

# 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

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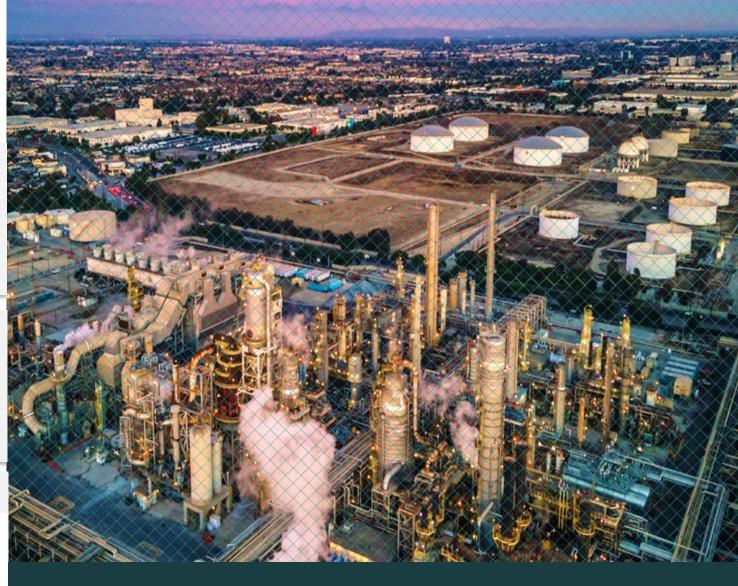
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# **Public Workshop**

August 22, 2023 10:00 AM and 6:00 PM (PDT)

# Agenda

Background

Rule Language Overview (PAR 1180)

Rule Language Overview (PR 1180.1)

Socioeconomic Impacts

California Environmental Quality Act (CEQA)

Next Steps

# Background

## Background on Refinery Fenceline and Community Air Monitoring

Assembly Bill 1647 (October 8, 2017), required to add Section 42705.6 to the California Health and Safety Code

Health and Safety Code 42705.6 requires air districts and refineries to install, operate, and maintain a refinery related community and a fenceline air monitoring system on or before January 1, 2020

Several air districts adopted refinery fenceline and community air monitoring that align with the requirements of Health and Safety Code 42705.6

South Coast AQMD: Rule 1180 - Refinery Fenceline and Community Air Monitoring

San Joaquin Valley Air Pollution Control
District (SJV APCD): Rule 4460 – Petroleum
Refinery Fence-line Air Monitoring and Rule
3200 – Petroleum Refinery Community Air
Monitoring Fees

Bay Area Air Quality Management District (BAAQMD): Regulation 12 Rule 15 – Refining Emissions Tracking

# Background on South Coast AQMD Rule 1180

- Rule 1180 was adopted on December 1, 2017
  - Applicable to petroleum refineries that process more than 40,000 barrels per day (bpd) of crude oil
    - All the major Petroleum Refineries in South Coast AQMD are subject to Rule 1180
  - Requires facilities to submit a plan and conduct real-time fenceline monitoring for specific compounds
  - Requires a fee to cover the cost for the South Coast AQMD to install, operate, and maintain community air monitoring systems
- A Refinery Fenceline Air Monitoring Plan Guideline\* was developed during the 2017 rulemaking process
- A Community Air Monitoring Plan (CAMP)\* was prepared as part of Rule 1180 implementation

<sup>\*</sup> https://www.aqmd.gov/home/rules-compliance/rules/support-documents/rule-1180-refinery-fenceline-monitoring-plans

# Refinery Air Monitoring Rules and Litigation

In 2022, a lawsuit against South Coast AQMD claimed that for at least three refineries with capacities below 40,000 bpd, the air district failed to:

- Install a community air monitoring system near each refinery
- Prepare refinery fenceline and community air monitoring guidance documents
- Require fenceline monitoring for each refinery due to the 40,000-bpd exemption
- Collect fees for community air monitoring systems from each refinery

In 2020, San Joaquin Valley Air Pollution Control District (SJV APCD) was sued for its Rules 4460 and 3200 due to exemptions for:

- Petroleum refineries not currently refining crude oil
- Facilities with refining capacity of 40,000 bpd or less

# Update on Air Pollutants for Monitoring

- Rule 1180 target compounds list was based on the September 2017 Office of Environmental Health Hazard Assessment (OEHHA) draft report "Analysis of Refinery Chemical Emissions and Health Effects"
- In March 2019, OEHHA finalized the report and updated the list of chemicals
  - 18 chemicals listed as the top candidates for air monitoring
- Table provides a comparison for the chemicals included in Rule 1180 versus the OEHHA priority list
- The highlighted compounds in red are not currently required to be monitored by Rule 1180
  - Amendment will address those compounds

	2019 OEHHA list of Air Pollutants
	Included in Rule 1180?
Acetaldehyde	Υ
Acrolein	Υ
Ammonia	Υ
Benzene	Υ
Black Carbon	Υ
1,3-butadiene	Υ
Cadmium	N
Carbonyl Sulfide	Υ
Diethanolamine	N
Ethylbenzene	Υ
Formaldehyde	Υ
Hydrogen Cyanide	Υ
Hydrogen Fluoride	Υ
Hydrogen Sulfide	Υ
Manganese	N
Naphthalene	N
Nickel	N
Nitrogen Oxide	Υ
Polycyclic Aromatic Hydrocarbons (PAH)	N
Particulate Matter	N (Only because it is currently measured)
Styrene	Υ
Sulfur Dioxide	Υ
Sulfuric Acid	N
Toluene	Υ
Total VOCs (Non-Methane Hydrocarbons)	Υ
Xylenes	Υ

# Adopting PAR 1180 and PR 1180.1

- Staff proposes to adopt PAR 1180 and PR 1180.1 to:
  - Address the issues identified in the South Coast AQMD and SJV APCD lawsuits
  - Update the air pollutants that require monitoring to reflect additional air pollutants identified in the 2019 OEHHA report
- PAR 1180 applicability will be expanded to include facilities with operations related to petroleum refineries
- PR 1180.1 will apply to refineries that are not applicable to Rule 1180, including two asphalt refineries and one refinery that processes alternative feedstocks
- Both rules specify requirements for fenceline and community monitoring, and will:
  - Establish health-based standards, and for those without, establish informational-based notification thresholds
  - Require root cause analysis for exceeding notification thresholds
  - Provide additional specifications on compliance schedule, web-based fenceline data display and notification program, independent audits, and quarterly reports

# PAR 1180 Applicability

## Major Petroleum Refineries

- Facilities that primarily process crude oil to produce transportation fuels
  - Tesoro Carson and Wilmington (Tesoro Refining and Marketing Co, LLC)
  - Torrance Refining Company
  - Chevron Products Company
  - Valero (Ultramar Inc)
  - Phillips66 Carson and Wilmington

# Related operations that are contiguous or adjacent to existing facilities

- Tesoro Sulfur Recovery Plant (SRP)
- Carson Crude Terminal and Carson Product Terminal
- Tesoro Logistics Wilmington Terminal
- Air Products Carson and Wilmington (Air Products and Chemicals)
- Kinder Morgan Liquids Terminals LLC
- Torrance Logistics Company
- Chemoil Refinery Corp
- Potentially additional facilities

# PR 1180.1 Applicability

### Other Refineries

- Refineries that primarily process crude oil to produce asphalt
  - Valero Wilmington Asphalt Plant
  - LTR dba World Oil Refining

# Refineries that process Alternative Feedstock

- Facilities that primarily process alternative feedstock
  - AltAir Paramount

Rule Language Overview (PAR 1180)



# Proposed Rule Structure

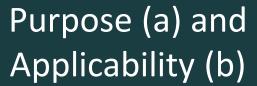


#### **Existing Rule Language**

- (a) Purpose
- (b) Applicability
- (c) Definitions
- (d) Plan Requirements
- (e) Fenceline Air Monitoring System Requirements
- (f) Plan Review Process
- (g) Notifications
- (h) Recordkeeping
- (i) Community Air Monitoring Fees
- (j) Exemptions

#### **Proposed Amended Rule Language**

- (a) Purpose
- (b) Applicability
- (c) Definitions
- (d) Plan Requirements
- (e) Fenceline Air Monitoring Compliance Schedule
- (f) Plan Review Process
- (g) Web-based Fenceline Data Display and Notification Program
- (h) Notification for Equipment Failure
- (i) Independent Audits
- (j) Recordkeeping and Reporting
- (k) Community Air Monitoring Fees
- (I) Exemptions



- Includes facilities with operations related to petroleum refineries
- Petroleum refineries that were subject to Rule 1180, as shown in Table 2, will remain subject to Rule 1180, even if they transition some or all of their operations to refining alternative feedstock



#### (a) Purpose

The purpose of this rule is to require real-time frenceline a ir monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds air pollutants, at or near the property boundaries of petroleum refineries and in nearby communities.

#### (b) Applicability

This rule applies to petroleum refineries and Facilities with Operations Related to Petroleum Refineries, including but not limited to, Hydrogen Production Plants, Sulfur Recovery Plants, and Terminals. Petroleum Refineries that were subject to Rule 1180 on [Date of Rule Adoption], as indicated by inclusion in Table 2 – Refinery-Related Community Air Monitoring System Fees, will remain subject to Rule 1180, even if they transition some or all of their operations to refining alternative feedstocks, which include: organic material that is not derived from crude oil product, coal, natural gas, or any other fossil-fuel based organic material. This rule does not apply to facilities subject to Rule 1180.1 – Other Refinery Fenceline and Community Air Monitoring.



# Definitions (c)

- Added <u>and</u>
   <u>modified 12 new</u>
   definitions
- Six shown here address new rule requirements

- (2) CORRECTIVE ACTION PLAN is a compliance plan that details the corrective actions a Facility will make to correct any deficiencies identified in an Independent Audit report.
- (3) DATA QUALITY FLAGS are indicators that designate the status, quality, or reliability of the data measured by the Fenceline Air Monitoring System.
- (27) FENCELINE AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a petroleum refinery Facility, including data systems that store historical data, public websites where data is displayed, and public fenceline notification systems.
- (9) INDEPENDENT AUDIT is an assessment conducted by a qualified independent party, i.e., a party that has not worked on the implementation of Rule 1180 fenceline air monitoring by the Facility, regarding the Facility's Fenceline Air Monitoring System, its implementation, operation, maintenance, and quality assurance procedures.
- (10) NOTIFICATION THRESHOLD is a health standard-based level, or a level developed by the Executive Officer through an informational analysis of past fenceline monitoring data, above which Facilities are required to send a fenceline notification.
- (14) ROOT CAUSE ANALYSIS is an analysis conducted by a Facility to determine the cause of an air pollutant being measured above an applicable Notification Threshold

# Definitions (c) (con't.)

 Six definitions shown here detail facility type

- (4) FACILITIES WITH OPERATIONS RELATED TO PETROLEUM REFINERIE \$\overline{5}\_{180}\$
  are Facilities that have operations related to the refinery processes located on properties adjacent or contiguous to a Petroleum Refinery, including Hydrogen
- (5) FACILITY is any Petroleum Refinery or Facility with Operations Related to Petroleum Refineries.

Production Plants, Sulfur Recovery Plants, and Terminals.

- fence formation about air monitoring instrumentation, maintenance and quality control procedures, backup systems, auditing, and data reporting methods. The FAMP includes the Facility's Quality Assurance Project Plan (QAPP) that details the project objectives, procedures, and tasks performed to ensure the Fenceline Air Monitoring System is producing reliable data.
- (8) HYDROGEN PRODUCTION PLANT is a Facility that produces hydrogen by steam hydrocarbon reforming, partial oxidation of hydrocarbons, or other processes which primarily supplies hydrogen for Petroleum Refineries.
- (15) SULFUR RECOVERY PLANT are units within a Petroleum Refinery, or a separate Facility, that recovers elemental sulfur or sulfur compounds from sour or acid gases and/or sour water generated by Petroleum Refineries.
- (16) TERMINAL is an industrial facility used to store and/or transfer crude oil, petroleum products, and/or petrochemical products.

## Section (d) – Plan Requirements (d)(2) and (d)(3)

- Facilities with existing
   FAMP have 6 months to
   revise plan to include
   new related facilities,
   air pollutants, and any
   required elements not
   addressed in previous
   FAMP
- Facilities without existing FAMP allowed one year to develop FAMP



- (2) No later than six months after [Date of Rule Adoption], the owner or operator of a Facility with an existing Fenceline Air Monitoring Plan (FAMP) shall submit a revised FAMP to include:
  - (A) Any Facilities with Operations Related to Petroleum Refineries;
  - (B) Any air pollutant in Table 1 that was not addressed in the Facility's previous FAMP; and
  - (C) Any requirement in paragraph (d)(4) that was not addressed in the Facility's previous FAMP.
- (3) No later than one year after [Date of Rule Adoption], the owner or operator of a Facility With Operations Related To Petroleum Refineries without an existing FAMP shall submit to the Executive Officer a written FAMP for establishing and operating a Real-Time Fenceline Air Monitoring System.

### Compliance Schedule (e)

- Facilities must begin operating the Fenceline Air Monitoring System:
  - New facilities have one year after the approval, or partial approval, of FAMP
  - Facilities with existing FAMP have six months one year after the approval, or partial approval, of updating FAMP to:
    - Include related facilities
    - Install new monitoring technologies
    - Update online platform



- (e) Fenceline Air Monitoring System Requirements Compliance Schedule
  - (1) <u>t</u>The owner or operator of a <u>petroleum refinery Facility</u> shall complete installation and begin operation of a <u>rReal-tTime fFenceline aAir mMonitoring sSystem or modify the operation of the Fenceline Air Monitoring System in accordance with the approved <u>or partially approved fenceline air monitoring planFAMP:</u></u>
    - (A) Beginning no later than one year after a fenceline air monitoring planFAMP submitted pursuant to paragraph (d)(1), (d)(2), or (d)(3) is approved, or partially approved, by the Executive Officer;
    - (B) No later than six months after the Executive Officer approves, or partially approves, a revised FAMP required pursuant to paragraph (d)(5); and
    - (C) Prior to commencing operations at a new Petroleum Refinery.

### Plan Review Process (f)

- Clarified rule language
- Added a backstop:
   Executive Officer will
   modify the plan and
   approve it as modified
   if facility does not
   submit revised FAMP
   within 30 calendar
   days after notification
   of disapproval
- Moved the plan fee requirement from paragraph (d)(4) to paragraph (f)(5)

- (f) Plan Review Process
  - (1) The Executive Officer shallwill notify the owner or operator of a Facility in writing whether the fenceline air monitoring planFAMP submitted pursuant to paragraph (d)(1) or (d)(3), or the revised FAMP submitted pursuant to paragraph (d)(2) or (d)(5), is approved, partially approved, or disapproved. Determination of approval status for the fenceline air monitoring plan shall be based on, at a minimum, submittal of information that satisfies the criteria in subdivision (d) and the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines. The FAMP shall be approved or partially approval if the following criteria is met:
    - (A) The owner or operator of a Facility submits all of the information in paragraph (d)(4) and the Refinery Fenceline Air Monitoring Plan Guidelines; and
    - (B) The Executive Officer will partially approve a FAMP if all sections of the FAMP are approved except the QAPP.
  - (A2) If the FAMP or revised FAMP submitted pursuant to paragraph (f)(1) is disapproved, the owner or operator of a Facility shall resubmit the a revised fenceline and air monitoring plan FAMP, subject to plan fees specified in Rule 306, within 30 calendar days after notification of disapproval of the plan. The resubmitted revised plan shall include any information necessary to address deficiencies identified in the disapproval letter.
  - (B3) The Executive Officer will either approve the revised and resubmitted fenceline air monitoring plan FAMP submitted pursuant to (f)(2) or modify the plan and approve it as modified. If the Facility does not submit the revised FAMP within 30 calendar days after notification of disapproval of the plan as required in paragraph (f)(2), the Executive Officer will modify the plan and approve it as modified. The owner or operator of a Facility may appeal the fenceline air monitoring plan FAMP modified by the Executive Officer to the Hearing Board pursuant to Rule 216 Appeals and Rule 221 Plans.
  - (24) The Executive Officer will make the A fenceline air monitoring planFAMP or revised FAMP that is submitted pursuant to subdivision (d) shall be made available, by the Executive Officer, available for public review no less than fourteen (14) days prior to approval.
  - (5) The owner or operator of a Facility shall pay plan fees as specified in Rule 306 Plan Fees for the review, approval, and modifications of FAMPs and revised FAMPs.



## Web-based Fenceline Data Display and Notification Program (g)

- New subdivision specifying data display and notification system requirements
- For data display:
  - Used requirements from guidelines
  - Added provisions to address new requirements
    - Root Cause Analysis
    - Independent Audit
    - Corrective Action Plans



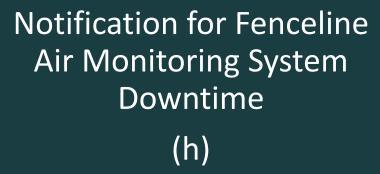


- (1) The owner or operator of a Facility shall maintain a web-based fenceline data display and notification program according to the Refinery Fenceline Air Monitoring Plan Guidelines to display and store information collected from the Fenceline Air Monitoring Systems, which includes at least five years of data as required pursuant to paragraph (j)(1), and make, at a minimum, the following information publicly available:
  - (A) Description of all instances when an air pollutant was measured above a Notification Threshold, measurement techniques, Notification Thresholds, and source of the Notification Threshold;
  - (B) Real-Time and historic concentrations of all air pollutants measured on the Fenceline Air Monitoring System including Data Quality Flags:
  - (C) Real-Time and historic wind speed and wind direction data;
  - (D) Definition of Data Quality Flags;
  - (E) The most recently approved, or partially approved, FAMP and QAPP prominently labeled to indicate the approval status;
  - (F) Report(s) generated from Independent Audit conducted pursuant to subdivision (i)(1);
  - (G) Root Cause Analysis as required pursuant to paragraph (j)(2);
  - (H) Quarterly report as required pursuant to paragraph (j)(3);
  - (I) Corrective Action Plans pursuant to paragraph (i)(4); and
  - (J) A mechanism for the public to provide comments and feedback and procedures to respond.

# Web-based Fenceline Data Display and Notification Program (g) (con't.)

- For notification program:
  - Used requirements from guidelines
  - Added the requirement to issue notification with 15 minutes of detecting above threshold
    - Based on current practice

- (2) The web-based fenceline notification system operated by the owner or operator of a Facility shall, at a minimum:
- PAR 1180
- (A) Include all the data collected by the Fenceline Air Monitoring System pursuant to the requirements in the Refinery Fenceline Air Monitoring Plan Guidelines;
- (B) Automatically generate and send a fenceline notification as soon as technically feasible, but no later than 15 minutes after any air pollutant listed in Table 1 is detected at a level that exceeds the applicable Notification Thresholds in the approved, or partially approved, FAMP;
- (C) Automatically generate and send a follow-up fenceline notification as soon as technically feasible, but no later than 15 minutes after the air pollutant subject to subparagraph (g)(2)(B) is detected at a level below the applicable Notification Threshold, which includes:
  - The maximum concentration of the air pollutant detected during the period after the Notification Threshold was exceeded pursuant to subparagraph (g)(2)(B); and
  - (ii) The duration for which the fenceline notification was exceeded;
- (D) Send a notification if a fenceline notification sent pursuant to subparagraph (g)(2)(B) was sent in error with an explanation as to the cause of the false fenceline notification;
- (E) Include a mechanism for the public to opt-in to receive fenceline notifications and to opt-out of fenceline notifications; and
- (F) Send the fenceline notifications, by email, text message, or other approved communication method to members of the public who opt-in to receive fenceline notifications.



- No major changes to subdivision (h) other than clarification in paragraph (h)(3)
- Specified the process for updated FAMP pursuant to paragraph (d)(5):
  - Compliance schedule in subparagraph (e)(1)(B)



The owner or operator of a petroleum refinery Facility shall submit an updated revised fenceline air monitoring plan FAMP to the Executive Officer pursuant to subparagraph (d)(5)(D) if an Fenceline Air Monitoring System downtime equipment failure results in a failure to accurately provide continuous, real-time fenceline air monitoring information for more than 30 days.

## Independent Audits (i)

- Requires Independent
   Audit to identify any
   deficiencies in fenceline
   air monitoring system
- Includes schedule for performing initial and recurring Independent Audits
- Requires audit report to be available on webbased fenceline notification system within 90 days

- (i) Independent Audits
  - (1) The owner or operator of a Facility shall hire a qualified independent party to conduct and complete an Independent Audit according to an independent audit protocol approved by the Executive Officer.
  - (2) The Independent Audit shall:
    - (A) Identify any deficiencies in the Fenceline Air Monitoring System and quality assurance procedures; and
    - (B) Result in an audit report that shall be:
      - Signed by the qualified independent party, certifying under penalty of law, based on information and belief formed after reasonable inquiry, that the statements and information in audit report and in all attachments and other materials are true, accurate, and complete; and
      - (ii) Submitted to the South Coast AQMD, the owner or operator of a Facility, and made available to the web-based fenceline data display and notification system within 90 days after the audit has been performed.
  - (3) The owner or operator of a Facility shall hire a qualified independent party to conduct an Independent Audit according to the following schedule:
    - (A) For a Fenceline Monitoring System installed before [Date of Rule Adoption], the initial Independent Audit shall be initiated no later than July 1, 2024, and subsequent audits shall be completed once every three years after completing the initial audit; and
    - (B) For a Fenceline Monitoring System installed on or after [Date of Rule Adoption], the initial audit shall be completed within one year after the installation and operation of the Fenceline Air Monitoring System and subsequent audits shall be completed once every three years after completing the initial audit.



# Independent Audits (i) (con't.)

- Requires facilities to develop corrective action plan within one month of audit report
  - Must be made available to public
  - Correction actions performed within six months
  - Follow-up within one month completing corrective actions

#### (4) Corrective Action Plan



If the independent audit report identifies deficiencies in a Fenceline Air Monitoring System, the owner or operator of the Facility shall:

- (A) Develop a Corrective Action Plan within one month of the audit report, describing:
  - All actions that will be taken to address all deficiencies; and
  - (ii) Any deficiency included in the independent audit report that the owner or operator of the Facility considers a safety concern and is proposing to exempt from corrective action;
- (B) Submit the Corrective Action Plan to the Executive Officer and make it available on the facility's web-based fenceline data display and notification program within two months of the audit report;
- (C) Perform all corrective actions within six months of the audit report;
- (D) Hire a qualified independent party to conduct a follow-up performance audit within one month of completing the corrective actions pursuant to subparagraph (i)(4)(C) and make it available on the facility's web-based fenceline data display and notification program within two months of the follow-up performance audit; and
- (E) Submit a revised FAMP to the Executive Officer pursuant to subparagraph (d)(5)(E) if the Corrective Action Plan identifies that a modification of FAMP is required.

# Recordkeeping and Reporting (j)

- Added requirements for Root Cause Analysis and Quarterly Reports
- Root Cause Analysis
  - New requirement
  - Required when air pollutant is measured above Notification
     Threshold
  - To determine the cause, and conduct corrective action, if applicable
  - Timelines defined for:
    - Initiating analysis
    - Report submittal
    - Corrective action
    - Reinspection

#### (2) Root Cause Analysis

When an air pollutant listed in Table 1 is measured above the Notification Threshold on a Facility Fenceline Air Monitoring System, the owner or operator of any Facility that relies on the Fenceline Air Monitoring System that measures the air pollutant shall:



- (B) Initiate corrective actions, if applicable, as soon as practicable once the root cause has been determined;
- (C) Submit a Root Cause Analysis report to the South Coast AQMD and make it available on the web-based program within 14 days;
- (D) Include, at a minimum, the following in the Root Cause Analysis:
  - (i) Cause and duration of the air pollutant emissions;
  - (ii) Determination of the source(s) of air pollutant emissions and methodology used to determine the source, including:
    - (A) Visual inspection;
    - (B) Optical gas imaging;
    - (C) Leak inspection using EPA Method 21; or
    - Other test or monitoring method approved by the Executive Officer;
  - (iii) Any mitigation and corrective actions taken to stop the exceedance or taken to prevent a similar recurrence;
  - (iv) An explanation of the reason(s) for any corrective actions taking more than 14 days; and
  - (v) Any monitoring data requested by the Executive Officer.
- (E) If the Root Cause Analysis required corrective action, the owner or operator of a Facility shall:
  - (i) Conduct a reinspection of the source within 14 days of the corrective action; and
  - Submit a report to the Executive Officer and make the report available on the refinery fenceline monitoring webpage within 28 days of the corrective actions.



# Recordkeeping and Reporting (j) (con't.)

- Quarterly report:
  - Used requirements from guidelines
  - Requires report to made available within 60 days after each quarter
    - Based on current practice

### (3) Quarterly Report



The owner or operator of a Facility with an approved or partially approved FAMP shall submit a quarterly report to the Executive Officer and make the report available on the refinery fenceline monitoring web-based fenceline data display and notification program within 60 calendar days after the conclusion of each quarter. The report shall be consistent with the Refinery Fenceline Air Monitoring Plan Guidelines, in a format approved by the Executive Officer, and at a minimum include a description of:

- (A) Summary of the air pollutant concentrations;
- (B) Data processing calculations, such as conversion calculations of instrument signal to pollutant concentration;
- (C) Summary of calibration data;
- Description of data completeness, accuracy, and precision;
- (E) Quality assurance/quality control;
- (F) Instrument maintenance and performance checks;
- (G) Any instance when an air pollutant was measured above a Notification

  Threshold that required a fenceline notification pursuant to paragraphs

  (g)(2); and
- (H) Any instance when a Fenceline Air Monitoring System downtime required a notification to Executive Officer pursuant to paragraph (h)(1) or corrective actions.

## Community Air Monitoring Fees (k)

- Removed outdated language
- Included additional community air monitoring fees due on July 1, 2024
  - Fees for staffing needs and new technologies to monitor additional air pollutants
- Community monitoring fees not included for the new facilities with related operations to petroleum facilities
  - Staff still assessing potentially applicable facilities



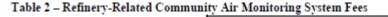
#### (jk) Community Air Monitoring Fees

- (1) Pursuant to CA Health and Safety Code §42705.6, aAn owner or operator of a petroleum refinery Facility shall pay an installation fee for refinery-related community air monitoring systems based on the fee schedule established in Table 2—Refinery-Related Community Air Monitoring System Fees.
- (2) No later than July 1, 2018, the owner or operator of a petroleum refinery shall make an initial minimum payment to the SCAQMD as specified in Table 2.
- (3) No later than January 30, 2019, the owner or operator of a petroleum refinery shall make a final payment to the SCAQMD for the remaining balance of the installation fee as specified in Table 2. The remaining balance shall be equal to the installation fee minus the initial minimum payment required by paragraph (j)(2).
- (2) No later than July 1, 2024, the owner or operator of a Facility shall make the payment to the South Coast AQMD as specified in Table 2.
- (43) Annual operating and maintenance fees for the community air monitoring system shall be paid pursuant to Rule 301-Permitting and Associated Fees, when applicable.
- (54) The refinery-related community air monitoring fees required by paragraph (jk)(1) are in addition to permit and other fees otherwise authorized to be collected from such facilities.

# Community Air Monitoring Fees (con't.)

Table 2 – Refinery Related Community Air Monitoring System Fees

- Added Facility IDs and changed name to what is on the permit
- Included new fees and removed the fees that have been paid
- Removed Delek U.S. Holding (AltAir)
  - Subject to PR 1180.1 and not PAR 1180
- Combined Tesoro Refineries (Carson and Wilmington) and footnoted Tesoro contiguous facilities



		Effective Date⊕ and Fee Requirement⊕			
Facility ID	Facility Name <mark>* and</mark> <del>Location</del> and (Permit <u>Name)</u>	<u>Location</u>	No later than July 1, 2018, petroleum refineries shall make the following initial minimum payment required by paragraph (j)(2)	No later than January 30, 2019, petroleum refineries shall make the following final payment required by paragraph (j)(3)	No later than July 1, 2024, required by paragraph (k)(2)
<u>174655</u>	Andeaver Corporation (Carson)Tesoro Carson (Tesoro Refining & Marketing Co, LLC)*	Carson	<del>\$429,078</del>	\$1,001,181	<u>\$231,736</u>
800436	Andeavor Corporation (Wilmington) Tesoro Wilmington (Tesoro Refining & Marketing Co, LLC)*	Wilmington	<del>\$214,539</del>	<del>\$500,591</del>	<u>\$115,868</u>
800030	Chevron U.S.A, Inc. (El Segundo)Chevron (Chevron Products Co.) Delek U.S. Holdings,	El Segundo	\$429,078	\$1,001,181	<u>\$231,736</u>
	<del>Inc.</del> <del>(Paramount)</del>		\$107,269	\$250,295	
<u>171109</u>	Phillips 66 Company (Carson)Carson (Phillips 66 Company/Los Angeles Refinery)	Carson	<del>\$214,539</del>	<del>\$500,591</del>	<u>\$115,868</u>
<u>171107</u>	Phillips 66 Company (Wilmington)Wilmington (Phillips 66 Company/LA Refinery Wilmington Pl)	Wilmington	\$214,539	\$500,591	<u>\$115,868</u>

<sup>\*</sup> Includes Tesoro Carson (Facility ID: 174655), Tesoro Wilmington (Facility ID: 800436), Tesoro SRP (Facility ID: 151798), Tesoro Logistics Carson Crude Terminal (Facility ID: 174694), Tesoro Logistics Carson Product Terminal (Facility ID: 174703), Tesoro Logistics Wilmington Terminal Truck Loading Rack (Facility ID: 167981)



## Exemptions (I)

- Removed:
  - 40,000 bpd exemption
- Included:
  - 96-hour monitoring exemption if downtime needed to install monitors for additional compounds proposed by the rule amendment
  - Exemption for related facilities located completely within the boundaries of a refinery with an existing fenceline monitoring system
  - Exemption for monitoring for black carbon and metal compounds for certain related facilities



#### (kl) Exemptions

- An owner or operator of a petroleum refinery that has a maximum capacity to process less than 40,000 barrels per day of crude oil Facility subject to Rule 1180.1 is exempt from the requirements of this rule.
- (2) An owner or operator of a Facility is exempt from the requirement of operating an existing Real-Time Fenceline Air Monitoring System for 96 hours if the operation of existing fenceline air monitoring equipment is disrupted by the required installation of new fenceline air monitoring equipment to measure any air pollutant in Table 1 that was not addressed in the Facility's previous FAMP.
- (3) An owner or operator of a Facility With Operations Related to Petroleum Refineries located entirely within the boundary of a Petroleum Refinery with an existing Real-Time Fenceline Air Monitoring System is exempt from the requirements of this rule.
- (4) An owner or operator of a Facility With Operations Related to Petroleum Refineries is exempt from monitoring black carbon.
- (5) An owner or operator of a Terminal is exempt from monitoring cadmium, manganese, and nickel.

### Table 1 – Target Compound **List and Notification** Thresholds

- Included several new air pollutants based on the 2019 **OEHHA** report
- Included health standardbased notification thresholds
  - Based on OEHHA's acute or 8-hour REL, NAAQS, or CAAQS standards
- Included informational-based notification threshold
  - Based on historical refinery fenceline air monitoring data

Air Pollutants	Health Standard-Based Notification Threshold	Informational-Based Notification Threshold
Criteria Air Pollutants		
Sulfur Dioxide	<u>75 ppb</u>	<u>N/A</u>
Nitrogen Oxides	100 ppb	<u>N/A</u>
Particulate Matter		
PM2.5	35 μg/m³ (24-hour avg.)	<u>N/A</u>
<u>PM10</u>	50 μg/m³ (24-hour avg.)	<u>N/A</u>
Volatile Organic Compounds		
Total VOCs	<u>N/A</u>	730 ppb
(Non-Methane Hydrocarbons)		
Formaldehyde	<u>44 ppb</u>	<u>N/A</u>
Acetaldehyde	<u>260 ppb</u>	<u>N/A</u>
Acrolein	<u>1.1 ppb</u>	<u>N/A</u>
1,3 Butadiene	<u>297</u> ppb	
Naphthalene	<u>N/A</u>	<u>N/A</u>
Polycyclic aromatic hydrocarbons	<u>N/A</u>	<u>N/A</u>
(PAHs)		
Styrene	<u>5,000</u> <u>ppb</u>	<u>N/A</u>
Benzene	<u>8 ppb</u>	<u>N/A</u>
Toluene	<u>1,300</u> ppb	<u>N/A</u>
<u>Ethylbenzene</u>	<u>N/A</u>	<u>N/A</u>
Xylenes	<u>5,000</u> ppb	<u>N/A</u>
<u>Metals</u>		
Cadmium	<u>N/A</u>	<u>N/A</u>
<u>Manganese</u>	0.17 μg/m³ (8-hour avg.)	<u>N/A</u>
<u>Nickel</u>	0.2 μg/m³	<u>N/A</u>
Other Compounds		
Hydrogen Sulfide	30 ppb	<u>N/A</u>
Carbonyl Sulfide	270 ppb	<u>N/A</u>
Ammonia	<u>4,507</u> ppb	<u>N/A</u>
Black Carbon	<u>N/A</u>	<u>30 μg/m³</u>
Hydrogen Cyanide	309 ppb	<u>N/A</u>
Hydrogen Fluoride+	289 ppb	<u>N/A</u>
+ If the facility uses hydrogen fluoride.		<u></u>





Rule Language Overview (PR 1180.1)





## • Proposed Rule 1180.1 Structure

- Developed to address the refineries exempt in Rule 1180
- Rule structure mirrors
   PAR 1180
- Similar requirements
- Next slides will
  highlight key
  differences between
  PAR 1180 and PR
  1180.1

(a) Purpose (b) Applicability (c) Definitions (d) Plan Requirements (e) Fenceline Air Monitoring Compliance Schedule (f) Plan Review Process (g) Web-based Fenceline Data Display and Notification Program (h) Notification for Equipment Failure (i) Independent Audits (j) Recordkeeping and Reporting (k) Community Air Monitoring Fees (I) Exemptions



## Applicability (b)

- Refineries that refine crude oil, alternative feedstock, or both
- Except petroleum refineries subject to Rule 1180
- The intention of PR 1180.1 is to apply to the facilities exempted by PAR 1180

#### (b) Applicability

This rule applies to Refineries that refines crude oil, Alternative Feedstocks, or both crude oil and Alternative Feedstocks, including, but not limited to, Asphalt Plants. This rule does not apply to facilities subject to Rule 1180 – Fenceline and Community Air Monitoring for Petroleum Refineries and Related Operations.



## Definitions (c)

- Some definitions from PAR 1180 are included
- Definitions for asphalt plant, alternative feedstock, refine, and refinery are included only in PR 1180.1

- (1) ASPHALT PLANT is a facility permitted to process petroleum, that primarily produces asphaltic materials, as defined in the Standard Industrial Classification Manual as Industry No. 2911.
- (2) ALTERNATIVE FEEDSTOCK is any feedstock, intermediate, product or byproduct material containing organic material that is not derived from crude oil product, coal, natural gas, or any other fossil-fuel based organic material.
- (10) REFINE is to convert crude oil or Alternative Feedstock to produce more usable products such as gasoline, diesel fuel, aviation fuel, lubricating oils, asphalt or petrochemical feedstocks, or any other similar product.
- (11) REFINERY is a facility that is permitted to Refine crude oil as defined in the Standard Industrial Classification Manual as Industry No. 2911 and/or a facility that is permitted to Refine Alternative Feedstocks. Refinery does not include petroleum refineries subject to Rule 1180.



- PR 1180.1 facilities are provided two years for the installation without an existing FAMP (vs. one year for PAR 1180 facilities)
- The schedule will be the same as PAR 1180 facilities in the future for any update with an existing FAMP



- (e) Fenceline Air Monitoring Compliance Schedule
  - (1) The owner or operator of a Refinery shall complete installation and begin operation of Real-Time Fenceline Air Monitoring System or modify the operation of the Fenceline Air Monitoring System in accordance with the approved or partially approved FAMP:
    - (A) Beginning no later than two years after a FAMP submitted pursuant to paragraph (d)(1) is approved, or partially approved, by the Executive Officer;
    - (B) Beginning no later than one year after a FAMP submitted pursuant to paragraph (d)(2) is approved, or partially approved, by the Executive Officer;
    - (C) No later than six months after the Executive Officer approves, or partially approves, an updated FAMP required pursuant to paragraph (d)(4); and
    - (D) Prior to commencing operations at a new Refinery.



# Community Air Monitoring Fees (k)

- PR 1180.1 facilities will pay installation fee for community air monitoring system by two phases:
  - Phase one by July 1, 2024
  - Phase two by January 30, 2025
- Annual operating and maintenance fees shall be paid pursuant to Rule 301

#### (k) Community Air Monitoring Fees

- (1) An owner or operator of a Refinery shall pay an installation fee for Refinery-related Community Air Monitoring Systems based on the fee schedule established in Table 2.
- (2) No later than July 1, 2024, the owner or operator of a Refinery shall make an initial minimum payment to the South Coast AQMD as specified in Table 2 for phase one implementation.
- (3) No later than January 30, 2025, the owner or operator of a Refinery shall make a final payment to the South Coast AQMD for the remaining balance of the installation fee as specified in Table 2 for phase two implementation. The remaining balance shall be equal to the installation fee minus the initial minimum payment required by paragraph (k)(2).
- (4) Annual operating and maintenance fees for the Community Air Monitoring System shall be paid pursuant to Rule 301-Permitting and Associated Fees, when applicable.
- (5) The community air monitoring fees required by paragraph (k)(1) are in addition to permit and other fees otherwise authorized to be collected from such Refineries.



#### Rule 1180.1

## Table 2 – Refinery Related Community Air Monitoring System Fees

 The phase one and phase two combined cost for each facility is the estimated cost for one community monitoring station

#### Table 2 – Refinery-Related Community Air Monitoring System Fees

Effective Dates and Fee Requirements

			Effective Bates an	a i co recquirements
Facility ID	Permit Name	Location	Phase One Implementation (No later than July 1, 2024)	Phase Two Implementation (No later than January 30, 2025)
187165	AltAir Paramount, LLC	Paramount	\$316,343	\$738,132
800080	LTR dba World Oil Refining	South Gate	\$316,343	\$738,132
800393	Valero Wilmington Asphalt Plant	Paramount	\$316,343	\$738,132



## Exemptions (I)

Refineries subject to Rule
 1180 are exempt

(l) Exemptions

An owner or operator of a Refinery subject to Rule 1180 is exempt from the requirements of this rule.

# Table 1 – Target Compound List and Notification Thresholds

- Does not include cadmium, manganese, and nickel
  - PR 1180.1 facilities do not operate Fluid Catalytic Cracking Unit (FCCU) - the only unit capable of emitting high concentrations of metals

Table 1– Air Pollutants and Notification Thresholds to be Addressed by FAMPs



Air Pollutants	Health Standard-Based Notification Threshold	Informational-Based Notification Threshold
Criteria Air Pollutants		
Sulfur Dioxide	75 ppb	N/A
Nitrogen Oxides	100 ppb	N/A
Particulate Matter		
PM2.5	35 μg/m³ (24-hour)	N/A
PM10	50 μg/m³ (24-hour)	N/A
Volatile Organic Compounds		
Total VOCs (Non-Methane Hydrocarbons)	N/A	730 ppb
Formaldehyde	44 ppb	N/A
Acetaldehyde	260 ppb	N/A
Acrolein	1.1 ppb	N/A
1,3 Butadiene	297 ppb	N/A
Naphthalene	N/A	N/A
Polycyclic aromatic hydrocarbons (PAHs)	N/A	N/A
Styrene	5000 ppb	N/A
Benzene	8 ppb	N/A
Toluene	1300 ppb	N/A
Ethylbenzene	N/A	N/A
Xylenes	5000 ppb	N/A
Other Compounds		
Hydrogen Sulfide	30 ppb	N/A
Carbonyl Sulfide	270 ppb	N/A
Ammonia	4507 ppb	N/A
Hydrogen Cyanide	309 ppb	N/A

# Socioeconomic Impacts



# Socioeconomic Impact Assessment

- California Health and Safety Code Section 40440.8
  - Requires socioeconomic impact assessment for proposed rule or rule amendment which "will significantly affect air quality or emissions limitations"
  - Socioeconomic impact assessment shall consider:
    - Type of affected industries
    - Range of probable costs, including costs to industry or business
    - Impact on employment and regional economy
- California Health and Safety Code Section 40728.5
  - Requires the socioeconomic impact assessment to also specifically consider the range of probable costs to small businesses

# Socioeconomic Impact Assessment

- Facilities impacted by PAR 1180 and PR 1180.1 would incur costs in the following categories
  - One-time capital costs
    - Site preparation, monitoring equipment, data logging systems, technical labor for installation for both community and fenceline systems
  - Recurring operating & maintenance costs
    - Utilities, land lease, lavatory rental, equipment calibration, maintenance parts/consumables, communications, and professional services
- Direct cost impacts will be used to model regional economic impacts

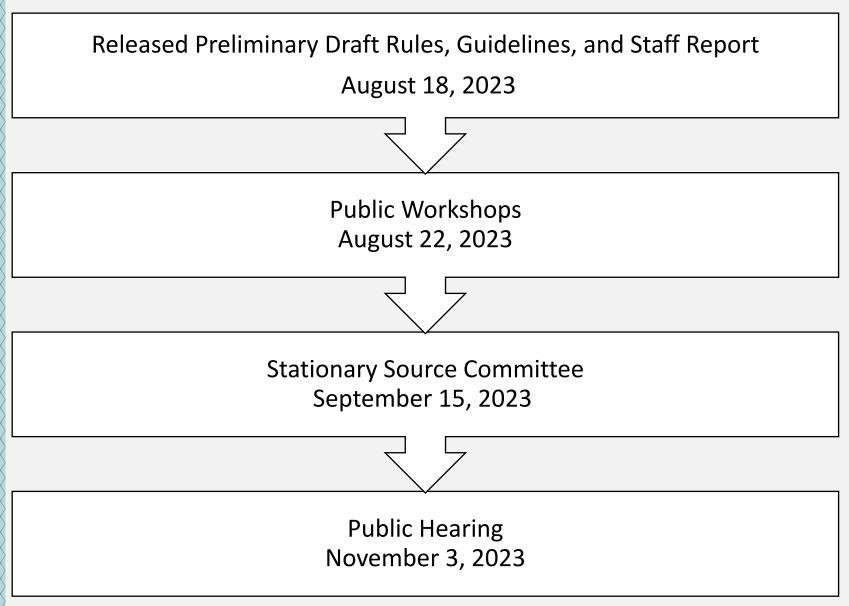
# California Environmental Quality Act (CEQA)



# California Environmental Quality Act (CEQA)

- The proposed project (PAR 1180 and PR 1180.1) seeks to enhance fenceline monitoring requirements to improve data collection without creating any significant adverse impacts
- The proposed project qualifies for the following CEQA exemptions
  - CEQA Guidelines Section 15061 (b)(3) Common Sense Exemption; and
  - CEQA Guidelines Section 15306 Information Collection
- A Notice of Exemption will be prepared, and if the proposed project is approved, it 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

# Next Steps



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