopted Rule 218.2 – Continuous Emission Monitoring System: General Provisions (Rule 218.2) and Rule 218.3 – Continuous Emission Monitoring: Performance Specifications (Rule 218.3) to update CEMS requirements and to prepare for the transition of facilities in RECLAIM to a command-and-control regulatory program. Rules 218.2 and 218.3 apply to a Facility Permit holder of CEMS, alternative continuous emission monitoring systems, or semi-continuous emission monitoring systems at former RECLAIM facilities as well as non-RECLAIM facilities after the implementation dates specified in Rules 218.2 and 218.3. Rule 218.2 contains paragraphs (e)(3) and (e)(4) to address requirements for CEMS under extended basic equipment shutdowns (minimum of 168 consecutive hours) provided specific conditions are met. Rule 218.3, Attachment A contains a three-point linearity error test to measure concentrations that fall below ten percent of the higher full scale span value of any range, with the exception of the lowest vendor guaranteed span range.

The proposed amendments to Rules 2011 and 2012 incorporate existing provisions in Rule 218.2 paragraphs (e)(3) and (e)(4), and the three-point linearity error test in Rule 218.3. Proposed Amended Rule 2011 (PAR 2011) and Proposed Amended Rule 2012 (PAR 2012) are necessary to provide monitoring relief for RECLAIM facilities as they replace and/or modify equipment to comply with landing rules and will provide consistency across South Coast AQMD CEMS rules.

## **REGULATORY HISTORY FOR RULES 2011 AND 2012**

The adoption of the RECLAIM program in October 1993, included Rule 2011 and Rule 2012 which established the monitoring, reporting, and recordkeeping requirements for SO<sub>x</sub> and NO<sub>x</sub> emissions, respectively. For the largest sources, Rule 2011 and Rule 2012 require CEMS, which are state-of-the-art monitoring systems that are critical for the RECLAIM program where

compliance has been based on overall mass emissions as compared to concentration limits under a command-and-control regulatory structure.

The most recent amendments to Rules 2011 and 2012 were made in May 2005. The previous amendments to Rule 2011 included requirements for Best Available Retrofit Control Technology (BARCT) for RECLAIM facilities as well as a clarification on monitoring and recordkeeping requirements for new RECLAIM sources subject to Rule 2005 – New Source Review for RECLAIM. The amendments to Rule 2012 included allowing a delay in the due date for the Relative Accuracy Test Audit (RATA) for a NO<sub>x</sub> source that is operated intermittently and specifying mass emissions reporting through the South Coast AQMD's website. Rules 2011 and 2012 were last approved by the U.S. EPA on September 14, 2017, into the California State Implementation Plan (SIP).

## **PUBLIC PROCESS**

The development of PAR 2011 and PAR 2012 was conducted through a public process. A Public Workshop for PAR 2011 and PAR 2012 was held on August 29, 2023. The objective of the Public Workshop is to gain consensus and resolve key issues with the stakeholders. In response to a comment during the Public Workshop, staff included new provisions for a three-point linearity error test to measure concentrations that fall below ten percent of the higher full scale span value of any range, with the exception of the lowest vendor guaranteed span range.

## **PROPOSED AMENDMENTS TO RULES 2011 AND 2012**

PAR 2011 and 2012 will provide consistency between South Coast AQMD CEMS rules and reduce potential compliance issues by providing monitoring relief. As RECLAIM facilities are replacing or modifying equipment to comply with RECLAIM landing rules, there is a need for additional compliance pathways for CEMS under extended CEMS basic equipment shutdown scenarios ~~shutdowns~~. Without an additional compliance pathway, it is anticipated that the South Coast AQMD Hearing Board would experience an increased demand on resources in the form of additional variance petitions. Without the proposed amendments, RECLAIM facilities would need variance relief to allow for CEMS to be offline while equipment is shutdown for extended periods.

Furthermore, South Coast AQMD rules are becoming more stringent as emission limits are revised to reflect BARCT. As facilities replace or modify equipment that comply with BARCT emission limits, staff is seeing increased measurements in the lower span range of a CEMS. However, CEMS can only accurately monitor emissions between 10 percent and 95 percent of the span range. Currently, Rules 2011 and 2012 only provide an alternative performance test for SO<sub>x</sub> and NO<sub>x</sub> concentrations that fall below ten percent of the lowest vendor guaranteed span range. In response to a comment during the Public Workshop, staff included new provisions for a three-point linearity error test to measure concentrations for SO<sub>x</sub> and NO<sub>x</sub> that fall below ten percent of the higher full scale span value of any range, with the exception of the lowest vendor guaranteed span range.

The rule language proposed for inclusion into PAR 2011 and PAR 2012 is based on similar existing provisions in Rules 218.2 and 218.3. The proposed rule language will not delay the transition of NO<sub>x</sub> RECLAIM to a command-and-control regulatory structure, nor will it result in an increase

in emissions. It is strictly a procedural amendment meant to provide RECLAIM facilities with compliance options already adopted in Rules 218.2 and 218.3, which former RECLAIM facilities will be subject to. As the RECLAIM program is still active, current RECLAIM facilities are subject to Rule 2011 and Rule 2012. Both PAR 2011 and PAR 2012 include changes to update references and provide clarity.

Staff is continuing to work on other amendments to Regulation XX related to the sunset of the NO<sub>x</sub> RECLAIM program, which include an exit date for NO<sub>x</sub> RECLAIM facilities. It should be noted that at this time, SO<sub>x</sub> RECLAIM is not transitioning to a command-and-control regulatory structure. Consequently, CEMS in SO<sub>x</sub> RECLAIM will continue to be subject to the requirements in Rule 2011.

### ***Proposed Amended Rule 2011***

Subparagraph (c)(2)(D) explains the conditions under which Facility Permit holders are not subject to the operating and reporting conditions for CEMS in subparagraphs (c)(2)(A) and (c)(2)(B). For any SO<sub>x</sub> source with a shutdown period shorter than 168 consecutive hours, the Facility Permit holder of the CEMS would not be permitted to use this provision for monitoring relief. Subparagraph (c)(2)(D) also validates emission hours under extended shutdowns and classifies those hours as zero value data points to make the Missing Data Procedure in Appendix A, Chapter 2, Section E not applicable. A CEMS must record zero emissions for four hours after the shutdown of the emission generating equipment for emission hours to be valid. Zero emissions are measured as zero value data points pursuant to Appendix A, Chapter 2, Section B, Part 5.

Subparagraph (c)(2)(E) outlines the requirements for a CEMS to be considered non-operational for the purposes of demonstrating eligibility for monitoring relief pursuant to subparagraph (c)(2)(D).

Subparagraph (c)(3)(E) was added to provide an extension of the electronic reporting requirements specified in subparagraphs (c)(3)(A), and (c)(3)(B), and Appendix A, Chapter 7 for a SO<sub>x</sub> source that is shutdown pursuant to subparagraph (c)(2)(D). The extension provides a Facility Permit holder 48 hours after the CEMS passes a calibration error test to submit all applicable electronic emission reports for the duration of the shutdown. The data is considered valid and consisting of zero value data points pursuant to subparagraph (c)(2)(D), provided that the Facility Permit holder complies with all requirements specified in clauses (c)(2)(D)(i) to (c)(2)(D)(iv).

The proposed amended rule language is contained in subdivision (c) – Major SO<sub>x</sub> Source, as all RECLAIM SO<sub>x</sub> sources equipped with a CEMS are major SO<sub>x</sub> sources. A SO<sub>x</sub> source that installs a CEMS can utilize the new provisions for monitoring relief during long term shutdowns, but must be re-permitted as a major SO<sub>x</sub> source pursuant to subparagraph (c)(1)(F) before using the new compliance pathway specified in subparagraph (c)(2)(D).

Attachment F to Appendix A was revised to allow facilities to run a three-point linearity error test to address a data gap. The valid operating range of CEMS analyzers is 10-95 percent of the analyzer full scale span range. For a SO<sub>x</sub> analyzer with dual span ranges, e.g., 0-10 ppm and 0-200 ppm, the valid ranges are 1-9.5 ppm and 20-190 ppm, respectively. If SO<sub>x</sub> emissions in the

lower range exceed 9.5 ppm, the emissions need to be reported at 20 ppm on the higher range. As a result, there is a data gap between 9.5 ppm and 20 ppm in this example, and this leads to over-reporting of emissions.

Currently, Rule 2011, Attachment F to Appendix A allows the use of less than ten percent of the lowest vendor guaranteed full scale span range (0-10 ppm in the above example) by successfully conducting performance requirements listed in Table F-1. The proposed amendment to Rule 2011, Attachment F to Appendix A allows the use of less than ten percent of the higher full scale span range (0-200 ppm in the above example) by successfully conducting a three-point linearity test. This proposed amendment can reduce the above-mentioned data gap. Appendix A, Chapter 2, Section B, Part 8 (b) was updated to provide the option to conduct a three-point linearity test specified in Appendix A, Attachment F, Section B.

### ***Proposed Amended Rule 2012***

Requirements for PAR 2012 are structured in a similar fashion to PAR 2011 and have the same purpose and intent. The proposed amendments to Rule 2012 are also contained in subparagraphs (c)(2)(D), (c)(2)(E), and (c)(3)(E). Subparagraph (c)(1)(I) specifies that NO<sub>x</sub> sources equipped with CEMS can become major NO<sub>x</sub> sources, provided that the NO<sub>x</sub> source is re-permitted as a major NO<sub>x</sub> source.

The new three-point linearity alternative performance test is contained within Attachment G to Appendix A, which mirrors the proposed language in in PAR 2011 Attachment F to Appendix A. Appendix A, Chapter 2, Section B, Part 8 (b) was updated to provide the option to conduct a three-point linearity test, specified in Appendix A, Attachment G, Section B to mirror PAR 2011.

### **AFFECTED FACILITIES**

Based on the RECLAIM compliance year 2021 audit data, there are 68 RECLAIM facilities that operate NO<sub>x</sub> and/or SO<sub>x</sub> sources monitored by CEMS. There are a total of 405 NO<sub>x</sub>-emitting sources that are monitored by CEMS and of those sources, 280 are NO<sub>x</sub> and SO<sub>x</sub> emitting sources. It should be noted that one CEMS may monitor emissions for several NO<sub>x</sub> and/or SO<sub>x</sub> sources. The proposed amendments are administrative in nature and therefore no modifications or new equipment are expected at affected facilities.

### **EMISSION REDUCTIONS**

PAR 2011 and PAR 2012 are administrative rules that provide technical guidelines for the installation and operation of CEMS required by South Coast AQMD rules or permit conditions. PAR 2011 and PAR 2012 do not directly regulate sources for emissions control and do not contain emission limits; therefore, there are no emission reductions that will result from this rule development.

## **COSTS AND COST-EFFECTIVENESS**

While a source-specific rule determines when a CEMS would be required for emission monitoring, PAR 2011 and PAR 2012 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 for which the CEMS is required as such there are no costs associated with the proposed amendments.

## **INCREMENTAL COST EFFECTIVENESS**

Health and Safety Code Section 40920.6 requires an incremental cost-effectiveness analysis for BARCT rules or emission reduction strategies when there is more than one control option that would achieve the emission reduction objective of the proposed amendments, relative to ozone, CO, SO<sub>x</sub>, NO<sub>x</sub>, and their precursors. PAR 2011 and PAR 2012 are not BARCT rules or emission reduction strategies; therefore, this provision is not applicable.

## **SOCIOECONOMIC ANALYSIS/IMPACT ASSESSMENT**

The proposed amendments to Rule 2011 and Rule 2012 are administrative in nature and do not affect air quality or emissions limitations.- Therefore, ~~no~~ a socioeconomic ~~analysis/impact assessment~~ is not required under Health and Safety Code Sections 40440.8 and 40728.5.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (PAR 2011 and PAR 2012) is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3). A Notice of Exemption ~~will be~~ has been prepared pursuant to CEQA Guidelines Section 15062, and if the proposed project is approved, the Notice of Exemption will be filed for posting with the State Clearinghouse of the Governor's Office of Planning and Research, and with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino Counties.

## **DRAFT FINDINGS UNDER HEALTH AND SAFETY CODE SECTION 40727**

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 for PAR 2011 and PAR 2012 to provide consistency across CEMS rules and a compliance pathway for CEMS under extended ~~CEMS~~ basic equipment shutdown scenarios/shutdowns, as RECLAIM facilities are replacing or modifying equipment to comply with RECLAIM landing rules.

**Authority:** The South Coast AQMD obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code Sections 39002, 39616, 40000, 40001, 40440, 40440.1, 40441, 40702, 40725 through 40728, and 41511.

**Clarity:** PAR 2011 and PAR 2012 have been written or displayed so that their meaning can be easily understood by the persons affected by the rules.

**Consistency:** PAR 2011 and PAR 2012 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 2011 and PAR 2012 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 these rules, the South Coast AQMD hereby implements, interprets, or makes specific reference to the following statutes: Assembly Bill 617, Health and Safety Code sSections 39002, 39616, 40000, 40001, 40702, 40440(a), ~~41511~~, and 40725 through 40728.5, and 41511.

## COMPARATIVE ANALYSIS

Health and Safety Code Section 40727.2(g) for comparative analysis is applicable when 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 proposed amendments do not impose such requirements.

**LIST OF AFFECTED FACILITIES**

<b>Fac ID</b>	<b>Name</b>	<b>Cycle</b>	<b>Market</b>
3417	AIR PROD & CHEM INC	1	NOx
3704	ALL AMERICAN ASPHALT, UNIT NO.01	2	NOx
4242	SAN DIEGO GAS & ELECTRIC	2	NOx
4477	SO CAL EDISON CO	1	NOx
5973	SOCAL GAS CO	1	NOx
7416	LINDE INC.	1	NOx
7427	OWENS-BROCKWAY GLASS CONTAINER INC	1	NOx/SOx
8547	QUEMETCO INC	1	NOx/SOx
11435	PQ LLC	2	NOx/SOx
12428	NEW NGC, INC.	2	NOx
16642	ANHEUSER-BUSCH LLC., (LA BREWERY)	1	NOx/SOx
19167	R J. NOBLE COMPANY	2	NOx
20604	RALPHS GROCERY CO	2	NOx
25638	BURBANK CITY, BURBANK WATER & POWER	2	NOx
42630	LINDE INC.	1	NOx
46268	CALIFORNIA STEEL INDUSTRIES INC	1	NOx
47781	OLS ENERGY-CHINO	1	NOx
63180	DARLING INGREDIENTS INC.	1	NOx
68118	TIDELANDS OIL PRODUCTION COMPANY ETAL	2	NOx
101656	AIR PRODUCTS AND CHEMICALS, INC.	2	NOx
101977	SIGNAL HILL PETROLEUM INC	1	NOx
115314	LONG BEACH GENERATION, LLC	2	NOx
115389	AES HUNTINGTON BEACH, LLC	2	NOx/SOx
115394	AES ALAMITOS, LLC	1	NOx
115536	AES REDONDO BEACH, LLC	1	NOx
115663	EL SEGUNDO ENERGY CENTER LLC	1	NOx
117290	B BRAUN MEDICAL, INC	2	NOx
127299	WILDFLOWER ENERGY LP/INDIGO GEN., LLC	2	NOx
128243	BURBANK CITY, BURBANK WATER & POWER, SCPPA	1	NOx
129497	THUMS LONG BEACH CO	1	NOx
129810	CITY OF RIVERSIDE PUBLIC UTILITIES DEPT	1	NOx
139796	CITY OF RIVERSIDE PUBLIC UTILITIES DEPT	1	NOx
146536	WALNUT CREEK ENERGY, LLC	1	NOx/SOx
148236	AIR LIQUIDE LARGE INDUSTRIES U.S., LP	2	NOx/SOx
151798	TESORO REFINING AND MARKETING CO, LLC	1	NOx/SOx
152707	SENTINEL ENERGY CENTER LLC	1	NOx
153992	CANYON POWER PLANT	1	NOx

Fac ID	Name	Cycle	Market
155474	BICENT (CALIFORNIA) MALBURG LLC	2	NOx
155877	MOLSON COORS USA LLC	1	NOx
156741	HARBOR COGENERATION CO, LLC	2	NOx
160437	SOUTHERN CALIFORNIA EDISON	1	NOx
164204	CITY OF RIVERSIDE, PUBLIC UTILITIES DEPT	2	NOx
171107	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	2	NOx/SOx
171109	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	1	NOx/SOx
172005	NEW- INDY ONTARIO, LLC	2	NOx
172077	CITY OF COLTON	1	NOx
174655	TESORO REFINING & MARKETING CO, LLC	2	NOx/SOx
180908	ECO SERVICES OPERATIONS CORP.	1	NOx/SOx
181667	TORRANCE REFINING COMPANY LLC	1	NOx/SOx
182561	COLTON POWER, LP	1	NOx
182563	COLTON POWER, LP	1	NOx
185600	BRIDGE ENERGY, LLC	2	NOx
185801	BERRY PETROLEUM COMPANY, LLC	1	NOx
186899	ENERY HOLDINGS LLC/LGHTHP_6_ICEGEN	1	NOx
187165	ALTAIR PARAMOUNT, LLC	1	NOx/SOx
191386	THE NEWARK GROUP, INC. DBA GREIF, INC	2	NOx
800026	ULTRAMAR INC	1	NOx/SOx
800030	CHEVRON PRODUCTS CO.	2	NOx/SOx
800074	LA CITY, DWP HAYNES GENERATING STATION	1	NOx
800075	LA CITY, DWP SCATTERGOOD GENERATING STN	1	NOx
800080	LUNDAY-THAGARD CO DBA WORLD OIL REFINING	2	NOx/SOx
800128	SO CAL GAS CO	1	NOx
800129	SFPP, L.P.	1	NOx
800168	PASADENA CITY, DWP	1	NOx
800170	LA CITY, DWP HARBOR GENERATING STATION	1	NOx
800193	LA CITY, DWP VALLEY GENERATING STATION	2	NOx
800335	LA CITY, DEPT OF AIRPORTS	2	NOx
800436	TESORO REFINING AND MARKETING CO, LLC	1	NOx/SOx



## RESPONSE TO PUBLIC COMMENTS

### Public Workshop Comments

#### **Public Workshop Commenter #1: Bill Quinn – California Council for Environmental and Economic Balance**

The commenter expressed appreciation to staff and highlighted the importance of the rulemaking for compliance at RECLAIM facilities while landing rules are implemented.

#### **Staff Response to Public Workshop Commenter #1:**

Staff appreciates support of PAR 2011 and PAR 2012.

#### **Public Workshop Commenter #2: Curtis Coleman – Southern California Air Quality Alliance**

The commenter expressed appreciation to staff for the expeditious work on PAR 2011 and PAR 2012.

#### **Staff Response to Public Workshop Commenter #2:**

See response to Commenter #1.

#### **Public Workshop Commenter #2: Dan McGivney – SoCalGas**

The commenter expressed appreciation to staff on their quick work on PAR 2011 and PAR 2012.

#### **Staff Response to Public Workshop Commenter #3:**

See response to Commenter #1.

#### **Public Workshop Commenter #2: Charlene He – AES**

The commenter expressed interest in adding a three-point linearity error test provision similar to options in Rule 218.3 Attachment A that would expand the quality assurance options to include a test to fill an existing data gap below the 10 percent – 95 percent span range.

#### **Staff Response to Public Workshop Commenter #4:**

Staff acknowledges the benefits of consistency between CEMS rules as RECLAIM facilities transition to a command-and control regulatory structure. Attachment F to Appendix A for PAR 2011 and Attachment G to Appendix A for PAR 2012, respectively, were updated to include a three-point linearity error test procedure.

## Comment Letters

### Comment Letter #1



#### California Council for Environmental and Economic Balance

101 Mission Street, Suite 1440, San Francisco, California 94105  
415-512-7890 phone, 415-512-7897 fax, [www.cceeb.org](http://www.cceeb.org)

September 12, 2023

Joshua Ewell  
Planning, Rule Development, and Implementation  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

Re: Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>) Emissions; and Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions

Dear Mr. Ewell,

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we submit these comments in support of the South Coast Air Quality Management District's Proposed Amended Rule 2011 and Proposed Amended Rule 2012. CCEEB has been a longstanding stakeholder engaged in the District's RECLAIM program to which these proposed amendments would apply.

PAR 2011 and PAR 2012 will address a potential conflict that could occur when facilities are implementing the so-called landing rules under the RECLAIM program. For example, if compliance with a landing rule requires a facility to remove or modify a stack that contains a Continuous Emission Monitoring Systems (CEMS) unit, that facility would need to shut down the CEMS unit. However, currently, Rules 2011 and 2012 require the installation and operation of CEMS units at RECLAIM facilities without exception, leading to an inability to comply with both the landing rules as well as Rules 2011 and 2012. For non-RECLAIM facilities, existing District regulations have provisions to address this concern; however, these provisions do not apply to RECLAIM facilities.

We believe PAR 2011 and PAR 2012 provide technical changes to existing rule language that will address this situation while including safeguards to ensure that there will be no adverse impact on air quality.

1-1

Joshua Ewell  
September 12, 2023  
Page 2

We thank the staff for quickly moving to develop a proposed solution. CCEEB supports PAR 2011 and PAR 2012 and will urge the Governing Board to approve these proposals.

Sincerely,



Bill Quinn  
CCEEB Consultant

cc: Michael Krause, SCAQMD  
Tim Carmichael, CCEEB  
Christine White, CCEEB  
Members, South Coast Air Project

**Staff Response to Comment Letter #1**

*Response to Comment 1-1:*

PAR 2011 and PAR 2012 will create consistency between CEMS rules and address potential CEMS compliance issues during long term shutdowns.

*Response to Comment 1-2:*

Staff appreciates support of PAR 2011 and PAR 2012.

1-2

ATTACHMENT M



**South Coast  
Air Quality Management District**

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

**SUBJECT: NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

**PROJECT TITLE: PROPOSED AMENDED RULE 2011 – REQUIREMENTS FOR MONITORING, REPORTING, AND RECORDKEEPING FOR OXIDES OF SULFUR (SO<sub>x</sub>) EMISSIONS, AND PROPOSED AMENDED RULE 2012 – REQUIREMENTS FOR MONITORING, REPORTING, AND RECORDKEEPING FOR OXIDES OF NITROGEN (NO<sub>x</sub>) EMISSIONS**

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-2023>.

**NOTICE OF EXEMPTION FROM THE  
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

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**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

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**Project Title:** Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions, and Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

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**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.

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**Description of Nature, Purpose, and Beneficiaries of Project:** Rule 2011 and Rule 2012 contain specifications for the installation and operation of continuous emission monitoring systems (CEMS) to ensure accuracy and precision of monitoring mass emissions for oxides of sulfur (SOx) and oxides of nitrogen (NOx) at Regional Clean Air Incentives Market (RECLAIM) facilities. To provide consistency between South Coast AQMD CEMS rules, reduce potential compliance issues by providing monitoring relief for RECLAIM facilities as they replace and/or modify equipment to comply with landing rules, and to improve clarity, Proposed Amended Rule 2011 (PAR 2011) and Proposed Amended Rule 2012 (PAR 2012) include the following new provisions that will: 1) allow the owner or operator to shutdown the SOx and/or NOx CEMS when the emission source for which the CEMS is monitoring is not scheduled to be operating and is not generating emissions for an extended period of time, provided specific conditions are met; and 2) expand the alternative performance test options to allow a three-point linearity error test to measure concentrations for SOx and NOx. Implementation of PAR 2011 and PAR 2012 will neither delay the transition of NOx RECLAIM to a command-and-control regulatory structure, nor result in a change in emissions. The proposed project will benefit RECLAIM facilities when conducting monitoring activities without undermining the overall goal of CEMS which is to collect accurate data for the purpose of determining compliance with RECLAIM requirements.

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**Public Agency Approving Project:** South Coast Air Quality Management District  
**Agency Carrying Out Project:** South Coast Air Quality Management District

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**Exempt Status:** CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption

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**Reasons why project is exempt:** South Coast AQMD, as Lead Agency, has reviewed the proposed project (PAR 2011 and PAR 2012) 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.

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**Date When Project Will Be Considered for Approval (subject to change):**  
South Coast AQMD Governing Board Public Hearing: November 3, 2023

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<b>PAR 2011 and PAR 2012 Contact Person:</b> Joshua Ewell	<b>Phone Number:</b> (909) 396-2212	<b>Email:</b> <a href="mailto:jewell@aqmd.gov">jewell@aqmd.gov</a>	<b>Fax:</b> (909) 396-3982
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**Date Received for Filing:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ *(Signed and Dated Upon Board Approval)*  
Kevin Ni  
Acting Program Supervisor, CEQA  
Planning, Rule Development, and Implementation

Proposed Amended Rule 2011 – Requirements for Monitoring,  
Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>)  
Emissions  
And  
Proposed Amended Rule 2012 – Requirements for Monitoring,  
Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>)  
Emissions



**Board Meeting**  
**November 3, 2023**

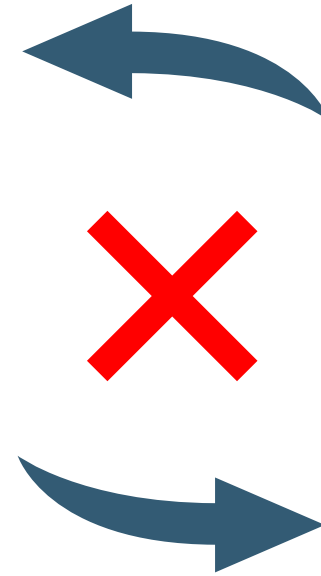
# Rule 2011\* and Rule 2012\*\* Background

- Continuous emissions monitoring systems (CEMS) are used to continuously measure pollutant concentrations within a stack
- Rules 2011 and 2012 establish CEMS requirements for RECLAIM facilities
  - Rules 2011 and 2012 require that CEMS be in operation at all times, even when the equipment is not in operation
  - RECLAIM operators have sought variances from the Hearing Board when the basic unit is not operational for prolonged periods
- To meet lower NO<sub>x</sub> limits in source-specific rules, extended equipment shutdowns are needed as pollution controls are being installed

\* Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO<sub>x</sub>)

\*\*Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>)

# Extended Shutdown Scenario



Monitored equipment is non-operational and disconnected for an extended period (at least 168 consecutive hours)

The CEMS has no emission source to monitor (emissions are verified as zero) so it may be offline while the monitored equipment is shutdown



# Proposed Amendments to Rules 2011 and 2012 based on Rule 218.2\* and Rule 218.3\*\*

Contains requirements to be applicable for extended CEMS shutdowns and validates the emission hours as zero value data points

Describes acceptable methods to demonstrate non-operation of equipment for the duration the CEMS is offline

Includes a three-point linearity test to address a data gap which can result in overreporting of emissions

Other minor changes for clarification and consistency

\*Rule 218.2 – Continuous Emission Monitoring System: General Provisions

\*\*Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications

# Impacts and Key Issues

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## Costs

- No costs are associated with PAR 2011 and PAR 2012
- No adverse socioeconomic impacts are expected

## Environmental Impacts

- The project will not require physical modifications
- No significant adverse environmental impacts are expected
- A Notice of Exemption from CEQA has been prepared

## Key Issues

- Staff is not aware of any remaining key issues

# Staff Recommendation

- Adopt Resolution:
  - Determining that Proposed Amended Rule 2011 and Proposed Amended Rule 2012 are exempt from the requirements of the California Environmental Quality Act
  - Amending Rule 2011 and Rule 2012