

REVISED



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

HYBRID STATIONARY SOURCE COMMITTEE MEETING

Committee Members

Mayor Larry McCallon, Chair
Supervisor Holly J. Mitchell, Vice Chair
Councilmember Michael A. Cacciotti, Board Vice Chair
Senator Vanessa Delgado (Ret.), Board Chair
Board Member Veronica Padilla-Campos
Councilmember José Luis Solache

September 15, 2023 ♦ 10:30 a.m.

TELECONFERENCE LOCATIONS

Kenneth Hahn Hall of Administration
500 W. Temple Street
HOA Room 374-A
Los Angeles, CA 90012

Lynwood City Hall
11330 Bullis Road
(Council Chambers Conference Room)
Lynwood, CA 90262

A meeting of the South Coast Air Quality Management District Stationary Source Committee will be held at 10:30 a.m. on Friday, September 15, 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 remote 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 if the meeting is changed to a full remote via webcast format, and details on how to participate:

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

ELECTRONIC PARTICIPATION INFORMATION

(Instructions provided at bottom of the agenda)

Join Zoom Meeting - from PC or Laptop, or Phone

<https://scaqmd.zoom.us/j/94141492308>

Meeting ID: **941 4149 2308** (applies to all)

Teleconference Dial In: +1 669 900 6833

One tap mobile: +16699006833,94141492308#

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

PUBLIC COMMENT WILL STILL BE TAKEN

Cleaning the air that we breathe...

AGENDA

Members of the public may address this body concerning any agenda item before or during consideration of that item (Gov't. Code Section 54954.3(a)). If you wish to speak, raise your hand on Zoom or press Star 9 if participating by telephone. All agendas for regular meetings are posted at South Coast AQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, at least 72 hours in advance of the regular meeting. Speakers may be limited to three (3) minutes total for all items on the agenda.

CALL TO ORDER

ROLL CALL

INFORMATIONAL ITEMS (Items 1 through 5)

- 1. Quarterly Permitting Update for Rule 1109.1 - Emissions of Oxides of Nitrogen from Petroleum Refineries and Related Operations (10 mins)** Bhaskar Chandan
Senior Engineering
Manager
(No Motion Required)
Staff will provide a quarterly update of permitting activities associated with the implementation of Rule 1109.1.
(Written Material Attached)
- 2. Update on Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines (10 mins)** Michael Morris
Planning and Rules
Manager
(No Motion Required)
Staff will provide a summary of Proposed Rule 1110.3 and Proposed Amended Rule 1110.2 since the Stationary Source Committee meeting on February 17, 2023. The presentation will focus on the key remaining issue and staff responses.
(Written Material Attached)
- 3. Summary of Proposed Amended Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) and Proposed Amended Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions (10 mins)** Michael Krause
Assistant Deputy
Executive Officer
(No Motion Required)
Staff will provide a summary of Proposed Amended Rules 2011 and 2012 which provide RECLAIM facilities a compliance pathway for continuous emission monitoring systems during extended shutdowns of basic equipment. Staff will summarize any key remaining issues.
(Written Material Attached)
- 4. Update on Proposed Amended Rule 1405 – Control of Ethylene Oxide Emissions from Sterilization and Related Operations (10 mins)** Kalam Cheung, PhD
Planning and Rules
Manager
(No Motion Required)
Staff will provide an update in response to comments raised at the Set Hearing on September 1, 2023.
(Written Materials Attached)

5. **Update on Proposed Amended Rule 1180 - Major Petroleum Refinery Fenceline and Community Air Monitoring and Proposed Rule 1180.1 – Other Refinery Fenceline and Community Air Monitoring** (10 mins) Heather Farr
Planning and Rules
Manager
(No Motion Required)
Staff will provide a summary of Proposed Amended Rule 1180 and Proposed Rule 1180.1 which expands fenceline and community air monitoring requirements to include smaller refineries and facilities whose operations are related to refineries.
(Written Material Attached)

WRITTEN REPORTS (Item 6 through 7)

6. **Monthly Update of Staff's Work with U.S. EPA and CARB on New Source Review Issues for the Transition of RECLAIM Facilities to a Command-and-Control Regulatory Program** Michael Krause
(No Motion Required)
This is a monthly update on staff's work with U.S. EPA and CARB regarding New Source Review issues related to the RECLAIM transition.
(Written Material Attached)
7. **Notice of Violation Penalty Summary** Bayron Gilchrist
(No Motion Required) General Counsel
This report provides the total penalties settled in August 2023 which includes Civil, Supplemental Environmental Projects, Mutual Settlement Assessment Penalty Program, Hearing Board and Miscellaneous.
(Written Material Attached)

OTHER MATTERS

8. **Other Business**
Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may ask a question for clarification, may make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter, or may take action to direct staff to place a matter of business on a future agenda. (Gov't. Code Section 54954.2)
9. **Public Comment Period**
At the end of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's authority that is not on the agenda. Speakers may be limited to three (3) minutes each.
10. **Next Meeting Date:** Friday, October 20, 2023 at 10:30 a.m.

ADJOURNMENT

Americans with Disabilities Act and Language Accessibility

Disability and language-related accommodations can be requested to allow participation in the Stationary Source Committee meeting. The agenda will be made available, upon request, in appropriate alternative formats to assist persons with a disability (Gov't Code Section 54954.2(a)). In addition, other documents may be requested in alternative formats and languages. Any disability or language related accommodation

must be requested as soon as practicable. Requests will be accommodated unless providing the accommodation would result in a fundamental alteration or undue burden to the South Coast AQMD. Please contact Catherine Rodriguez at (909) 396-2735 from 7:00 a.m. to 5:30 p.m., Tuesday through Friday, or send the request to crodriguez@aqmd.gov.

Document Availability

All documents (i) constituting non-exempt public records, (ii) relating to an item on an agenda for a regular meeting, and (iii) having been distributed to at least a majority of the Committee after the agenda is posted, are available by contacting Catherine Rodriguez at (909) 396-2735, or send the request to crodriguez@aqmd.gov.

INSTRUCTIONS FOR ELECTRONIC PARTICIPATION

Instructions for Participating in a Virtual Meeting as an Attendee

As an attendee, you will have the opportunity to virtually raise your hand and provide public comment. Before joining the call, please silence your other communication devices such as your cell or desk phone. This will prevent any feedback or interruptions during the meeting.

Please note: During the meeting, all participants will be placed on Mute by the host. You will not be able to mute or unmute your lines manually. After each agenda item, the Chair will announce public comment. A countdown timer will be displayed on the screen for each public comment. If interpretation is needed, more time will be allotted.

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

Directions for Video ZOOM on a DESKTOP/LAPTOP:

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

Directions for Video Zoom on a SMARTPHONE:

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

Directions for TELEPHONE line only:

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



Rule 1109.1: NO_x Emissions from Petroleum Refineries and Related Operations

- ▶ Adopted on November 5, 2021
- ▶ Established NO_x emission limits (BARCT) for nearly 300 pieces of combustion equipment
- ▶ Alternative compliance pathways for facilities with six or more pieces of equipment



Rule 1109.1 Applicability



9 Petroleum Refineries

- Chevron (El Segundo)
- Marathon (Carson)
- Marathon (Wilmington)
- Marathon – Calciner
- Marathon – Sulfur Recovery Plant
- Phillips 66 (Carson)
- Phillips 66 (Wilmington)
- Torrance Refining Company
- Ultramar (Valero)



3 Small Refineries

Asphalt Plants

- Lunday-Thagard DBA World Oil Refining (LTR)
- Valero Wilmington Asphalt Plant

Biodiesel Refinery

- AltAir Paramount



4 Related Operations

Hydrogen Plants

- Air Liquide Large Industries
- Air Products and Chemicals (Carson & Wilmington)

Sulfuric Acid Plant

- Eco Services Operations

About I-Plans, B-Plans, and B-Caps

- ▶ I-Plan provides a phased implementation schedule and establishes Phase targets
- ▶ Five I-Plan Options
- ▶ B-Plan and B-Cap provides options to achieve BARCT in aggregate
 - ▶ B-Plan is BARCT equivalent concentration plan and allows NOx concentration limits equivalent to BARCT in aggregate
 - ▶ B-Cap is BARCT equivalent Mass Cap and requires a NOx emission limit for each unit
 - ▶ B-Cap requires an additional 10% NOx emission reduction
- ▶ Allows refineries to implement projects within turnaround schedules

I-Plan Options	Refinery	Permit Appl Submittal Deadline		
		Phase I	Phase II	Phase III
Option 1		80%	100%	
B-Plan Rule Limits	Torrance	Jan 1, 2023	Jan 1, 2031	
	LTR			
Option 2		65%	100%	
B-Plan	Chevron	July 1, 2024	Jan 1, 2030	
Option 3		40%	100%	
B-Plan	Ultramar/ Valero	July 1, 2025	July 1, 2029	
Option 4		50%	80%	100%
B-Cap	Marathon	N/A	Jan 1, 2025	Jan 1, 2028
Option 5		50%	70%	100%
Rule Limits	Phillips 66	Jan 1, 2023	Jan 1, 2025	July 1, 2028

Status of I-Plans, B-Plans, and B-Caps

Plan Options	Applications Received	Facilities	Status
I-Plan with Rule limits (Options 1 & 5)	3	Phillips 66 (Wilmington and Carson) and LTR	Issued
I-Plan with B-Plan (Options 1, 2 & 3)	6	Torrance Refining Company, Chevron, Ultramar	4 Issued 2 EPA review completed
I-Plan with B-Cap (Option 4)	8	Marathon Petroleum Corp.	Facility Review

▶ WCWLB and SELA AB 617 steering committees notified on January 19 prior to the issuance of B-Plans

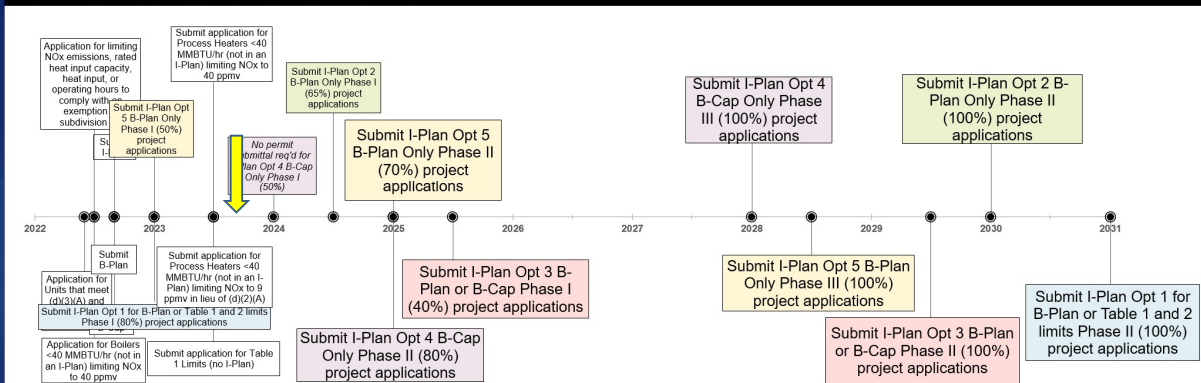
▶ All Plans are available on South Coast AQMD website



Rule 1109.1 Plans

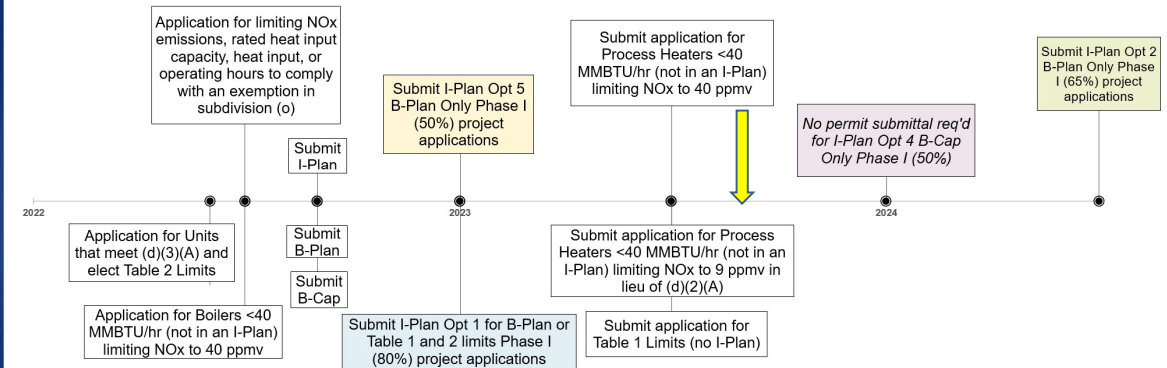
Overall Timeline of Rule 1109.1 Applications

Rule 1109.1 CRITICAL ACTIVITY DEADLINES



Rule 1109.1 Applications Timeline – First 3-Years (2022-24)

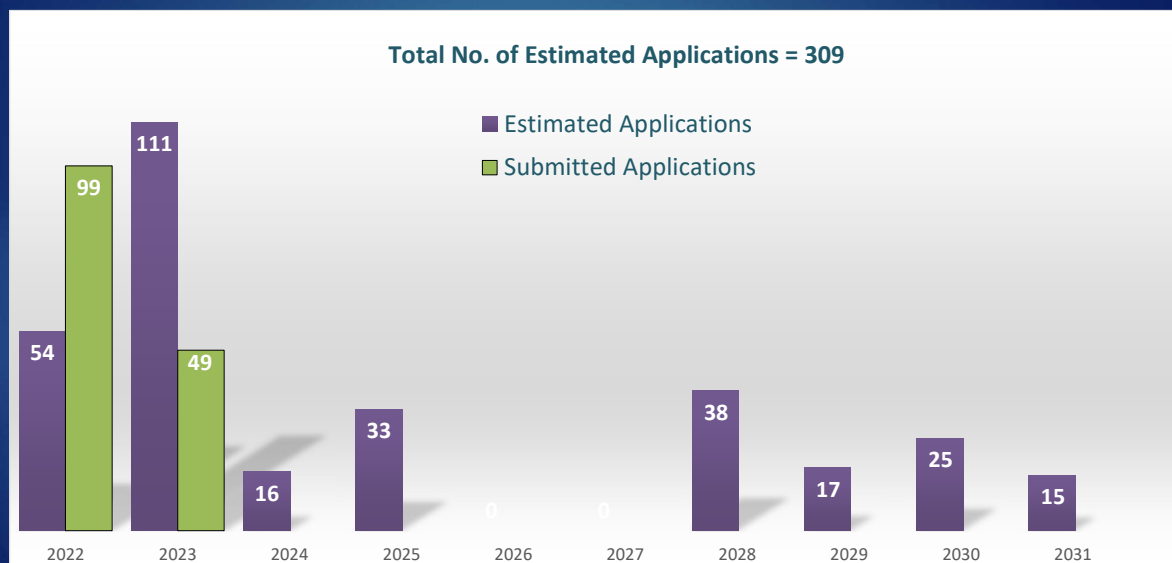
Rule 1109.1 CRITICAL ACTIVITY DEADLINES



Future applications will implement Plan requirements

Rule 1109.1 Application Count by Year

Total No. of Estimated Applications = 309



Permit Application Submittal Summary

Breakdown of submitted applications (cumulative) by type:

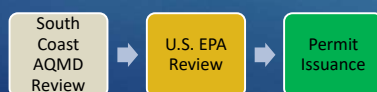
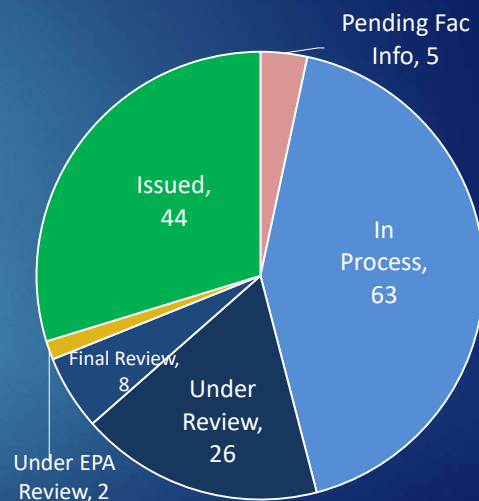
	Q4 2022	Q1 2023	Q2 2023	Q3 2023
BARCT Limits	7	13	13	17
Conditional Limits	37*	29	29	29
Boilers/Heaters < 40 MMBtu/hr	0	8	8	46
Exemption Applications	7	7	7	7
Alternate BARCT Limits	0	9	9	9
Add Source Test Condition	10	20	20	23
Plan Applications	11	17	17	17
<i>B-Plan</i>	3	3	3	3
<i>B-Cap</i>	1	4	4	4
<i>I-Plan</i>	7	10	10	10
Total	72	103	103	148

*8 of the 37 applications were later reclassified as "Boilers/Heaters <40 MMBtu/hr" that are reflected in Q1-2023 data

Permit Application Processing Summary

▶ Permit application processing status:

	Q2 2023	Q3 2023
Awaiting Additional Facility Info	6	5
In Process	30	63
Under Review	21	26
Final Review	8	8
Under U.S. EPA Review	18	2
Issued	20	44
Total	103	148



Streamlining Implementation

11

- ▶ Timely processing of Rule 1109.1 applications requires:
 - Complete permit application packages
 - Operators responding quickly to South Coast AQMD requests for additional information
 - Minimizing or eliminating additional modifications to permit applications that could delay permit issuance (e.g. increase in throughput or firing rate)
 - No modifications that may trigger additional regulatory requirements
- ▶ Streamlined permit evaluation and development of templates for applications

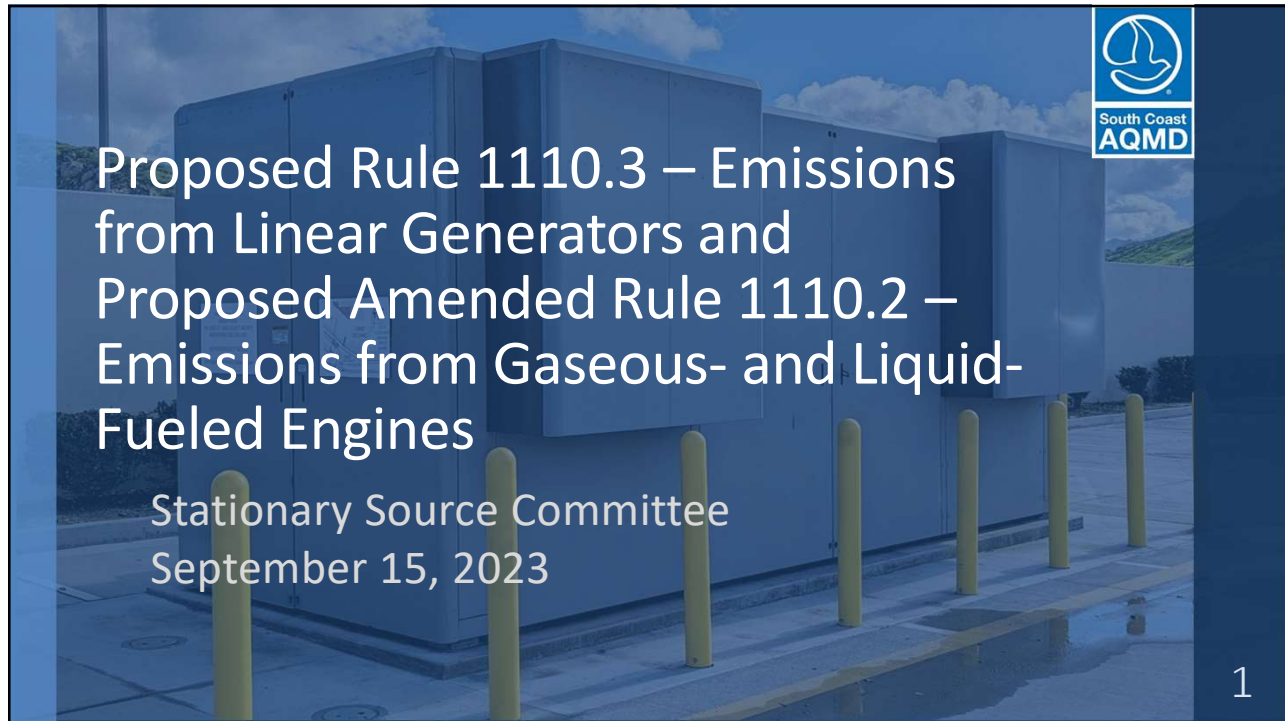
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Next Steps

12

- ▶ Continue processing Rule 1109.1 applications expeditiously
- ▶ Continue outreach to the refineries to:
 - Minimize need for additional information requests
 - Focus processing on Rule 1109.1 projects
 - Communicate regulatory requirements and policies
- ▶ Continue to strategically process other projects
- ▶ Next SSC update: November 2023

12



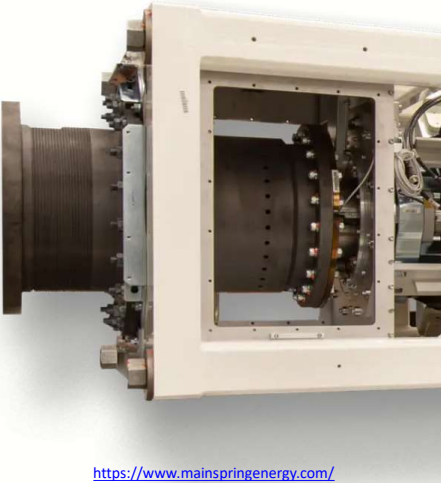


Proposed Rule 1110.3 – Emissions from Linear Generators and Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines

Stationary Source Committee
September 15, 2023

1

Background



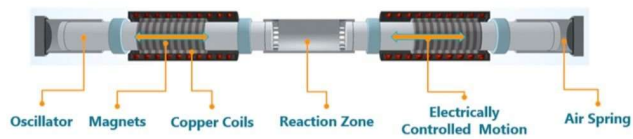
<https://www.mainspringenergy.com/>

- Rule 1110.2 regulates emissions from engines rated over 50 bhp
- As requested by a manufacturer, the 2019 amendment to Rule 1110.2 established emission limits for linear generators
- Due to the unique characteristics of linear generators, Proposed Rule 1110.3 (PR 1110.3) will establish requirements specific to linear generators
- Staff provided a briefing of PR 1110.3 and Proposed Amended Rule 1110.2 (PAR 1110.2) at the February 2023 SSC meeting

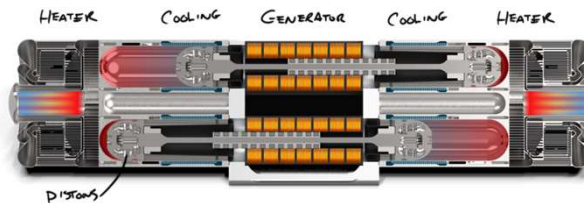
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Linear Generators

- Linear generator converts linear motion into electricity
 - Compresses a fuel and air mixture in a reaction zone without a flame or burning
 - Energy created from the reaction drives linear motion of oscillators or pistons
- Linear generators can be used for emergency and prime power applications



<https://www.mainspringenergy.com/>



<https://www.hyllion.com/>

Key Proposed Rule 1110.3 Provisions- Emission Limits

Concentration Limits for Linear Generators

Units with a Permit to Operate Issued on or after [Date of Adoption]			
Fuel Type	NOx (ppmv) ¹	CO (ppmv) ¹	VOC (ppmv) ²
Natural Gas	2.5	12	10

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.

Emission limits mirror the requirements in Rule 1110.2 and are already achieved in practice, as demonstrated by source test data

Existing linear generators subject to VOC limit of 25 ppmv

Upon rule adoption, all newly permitted units will be subject to lower VOC concentration limits

Key Proposed Rule 1110.3 Provisions- Source Testing

Source Testing

- Conduct source testing every 24,000 hours, or 5 years, whichever occurs first
- 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 8,760 hours (1-year operating time)
- Parametric monitoring system

- Periodic monitoring is required by U.S. EPA
- South Coast AQMD rules pertaining to combustion equipment have source testing requirements
- Source testing ensures that equipment meets emission limits

5

Key Issue – Source Testing Costs

- Concerns raised regarding the costs associated with source testing

	Rule 1110.2	PR 1110.3
Source Test Frequency	2 years/ 8,760 hours	5 years/ 24,000 hours
Pooled Source Testing Option	No	Yes
Cost per unit (10 years)	\$50,000	\$20,000

Staff is proposing a reduced source testing frequency in PR 1110.3

- PR 1110.3 will reduce source testing costs by approximately 60%* compared to Rule 1110.2
- Pooling units will reduce source test costs even further

Staff pursued certification pathways to further minimize source testing costs

- California Air Resources Board (CARB) Distributed Generation (DG) Certification Program
- South Coast AQMD certification program

*Based on non-pooled units

6

Current Status

In addition to U.S. EPA requirements, periodic monitoring will provide data to determine durability and robustness of linear generator technology

U.S. EPA also indicated that including an exemption for certified units would likely result in a rule disapproval

- CARB DG Certification Regulation has not been submitted (or approved) in the State Implementation Plan
- South Coast AQMD certification program has not been developed yet

As a result, PR 1110.3 does not contain any provisions for certification or exemptions for certified units, but has less frequent source test requirements compared to Rule 1110.2

7

Next Steps

Set Hearing

October 6, 2023



Public Hearing

November 3, 2023



<https://www.hyllion.com/>

8

Proposed Amended Rule 2011 – Requirements for Monitoring,
Reporting, and Recordkeeping for Oxides of Sulfur (SO_x)
Emissions
And
Proposed Amended Rule 2012 – Requirements for Monitoring,
Reporting, and Recordkeeping for Oxides of Nitrogen (NO_x)
Emissions



STATIONARY SOURCE COMMITTEE
September 15, 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 a variance from the Hearing Board
- To meet lower NO_x limits in source-specific rules, extended CEMS shutdowns are needed as pollution controls are being installed

* Rule 2011 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO_x)

**Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_x)

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

3

Rules 218.2* and 218.3**

Adopted in 2021 to align CEMS requirements for non-RECLAIM facilities and former RECLAIM facilities

Applies to non-RECLAIM facilities and will apply to former NO_x RECLAIM facilities after they exit RECLAIM

Until RECLAIM facilities exit RECLAIM, they are subject to Rules 2011 and 2012

Rule 218.2 specifies compliance requirements for extended CEMS shutdowns, which are mirrored in the proposed amendments to Rules 2011 and 2012

*Rule 218.2 – Continuous Emission Monitoring System: General Provisions

**Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications

4

Proposed Amendments to Rules 2011 and 2012

- Contains requirements related to CEMS shutdowns and validates the emission hours as zero value data points
 - Unit must be non-operational for an extended period (at least 168 consecutive hours)
 - CEMS must operate for a minimum of 4 hours and show zero emissions before shutdown
 - Report must be submitted to the South Coast AQMD
 - Before normal operation resumes, the CEMS must be calibrated and run for a minimum 4 hours before any emissions are generated
- Describes acceptable methods to demonstrate non-operation of equipment including:
 - Disconnecting fuel lines and placing blind flange(s)
 - Demonstrating exhaust flow is less than the lowest quantifiable rate
 - Executive Officer's written approval
- Other minor changes for clarification and consistency

5

Impacts and Key Issues

Costs

- The provisions in PAR 2011 and PAR 2012 are not expected to impose any costs

Environmental Impacts

- PAR 2011 and PAR 2012 provide updates to guidelines for operating CEMS without requiring physical modifications that would cause a significant adverse effect on the environment
- A Notice of Exemption from CEQA will be prepared

Key Issues

- Staff is not aware of any remaining key issues

6

Next Steps

Set Hearing

October 6, 2023

Public Hearing

November 3, 2023



Proposed Amended Rule 1405



Control of Ethylene Oxide Emissions from Sterilization and Related Operations

Stationary Source Committee
September 15, 2023



Background

September 1, 2023 Governing Board Meeting

- Board approved a 90-day set hearing for a public hearing on December 1, 2023

Key Comments

- Provide more info on the health effects of ethylene oxide
- Need for PAR 1405 when Rule 1402 addresses facility specific issues
- Facilities could not meet proposed requirements
- PAR 1405 would cause a shortage in medical devices





Health Effects of Ethylene Oxide (EtO)

Long-Term Health Effects

- Associated with blood cancers (non-Hodgkin lymphoma, myeloma, and lymphocytic leukemia) and, in women, breast cancer
- Also linked with reproductive harm to men and women
- U.S. EPA's revised inhalation cancer risk is 30 to 50 times higher than previously known

Children May be More Susceptible

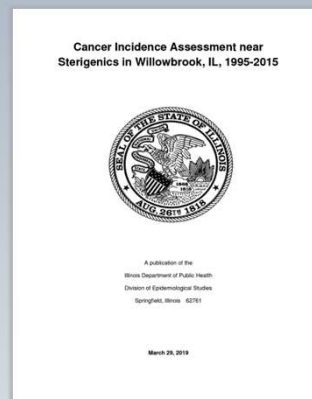
- EtO is mutagenic, meaning it damages DNA
- Children are expected to be more susceptible to EtO's toxic effects because their bodies are growing and duplicating DNA

3



Known Issues and Lessons Learned

- In 2018, a sterilization facility in Willowbrook, Illinois was identified as a high emitter of EtO and confirmed via fence-line air monitoring
 - State of Illinois determined increased incidence of cancer near the facility
 - U.S. EPA determined that nearby residents faced up to 10X higher risk of cancer
 - Facility faced hundreds of lawsuits regarding increased cancer risk
 - In 2019, this facility shut down
- Same company operates two facilities in South Coast AQMD
 - Both facilities lacked sufficient pollution controls similar to their Willowbrook facility
 - Operator did not upgrade controls based on lessons learned in Illinois



4



Status for Large Sterilization Facilities

Status of Key Upgrades since 2022

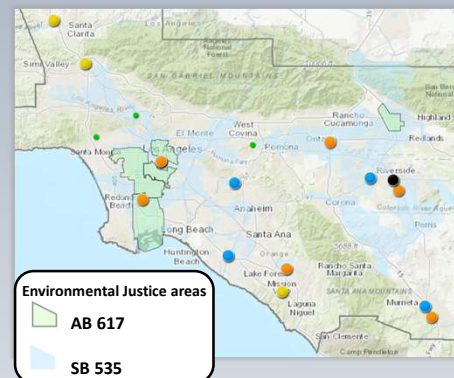
Company	Project	Status
Parter Medical, Carson	Control Equipment for Stack and Fugitive and PTE	Permit issued
Sterigenics, Vernon	Phase 0.5 - Stack Modification	Permit issued
	Phase 1 - Control Equipment for Fugitive	Permit issued
	Phase 2 - PTE	Permit pending – On hold per facility request
Sterigenics, Ontario	Stack Modification	Permit pending – Draft permits with facility, modification completed
	Control Modifications to Existing Scrubber	Permit issued
Steris, Temecula	Control Equipment for Fugitive	Permit issued

5



Why PAR 1405 is Needed

- EtO is highly carcinogenic and sterilization facilities are known sources
- Builds on lessons learned from Illinois
- PAR 1405 is an industry-wide rule
 - Establishes the most stringent technology-based controls
 - Provides enhanced monitoring requirements
 - Establishes curtailment provisions in response to elevated levels of EtO detected
- PAR 1405 collects information from warehouses to assess the need for future rulemaking



6



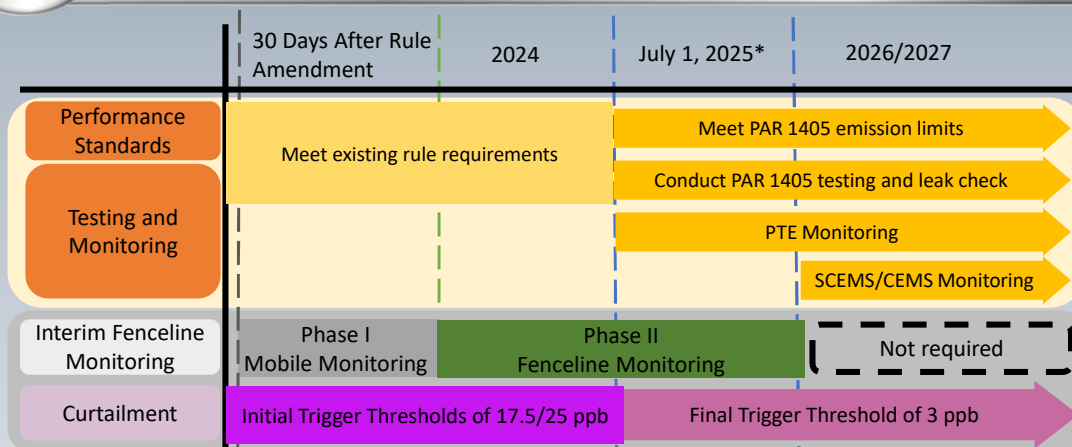
AB 2588 Process

- AB 2588 is a facility-specific process that each facility must meet a specified health risk level
- Rule 1402 implements the AB 2588 program
- Requires operators to:
 - Prepare an air toxics emissions inventory for all Toxic Air Contaminants at facility
 - Prepare a Health Risk Assessment
 - Prepare a Risk Reduction Plan (risks over 25 in-a-million)
 - Implementation of approved Risk Reduction Plan
 - If health risks are over 10 in-a-million, must conduct Public Notification and Meeting
- Implementation of AB 2588, including Risk Reduction Plan takes 3 to 5 years

7



PAR 1405 Compliance Timelines for a Large Facility



*Evaluating whether the 60-day deferral of hearing on proposed amended rule warrants adjustments to rule implementation timelines

8



PAR 1405 - Warehouse Requirements

Background

- Warehouses may be a source of EtO emissions
 - One warehouse controls emissions from products that had completed aeration
 - One out of ten warehouses showed elevated EtO levels near fenceline based on mobile monitoring
- Lack of EtO throughput data (e.g., amount of sterilized product stored)



Requirement

- Purpose is information gathering (through tracking and emission study or fenceline monitoring) to determine if other actions are necessary
- Size of the warehouse is used as a surrogate for emission potential as throughput information is not available

9



Next Steps

Actions/Public Meetings	Date
Release Updated Rule Language	Late September 2023
Stationary Source Committee Meeting	October 20, 2023
Public Hearing	December 1, 2023*

**Set for 90 days at the September 1, 2023 Governing Board Meeting*

10



**Proposed Amended Rule 1180
(PAR 1180)**

Major Petroleum Refinery Fenceline and
Community Air Monitoring

**Proposed Rule 1180.1
(PR 1180.1)**

Other Refinery Fenceline and
Community Air Monitoring

**Stationary Source Committee
September 15, 2023**



Background on South Coast AQMD Rule 1180

Rule 1180 was adopted in December 2017

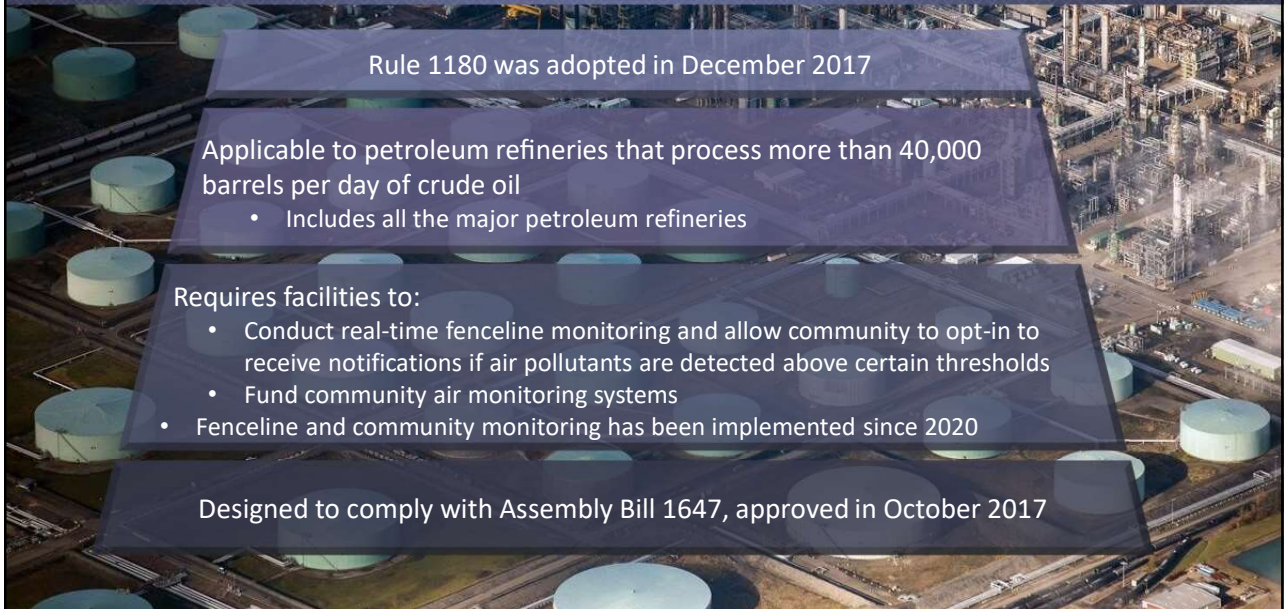
Applicable to petroleum refineries that process more than 40,000 barrels per day of crude oil

- Includes all the major petroleum refineries

Requires facilities to:

- Conduct real-time fenceline monitoring and allow community to opt-in to receive notifications if air pollutants are detected above certain thresholds
- Fund community air monitoring systems
- Fenceline and community monitoring has been implemented since 2020

Designed to comply with Assembly Bill 1647, approved in October 2017



Fenceline and Community Monitoring

- Measures air pollutants at the fenceline of an applicable facility and at the specific locations in the community
- Consists of open path monitors, point source monitors, and a data system
- Monitors specific criteria pollutants and air toxics
- Fenceline and community air monitoring systems provide real-time or near real-time information about pollutants in the vicinity of refineries to the public



Need for PAR 1180 and PR 1180.1

In 2022, Earthjustice filed a lawsuit against South Coast AQMD

- Cited the Rule 1180 exemption for refineries with capacities below 40,000 barrels per day

On February 16, 2023, Senator Lena Gonzalez (Long Beach), introduced Senate Bill 674 – The Refinery Air Pollution Transparency and Reduction Act

- Expands Assembly Bill 1647 requirements for community and fenceline monitoring

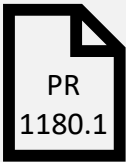
Initiated a rulemaking process to amend PAR 1180 and adopt PR 1180.1

- Addresses the lawsuit, aligns with Senate Bill 674, and incorporates other updates

PAR 1180 and PR 1180.1 Rulemaking Process



PAR
1180



PR
1180.1



Four Working Group Meetings starting January 2023



14+ Meetings with Stakeholders



Four Draft Documents:

1. PAR 1180
2. PR 1180.1
3. Refinery Fenceline Air Monitoring Plan Guidelines
4. Staff Report



Two Public Workshop Sessions

- Daytime session
- Evening session to elevate community participation

5

PAR 1180 and PR 1180.1 Proposals

Address South Coast AQMD lawsuit

- Amend Rule 1180 to remove 40,000 barrels per day exemption
- Adopt Proposed Rule 1180.1 to require fenceline air monitoring and related community monitoring for three smaller refineries

Update air pollutants to be monitored

- Reflect additional air pollutants identified in the 2019 Office of Environmental Health Hazard Assessment (OEHHA) report
 - Compound list expanded since the adoption of Rule 1180

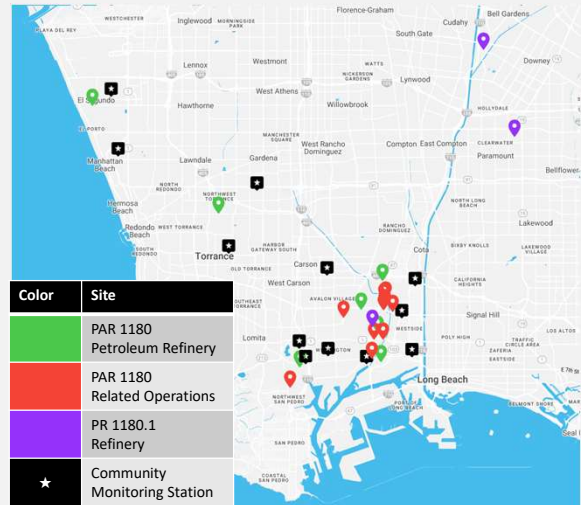
Align with Senate Bill 674 proposal

- Expand applicability to include facilities with operations related to petroleum facilities
- Include root cause analyses and independent audits

6

Applicability

- PAR 1180 will:
 - Continue to apply to all major petroleum refineries and
 - Expand the applicability to include facilities with related operations to the petroleum refineries, including:
 - Hydrogen plants, facilities with above-ground storage tanks, and sulfur recovery plants
- PR 1180.1 will apply to asphalt refineries and refineries that process alternative feedstocks
- PAR 1180 and PR 1180.1 will expand the number of community monitoring stations to include areas near new facilities



Key New Proposed Requirements

Notification Thresholds

- Require option for community to opt-in for text-based notifications, in addition to the existing email-based notifications, if emissions exceed threshold
- Threshold based on health standards or historical operation if no health standard exists
- Initiate investigation into reason for exceedance

Real-time and historical data available on webpage

- Ensure data is accessible in a user-friendly and downloadable format



Key New Proposed Requirement (con't)

Fenceline Audits and Action

Independent audits to be conducted by third party hired by facility

Independent audits will identify deficiencies in the fenceline air monitoring system

Facilities required to develop a corrective action plan and make corrective actions as soon as practicable

Compliance Schedule

Submit a new or revised fenceline air monitoring plan (plan) after rule adoption

Within six months for a facility with an existing plan

Within one year for a facility without an existing plan



Complete installation and begin operation

PAR 1180
No later than **one year** after plan approval

PR 1180.1
No later than **two years** after plan approval

9

Estimated Cost for Additional Air Monitoring Systems

PAR 1180 costs

- Existing refineries
 - Monitors for new air pollutants
- New related facilities
 - Fenceline monitoring systems
 - Potentially two new community stations

PR 1180.1 costs

- Fenceline monitoring systems
- At least three new community monitoring stations

	Fenceline Monitoring		Community Monitoring	
	PAR 1180	PR 1180.1	PAR 1180	PR 1180.1
Existing Facilities	\$5MM	N/A	N/A	N/A
New Facilities	\$6MM	\$5MM	\$3MM	\$3MM
Total Cost	\$16MM		\$6M	
	\$22MM			

Note: Table above lists **one-time** capital costs (e.g., site preparation, equipment, and installation) and represents the cumulative costs for all facilities

10

Key Issue: Air Pollutants for Monitoring

Stakeholders requested real-time fenceline monitoring for all air pollutants identified in the OEHHA 2019 report

Real-time fenceline monitoring is not applicable or feasible for some air pollutants:

- Metals (Cadmium, manganese, and nickel)
 - Not applicable to PR 1180.1 refineries as they are not capable emitting high concentrations of metals during normal operations or upset conditions
- Polycyclic Aromatic Hydrocarbons (PAHs)
 - No real-time or near real-time technology available
 - Current PAHs measurements take 2-3 weeks for sampler preparation and analysis
 - Will reassess the status of real-time PAH monitoring technology every five years
- Sulfuric Acid and Diethanolamine
 - Short-lived gaseous phase; not feasible for real-time fenceline monitoring

11

Next Steps

Set Hearing
October 6, 2023

Public Hearing
November 3, 2023

12

September 2023 Update on Work with U.S. EPA and CARB on New Source Review Issues for the RECLAIM Transition

At the October 5, 2018 Board meeting, the Board directed staff to provide the Stationary Source Committee with a monthly update of staff's work with U.S. EPA regarding resolving NSR issues for the transition of facilities from RECLAIM to a command-and-control regulatory structure. Key activities with U.S. EPA and CARB since the last report are summarized below.

- Provided NSR Equivalency Program summary to CARB
- RECLAIM/NSR Working Group meeting was not held in September
- Next presentation to the Stationary Source Committee is scheduled for October 20, 2023
- Next meeting scheduled for November 9, 2023 to discuss the latest considerations for proposed amendments to Regulation XIII and XX

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

Settlement Penalty Report (08/01/2023 - 08/31/2023)

Total Penalties

Civil Settlement: \$138,075.00
Hearing Board Settlement: \$2,000.00
MSPAP Settlement: \$78,684.00

Total Cash Settlements: \$218,759.00

Fiscal Year through 08/31/2023 Cash Total: \$813,730.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
Civil						
115394	AES ALAMITOS, LLC	2004, 3002	08/04/2023	KCM	P66892	\$2,850.00
115389	AES HUNTINGTON BEACH, LLC	2004, 2012 Appendix A	08/04/2023	KCM	P66881, P66889	\$4,400.00
185801	BERRY PETROLEUM COMPANY, LLC	2004, 3002	08/09/2023	JL	P66548, P68323, P69282	\$24,591.00
190249	CAREY HELLMAN	40 CFR 61.145, 1403	08/23/2023	SP	P67512	\$35,000.00
162551	CE ALLENCOMPANY, INC. DBA ALLENCO	203, 463, 1148.1	08/23/2023	SH	P66538, P66539, P66541, P73323, P75509, P75513	\$10,000.00
90739	COUNTY OF RIVERSIDE FLEET SRVCS DEPT.	461	08/02/2023	RL	P75218, P75224, P75226, P75227, P75228, P75229, P75230, P77901, P77902, P77903, P77904, P77905	\$7,500.00
7417	EASTERN MUNICIPAL WATER DISTRICT	203, 3002	08/16/2023	SP	P67448, P73506, P75854	\$7,500.00
1703	EASTERN MUNICIPAL WATER DISTRICT	203, 431.1, 3002, 3004	08/16/2023	SP	P61124, P67447, P72926, P73504, P75853	\$7,500.00
52835	G&M OIL CO., LLC #30	203	08/23/2023	EC	P70496, P70500	\$8,485.00
119218	G&M OIL CO., LLC #81	203, 461	08/23/2023	EC	P70484	\$2,342.00
145969	G&M OIL CO., #139	203	08/23/2023	EC	P70499	\$2,342.00
179126	SO CAL REMEDIATION, INC.	1403	08/03/2023	ND	P70507, P67485, P74592, P74585	\$7,500.00
191387	SUPERIOR CARPET & DESIGN CENTER	40 CFR 61.145, 1403	08/22/2023	RM	P74222	\$500.00
146612	US HENDY OIL, INC.	203, 461	08/04/2023	ND	P66036, P70067, P72201, P74829	\$17,565.00
Total Civil Settlements: \$138,075.00						

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
Hearing Board						
112573	FREUND BAKING COMPANY	1153.1	08/16/2023	JL	6226-1	\$2,000.00
Total Hearing Board Settlements: \$2,000.00						
MSPAP						
198679	2619 WILSHIRE BLVD ASSOCIATES, LLC	203, 222	08/25/2023	CL	P76540	\$2,927.00
179806	5201 W CENTURY BLVD, INC.	203, 461, H&S 41960	08/11/2023	CL	P75724	\$2,552.00
176080	BARJA, INC. - DBA A1 SHELL	461, H&S 41960	08/04/2023	CL	P75719	\$1,756.00
5023	CAL ST UNIV LONG BEACH - EH&S	461	08/11/2023	CL	P76259	\$2,677.00
83386	CALIFORNIA HIGHWAY PATROL	203, 461	08/04/2023	CL	P67742	\$2,442.00
174184	CANOGA PARK SHELL	461	08/25/2023	VA	P77729	\$1,343.00
169951	CHEVRON GAS & FOOD STORE	461	08/25/2023	VA	P68165	\$1,494.00
179152	FLYERS ENERGY, LLC.	461	08/04/2023	CL	P73117	\$2,427.00
119218	G&M OIL CO., LLC #81	203	08/04/2023	CL	P78666	\$1,171.00
182163	GM&J LASER CUTTING	201, 203	08/11/2023	CL	P75424	\$3,063.00
187918	HM COLLISION	109	08/25/2023	CL	P67746	\$2,142.00
97020	HONDA R&D NORTH AMERICAS, INC.	203, 461	08/25/2023	CL	P78311	\$6,126.00
167482	HOUSE OF CLEANERS	203	08/04/2023	CL	P73239	\$1,021.00
191302	INLAND CENTER SHELL	203	08/25/2023	CL	P76175	\$1,121.00
131628	KINDRED HOSPITAL OF LOS ANGELES	222, 1415	08/09/2023	CL	P78410	\$2,042.00
127621	LA COUNTY FIRE DEPT #187	461	08/04/2023	CL	P73166	\$1,300.00
27024	LA COUNTY SHERIFF'S DEPT.	461	08/11/2023	CL	P76262	\$887.00
184839	M2 UNITED, INC.	461	08/25/2023	CL	P69885	\$1,301.00
20280	METAL SURFACES INTERNATIONAL, LLC	203, 1469	08/04/2023	CL	P74790	\$5,764.00
199080	NATIONAL CORE	403	08/11/2023	CL	P76261	\$6,447.00
193896	NCK INDUSTRIES	203	08/04/2023	CL	P74560	\$1,071.00
177169	PACIFIC ENVIRONMENTAL & ABATEMENT	1403	08/25/2023	CL	P76223	\$1,942.00
127546	PMM, INC.	461, H&S 41960.2	08/25/2023	CL	P78678	\$1,305.00
174589	RISSER SURGERY CENTER	203	08/25/2023	CL	P78005	\$971.00
182291	RIVER ROAD X_PRESS CAR WASH	203, 461	08/25/2023	CL	P69900, P78753	\$7,500.00
142730	SANG HAN ENTERPRISE, INC.	203, 461	08/04/2023	VA	P75710	\$1,343.00
110467	LEON'S UNOCAL	203, 461, H&S 41960.2	08/04/2023	CL	P76167	\$3,276.00
177508	VEN TERRA ENVIRONMENTAL, INC.	1403	08/23/2023	CL	P74562	\$7,389.00
179162	VICTORY VALERO - HASSAKE ENT, INC.	203, 461	08/25/2023	CL	P74827, P75458	\$3,884.00
Total MSPAP Settlements: \$78,684.00						

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

REGULATION I - GENERAL PROVISIONS

Rule 109 Recordkeeping for Volatile Organic Compound Emissions

REGULATION II - PERMITS

Rule 201 Permit to Construct

Rule 203 Permit to Operate

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

REGULATION IV - PROHIBITIONS

Rule 403 Fugitive Dust- Pertains to solid particulate matter emitted from man-made activities

Rule 431.1 Sulfur Content of Gaseous Fuels

Rule 461 Gasoline Transfer and Dispensing

Rule 463 Storage of Organic Liquids

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1148.1 Oil and Gas Production Wells

Rule 1153.1 Emissions of Oxides of Nitrogen from Commercial Food Ovens

REGULATION XIV - TOXICS

Rule 1403 Asbestos Emissions from Demolition/Renovation Activities

Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems

Rule 1466 Control of Particulate Emissions from Soils with Toxic Air Contaminants

Rule 1469 Hexavalent Chromium Emissions from Chrome Plating and Chromic Acid Anodizing Operations

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004 Requirements

Rule 2012 Appendix A

Protocol for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_x) Emissions

REGULATION XXX- TITLE V PERMITS

Rule 3002 Requirements

Rule 3004 Permit Types and Content

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

CODE OF FEDERAL REGULATIONS

40 CFR 61.145 Standard for Demolition and Renovation

CALIFORNIA HEALTH AND SAFETY CODE

41960 Certification of Gasoline Vapor Recovery System

41960.2 Gasoline Vapor Recovery

42402 Violation of Emission Limitations – Civil Penalty