

RULE 1180. FENCELINE AND COMMUNITY AIR MONITORING FOR PETROLEUM REFINERIES AND RELATED FACILITIES

(a) Purpose

The purpose of this rule is to require Real-Time Fenceline Air Monitoring Systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other air pollutants, at or near the property boundaries of Petroleum Refineries and in nearby communities.

(b) Applicability

This rule applies to Petroleum Refineries, Related Facilities, and their successors are subject to the rule. Rule 1180 Facilities are included in Table 2 – Refinery-Related Community Air Monitoring System Fees for Petroleum Refineries (Table 2) and Table 3 – Refinery-Related Community Air Monitoring System Fees for Related Facilities (Table 3). Petroleum Refineries that were subject to Rule 1180 on January 5, 2024 remain subject to Rule 1180, even if they transition some or all of their operations to refining alternative feedstocks, which are organic material not derived from crude oil product, coal, natural gas, or any other fossil fuel-based material. This rule does not apply to facilities subject to Rule 1180.1 – Other Refinery Fenceline and Community Air Monitoring.

(c) Definitions

- (1) **COMMUNITY AIR MONITORING SYSTEM** is a combination of equipment that measures and records air pollutant concentrations in communities near a Facility.
- (2) **CORRECTIVE ACTION PLAN** is a compliance plan that details the actions a Facility will execute 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.
- (4) **FACILITY WITH OPERATIONS RELATED TO PETROLEUM REFINERIES (RELATED FACILITY)** is any establishment that has operations related to the refinery processes located on properties adjacent to or contiguous with a Petroleum Refinery, including electricity generating facilities, Hydrogen Production Plants, sulfuric acid plants, Sulfur Recovery Plants, and Terminals, which receive more

- (c) (4) than 50 percent of their product input either directly or indirectly from, or provide more than 50 percent of their product output either directly or indirectly to, any of the Petroleum Refineries subject to this rule in 2022 calendar year.
- (5) FACILITY is any Petroleum Refinery or Related Facility.
- (6) FENCELINE AIR MONITORING PLAN (FAMP) is a compliance plan that provides detailed information about air monitoring instrumentation, maintenance and quality control procedures, backup systems, auditing, and data reporting methods for the affected Facility. The FAMP includes:
 - (A) The plan for the installation of the Fenceline Air Monitoring System specified in subparagraphs (d)(1)(A) through (d)(1)(D);
 - (B) The plan to comply with the web-based fenceline data display and notification program specified in subdivision (h); and
 - (C) The quality assurance project plan that details the project objectives, procedures, and tasks performed to ensure the Fenceline Air Monitoring System is producing reliable data.
- (7) FENCELINE AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a Facility; data systems that process and store historical data; and public web-based fenceline data display and notification systems, where data are displayed and through which public fenceline notifications are issued.
- (8) HYDROGEN PRODUCTION PLANT is an establishment that produces hydrogen by steam hydrocarbon reforming, partial oxidation of hydrocarbons, or other processes.
- (9) INDEPENDENT AUDIT is an assessment conducted by a Qualified Independent Party with relevant technical expertise in Fenceline Air Monitoring Systems that was not involved in the implementation of the FAMP, including the installation, operation, maintenance, and quality assurance procedures of the Fenceline Air Monitoring System at the Facility being audited.
- (10) NOTIFICATION THRESHOLD is a level above which Facilities are required to send a fenceline notification.
- (11) PETROLEUM REFINERY is an establishment, as defined in the Standard Industrial Classification Manual as Industry No. 2911, that is permitted to process petroleum and primarily produces transportation fuels, including gasoline, diesel, and jet fuel.

- (c)
 - (12) QUALIFIED INDEPENDENT PARTY is a person, research institution, educational institution, or consulting firm with the relevant technical expertise that is not an employee of a Facility.
 - (13) REAL-TIME is the actual or near actual time during which air pollutant levels occur at or near the property boundary of a Facility or in a nearby community.
 - (14) RULE 1180 AND RULE 1180.1 FENCELINE AIR MONITORING PLAN GUIDELINES are a written framework to be used by the Executive Officer to evaluate a FAMP.
 - (15) SPECIFIC CAUSE ANALYSIS is an analysis conducted by a Facility to determine the cause of an air pollutant detected above an applicable Notification Threshold, which includes the investigation into the source of the air pollutant.
 - (16) SULFUR RECOVERY PLANT are units within a Petroleum Refinery, or a separate establishment, that recovers elemental sulfur or sulfur compounds from sour or acid gases and/or sour water generated by Petroleum Refineries.
 - (17) TERMINAL is an establishment used to store crude oil, petroleum products, and/or petrochemical products in above-ground storage tanks.

- (d) Plan Requirements
 - (1) The owner or operator of a Facility shall revise an existing FAMP or shall prepare a FAMP pursuant to the schedule in subdivision (e), in accordance with the Rule 1180 and Rule 1180.1 Fenceline Air Monitoring Plan Guidelines, and provide the following detailed information:
 - (A) Equipment to be used to continuously monitor, record, and report air pollutant levels for the air pollutants specified in Table 1 – Air Pollutants and Notification Thresholds to be Addressed by FAMPs (Table 1), in Real-Time, at or near the property boundary of the Facility;
 - (B) A technical justification for not including Real-Time fenceline air monitoring for any of the air pollutants specified in Table 1, consistent with the criteria in the Rule 1180 and Rule 1180.1 Fenceline Air Monitoring Plan Guidelines;
 - (C) Equipment to be used to continuously monitor, record, and report wind speed and wind direction, installed in at least one location per Facility, unless adequate coverage has been demonstrated to the satisfaction of Executive Officer;
 - (D) Equipment specifications and Facility maps with locations of fenceline air monitoring equipment;

- (d) (1) (E) Procedures for Fenceline Air Monitoring System maintenance and failures. The procedures for system maintenance and failures shall include a plan that describes the maintenance activities necessary to maintain proper performance of the Fenceline Air Monitoring System and a plan that addresses system failures. At a minimum, the maintenance and failure plan shall describe the following:
- (i) Routine maintenance requirements;
 - (ii) A planned schedule for routine maintenance;
 - (iii) Estimated length of time that the Fenceline Air Monitoring System would not be operating during routine maintenance activities; and
 - (iv) Temporary measurements that would be taken in the event of a system failure or during routine maintenance activities and used until the Fenceline Air Monitoring System is restored to normal operating conditions;
- (F) Procedures for implementing the FAMP, including, information pertaining to the installation, operation, maintenance, and quality assurance and quality control, for the Fenceline Air Monitoring System;
- (G) Methods for disseminating data collected by the equipment specified in subparagraphs (d)(1)(A) and (d)(1)(C) to the public, local response agencies, and the Executive Officer as expeditiously as possible, but no later than 15 minutes after the data is collected;
- (H) Methods for making the most recent five calendar years of electronic historical data collected by the equipment specified in subparagraphs (d)(1)(A) and (d)(1)(C) available within 60 calendar days after the conclusion of each quarter for public download in an easily downloadable, accessible, and interpretable electronic format that is approved by the Executive Officer;
- (I) Methods for making the most recent five calendar years of electronic historical data collected by the equipment specified in subparagraphs (d)(1)(A) and (d)(1)(C) available to be electronically transmitted to the Executive Officer within 60 calendar days after the conclusion of each quarter in a format that is approved by the Executive Officer;
- (J) Notification Thresholds for each air pollutant listed in Table 1, unless the air pollutant was excluded in the approved or partially approved FAMP; and
- (K) Any other information specified in the Rule 1180 and Rule 1180.1 Fenceline Air Monitoring Plan Guidelines.

- (d) (2) The owner or operator of a Facility may include the use of emerging technologies in a FAMP that is compliant with the requirements of this rule.

- (e) Plan Submittal Deadlines
 - (1) At least 12 calendar months prior to commencing operations at a new Facility, the owner or operator of a Facility shall submit to the Executive Officer a written FAMP for establishing and operating a Real-Time Fenceline Air Monitoring System.
 - (2) No later than seven calendar months after January 5, 2024, the owner or operator of a Facility with an existing Fenceline Air Monitoring Plan (FAMP) shall submit a revised FAMP to include:
 - (A) Any Related Facility with the same board of directors or parent corporation, that will be included in the Facility’s FAMP, if applicable;
 - (B) Any air pollutant in Table 1 that was not addressed in the Facility’s previous FAMP; and
 - (C) Any requirement in paragraph (d)(1) that was not addressed in the Facility’s previous FAMP.
 - (3) No later than 12 calendar months after January 5, 2024, the owner or operator of a Related Facility that does not have the same board of directors or parent corporation as a Facility with an existing FAMP, shall submit to the Executive Officer a written FAMP for establishing and operating a Real-Time Fenceline Air Monitoring System.
 - (4) The owner or operator of a Facility shall submit a revised FAMP to the Executive Officer as follows:
 - (A) Ten (10) calendar days after the date of any unplanned modification that an approved or partially approved FAMP does not adequately address;
 - (B) Forty-five (45) calendar days before the date of implementation of any planned modification that an approved or partially approved FAMP does not adequately address;
 - (C) Sixty (60) calendar days after the date of receiving information that an approved or partially approved FAMP does not adequately measure any air pollutant(s) identified in Table 1 that are emitted from the Facility;
 - (D) Sixty (60) calendar days from the initial Fenceline Air Monitoring System downtime or malfunction that required a revised FAMP pursuant to paragraph (i)(4);

- (e) (4) (E) Sixty (60) calendar days after the Independent Audit is submitted to the Executive Officer if the Independent Audit report indicates there are deficiencies in the FAMP;
 - (F) Sixty (60) calendar days after the Executive Officer notifies the Facility in writing of deficiencies in the FAMP; and
 - (G) Sixty (60) calendar days after the Executive Officer provides the Facilities written notice that Real-Time monitoring of Polycyclic Aromatic Hydrocarbons (PAHs) is feasible.
- (f) Fenceline Air Monitoring System Installation Compliance Schedule
- (1) The owner or operator of a Facility shall complete installation and begin operation of a Real-Time Fenceline Air Monitoring System or modify the operation of the Fenceline Air Monitoring System in accordance with an approved or partially approved FAMP:
 - (A) Beginning no later than 15 calendar months after a FAMP submitted pursuant to paragraph (e)(1), (e)(2), or (e)(3) is approved, or partially approved, by the Executive Officer;
 - (B) No later than six calendar months after the Executive Officer approves, or partially approves, a revised FAMP required pursuant to paragraph (e)(4); and
 - (C) Prior to commencing operations at a new Facility.
- (g) Plan Review Process
- (1) The Executive Officer will notify the owner or operator of a Facility in writing whether the FAMP submitted pursuant to paragraph (e)(1) or (e)(3), or the revised FAMP submitted pursuant to paragraph (e)(2) or (e)(4), is approved, partially approved, disapproved, or partially disapproved as follows:
 - (A) The FAMP will be approved if the owner or operator of a Facility submits all of the information in subdivision (d) and the Rule 1180 and Rule 1180.1 Fenceline Air Monitoring Plan Guidelines and all sections are approved; and
 - (B) The Executive Officer will partially approve a FAMP if the section described in subparagraph (c)(6)(A), (c)(6)(B), or (c)(6)(C), is approved.
 - (2) If the FAMP or revised FAMP is disapproved pursuant to paragraph (g)(1), the owner or operator of a Facility shall submit a revised FAMP within 30 calendar days after notification of disapproval of the plan. The revised plan shall include any information necessary to address deficiencies identified in the disapproval letter.

- (g) (3) The Executive Officer will either approve the revised FAMP submitted pursuant to (g)(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 (g)(2), the Executive Officer will modify the plan and approve it as modified. The owner or operator of a Facility may appeal the FAMP modified by the Executive Officer to the Hearing Board pursuant to Rule 216 – Appeals and Rule 221 – Plans.
 - (4) The Executive Officer will make the FAMP or revised FAMP that is submitted pursuant to subdivision (d) available for public review no less than 14 calendar days prior to approval.
 - (5) The owner or operator of a Facility shall pay compliance plan review fees as specified in Rule 306 – Plan Fees for the review, approval, and modifications of FAMPs and revised FAMPs.
- (h) Web-based Fenceline Data Display and Notification Program
- (1) The owner or operator of a Facility shall maintain a web-based fenceline data display and notification program according to the Rule 1180 and Rule 1180.1 Fenceline Air Monitoring Plan Guidelines to display and store at least five calendar years of the most recent data collected from the Fenceline Air Monitoring Systems, and make, at a minimum, the following information publicly available:
 - (A) Description of measurement techniques, Notification Thresholds, type of Notification Threshold (health standard-based or information-based), and all instances when an air pollutant was measured above a Notification Threshold;
 - (B) Effective 30 calendar days from January 5, 2024 for a Facility with an existing FAMP on January 5, 2024, or upon commencing operation of a new Fenceline Air Monitoring System for a Facility without an existing FAMP on January 5, 2024, Real-Time and historic concentrations, of all air pollutants measured on the Fenceline Air Monitoring System with Data Quality Flags;
 - (C) Effective 30 calendar days from January 5, 2024 for a Facility with an existing FAMP on January 5, 2024, or upon commencing operation of a new Fenceline Air Monitoring System for a Facility without an existing FAMP on January 5, 2024, Real-Time and historic wind speed and wind direction data measured on the Fenceline Air Monitoring System;

- (h) (1) (D) Effective 30 calendar days from January 5, 2024 for a Facility with an existing FAMP on January 5, 2024, or upon commencing operation of a new Fenceline Air Monitoring System for a Facility without an existing FAMP on January 5, 2024, definition of Data Quality Flags;
- (E) The most recently approved, or partially approved, FAMP prominently labeled to indicate the approval status of each section described in subparagraphs (c)(6)(A), (c)(6)(B), and (c)(6)(C);
- (F) Report(s) generated from Independent Audit conducted pursuant to subdivision (j);
- (G) Specific Cause Analyses as required pursuant to paragraphs (k)(2), (k)(3), and (k)(4);
- (H) Quarterly reports as required pursuant to paragraph (k)(5);
- (I) Corrective Action Plans as required pursuant to paragraph (j)(4); and
- (J) Description of the air pollutants monitored by the Fenceline Air Monitoring Systems, their general health impacts, and a link to the Office of Health Hazard Assessment (OEHHA) Air Chemical database website.
- (2) The web-based fenceline data display and notification program operated by the owner or operator of a Facility shall automatically generate and send a 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, regardless of the cause of the air pollutant emissions and shall include:
 - (A) A unique identification number for each notification generated;
 - (B) Facility name;
 - (C) Location, site, date, and time of the exceedance;
 - (D) Air pollutant name, concentration measured, and the Notification Threshold; and
 - (E) A link to the OEHHA Air Chemical database website to the specific air pollutant detected above the threshold;

- (h) (3) Effective 90 calendar days from January 5, 2024 for a Facility with an existing FAMP on January 5, 2024, or upon commencing operation of a new Fenceline Air Monitoring System for a Facility without an existing FAMP on January 5, 2024, the owner or operator of a Facility shall automatically generate and send a follow-up notification as soon as technically feasible, but no later than 15 minutes after, the first occurrence when the measured concentration of the air pollutant exceeds the follow-up Notification Threshold during an exceedance event. The follow-up Notification Threshold shall be determined as:

$$\begin{aligned} & \textit{Follow - up Notification Threshold} \\ & = \textit{Applicable Notification Threshold} \times 2^X \\ & \text{Where } X = 1, 2, 3, 4, \text{ and } 8 \end{aligned}$$

The follow-up notifications shall include:

- (A) The corresponding unique identification number;
 - (B) Facility name;
 - (C) Location, site, date, and time of the exceedance;
 - (D) Air pollutant name, concentration measured, and the Notification Threshold; and
 - (E) A link to the OEHHA Air Chemical database website to the specific air pollutant detected above the threshold;
- (4) The owner or operator of a Facility shall send a notification at the conclusion of the exceedance event that required a notification pursuant to (h)(2) after the air pollutant has been continuously detected at a level below the applicable Notification Threshold for a minimum of 30 minutes or two consecutive measurements. The notification shall include:
- (A) The corresponding unique identification number;
 - (B) The maximum concentration of the air pollutant, detected during the period the Notification Threshold was exceeded, using the same averaging time as the Notification Threshold; and
 - (C) The duration for which the Notification Threshold was exceeded; or
 - (D) If the fenceline notification was sent in error, the notification shall include an explanation as to the cause of the erroneous fenceline notification.

- (h) (5) The web-based fenceline data display and notification program operated by the owner or operator of a Facility shall include a mechanism for the public to:
 - (A) Opt-in to receive fenceline notifications and to opt-out of fenceline notifications;
 - (B) Select separate email and/or text message notification options; and
 - (C) Provide comments or feedback to the Facility and a mechanism for the Facility to respond.

- (i) Fenceline Air Monitoring System Downtime or Malfunction
 - (1) Upon installation and operation of a Fenceline Air Monitoring System as required by subdivision (f), the owner or operator of a Facility shall comply with the following notification requirements:
 - (A) Calling 1-800-CUT-SMOG[®] to notify the Executive Officer at least 48 hours prior to the planned maintenance or modification of the Fenceline Air Monitoring System described in the FAMP by providing the name of the Facility, the name of the monitor, and the planned date(s) of the occurrence(s); and
 - (B) Calling 1-800-CUT-SMOG[®] to notify the Executive Officer within two hours of discovering, and no more than eight hours after the start of downtime or malfunction, that the Fenceline Air Monitoring System described in the FAMP subject to subdivision (d) failed to accurately provide Real-Time air monitoring information for more than one hour. The owner or operator shall provide the:
 - (i) Name of the Facility;
 - (ii) Part(s) of the impacted Fenceline Air Monitoring System;
 - (iii) Impacted data;
 - (iv) Date and time of the occurrence; and
 - (v) Reason for the lapse in collecting and/or reporting the Real-Time air monitoring information.

- (i) (2) The owner or operator of the Facility shall submit a written notification to the Executive Officer of any Fenceline Air Monitoring System downtime or malfunction that results in a failure to accurately provide continuous, Real-Time fenceline air monitoring information as required by the approved, or partially approved, FAMP subject to subdivision (d) for 24-hours or longer. The written notification shall be submitted to the Executive Officer within 24 hours of discovery, and no more than 30 hours of the start of the Fenceline Air Monitoring System downtime or malfunction and shall include the following:
 - (A) A description of actions being taken to remedy the Fenceline Air Monitoring System downtime or malfunction;
 - (B) Estimated time needed to restore the Fenceline Air Monitoring System or if already restored, the time the Fenceline Air Monitoring System was returned to normal operating conditions that comply with the approved or partially approved FAMP; and
 - (C) Temporary fenceline air monitoring measures being implemented until the Fenceline Air Monitoring System is restored to normal operating conditions.
 - (3) When the Fenceline Air Monitoring System is experiencing a known downtime or malfunction, the owner or operator of a Facility shall indicate the data is unavailable for the missed or inaccurate measurements on their web-based fenceline data display and notification program.
 - (4) If a Fenceline Air Monitoring System downtime or malfunction results in a failure to accurately provide continuous, Real-Time fenceline air monitoring information for more than 30 consecutive calendar days and the Executive Officer determines and notifies the owner or operator of a Facility that a revised FAMP is required to address the downtime or malfunction, the owner or operator of a Facility shall submit a revised FAMP to the Executive Officer, pursuant to the schedule in subparagraph (e)(4)(D).
- (j) Independent Audits
- (1) The owner or operator of a Facility shall cause an Independent Audit to be conducted and completed according to an audit protocol approved by the Executive Officer.

- (j) (2) The Independent Audit shall:
 - (A) Identify any deficiencies in the Fenceline Air Monitoring System and quality assurance procedures; and
 - (B) Produce an Independent Audit report that shall be:
 - (i) Signed by the party that conducted the Independent Audit, certifying under penalty of law, based on information and belief formed after reasonable inquiry, that the statements and information in the audit report and in all attachments and other materials are true, accurate, and complete; and
 - (ii) Submitted to the Executive Officer and made available on the web-based fenceline data display and notification program within 90 calendar days after the audit has been completed.
- (3) The owner or operator of a Facility shall cause an Independent Audit to be performed according to the following schedule:
 - (A) For a Fenceline Air Monitoring System installed before January 5, 2024, an Independent Audit shall be completed by January 1, 2029, and once every 36 calendar months thereafter;
 - (B) For a Fenceline Monitoring System installed on or after January 5, 2024, an Independent Audit shall be completed within 12 calendar months after the installation and operation of the Fenceline Air Monitoring System and subsequent Independent Audits shall be completed once every 36 calendar months thereafter; and
 - (C) A Facility with a Fenceline Monitoring System installed before January 5, 2024 that was required to amend their FAMP to include Related Facilities shall complete the Independent Audits for their Related Facility pursuant to the schedule in subparagraph (j)(3)(A).
- (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 three calendar months of the audit report, describing:
 - (i) 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 is proposing to exempt from corrective action because any corrective action will negatively affect safety;

- (j) (4) (B) Submit the Corrective Action Plan to the Executive Officer for review and make it available on the Facility’s web-based fence data display and notification program within one business day of approval by the Executive Officer;
- (C) Perform all corrective action(s) pursuant to the schedule in an approved Corrective Action Plan; and
- (D) Maintain a record indicating when the corrective action(s) have been completed.

(5) Corrective Action Plan Approval Process

The Executive Officer shall notify the owner or operator of a Facility in writing whether the Corrective Action Plan submitted pursuant to paragraphs (j)(4) is approved or disapproved.

- (A) If the Corrective Action Plan is disapproved, the owner or operator of a Facility shall submit a revised Corrective Action Plan within 14 calendar days after notification of disapproval of the plan. The revised plan shall include any information necessary to address deficiencies identified in the disapproval letter; and
- (B) The Executive Officer will either approve the revised Corrective Action Plan or modify the plan and approve it as modified. If the facility does not submit the revised Corrective Action Plan within 30 calendar days after notification of disapproval of the plan as required in subparagraph (j)(5)(A), the Executive Officer will modify the plan and approve it as modified. The owner or operator of a Facility may appeal the Corrective Action Plan modified by the Executive Officer to the Hearing Board pursuant to Rule 216 – Appeals and Rule 221 – Plans.

(6) Follow-up Independent Audit

The owner or operator of a Facility shall:

- (A) Cause a party to conduct and complete a follow-up Independent Audit within three calendar months of completing the corrective action(s) pursuant to subparagraph (j)(4)(C) to:
 - (i) Determine if all of the actions specified in the Corrective Action Plan were completed;
 - (ii) Determine if the corrective action(s) resolved the deficiencies identified in the Independent Audit report; and
 - (iii) Produce a follow-up Independent Audit report that shall be:

- (j) (6) (A) (iii) (A) Signed by the party that conducted the follow-up Independent Audit, certifying under penalty of law, based on information and belief formed after reasonable inquiry, that the statements and information in the follow-up Independent Audit report and in all attachments and other materials are true, accurate, and complete; and
 - (B) Submitted to the Executive Officer and made available on the web-based fenceline data display and notification program within 90 calendar days after the follow-up Independent Audit has been completed;
 - (B) Develop a Corrective Action Plan pursuant to paragraph (j)(4) that shall be approved pursuant to paragraph (j)(5) if the follow-up Independent Audit report identifies deficiencies in a Fenceline Air Monitoring System.
- (7) Revised FAMP

The owner or operator of a Facility shall submit a revised FAMP to the Executive Officer pursuant to the schedule in subparagraph (e)(4)(E) if the Executive Officer notifies the Facility in writing that the Independent Audit or follow-up Independent Audit indicates deficiencies in the FAMP.
- (8) Plan Review Fees

The owner or operator of a Facility shall pay compliance plan review fees as specified in Rule 306 – Plan Fees for the review, approval, and modifications of any Corrective Action Plan specified in subdivision (j).
- (k) Recordkeeping, Reporting, and Specific Cause Analysis
 - (1) The owner or operator of a Facility shall maintain records of all information required under this rule for at least five calendar years and shall make the information available to the Executive Officer upon request. Records for at least the two most recent calendar years shall be kept onsite.
 - (2) Specific 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 utilizing the Fenceline Air Monitoring System that measured the air pollutant shall:

- (k) (2) (A) Initiate a Specific Cause Analysis upon discovery, but no later than 24 hours after discovery, to determine the source(s) of the air pollutant using techniques such as:
 - (i) Visual inspection;
 - (ii) Optical gas imaging;
 - (iii) Leak inspection using EPA Method 21; or
 - (iv) Other test or monitoring method approved by the Executive Officer;
- (B) If the specific cause was determined to be from an on-site source, initiate corrective action(s) to stop the exceedance or prevent a similar exceedance, if needed, as soon as practicable, but no later than 24 hours after identifying the specific cause;
- (C) If the specific cause was determined to be from an off-site source, notify the Executive Officer by calling 1-800-CUT-SMOG® upon discovery, but no later than 24 hours after discovery of such determination, providing the basis of such determination, and the suspected off-site source(s);
- (D) If the specific cause was determined to be from an on-site source, submit a Specific Cause Analysis report to the Executive Officer and make it available on the web-based fenceline data display and notification program within 14 calendar days of identifying the specific cause. The report shall include, at a minimum:
 - (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;
 - (iii) Any mitigation and corrective action(s) taken to stop the exceedance or taken to prevent a similar recurrence;
 - (iv) If a corrective action(s) would take more than 14 calendar days, the reason(s) why; and
 - (v) Any monitoring data requested by the Executive Officer;

- (k) (2) (E) If corrective action(s) is required pursuant to subparagraph (k)(2)(B), the owner or operator of the Facility shall:
 - (i) Conduct a reinspection of the source within 14 calendar days of completing the corrective action(s) to assess if the corrective action(s) reduced or eliminated the source(s) of the air pollutant; and
 - (ii) Submit a report to the Executive Officer and make the report available on the web-based fence line data display and notification program within 28 calendar days of completing the corrective action(s) describing how the corrective action(s) addressed the source(s) of the air pollutant.
- (3) If the owner or operator of a Facility is notified by the Executive Officer to be the off-site source of an air pollutant measurement that exceeds the Notification Threshold, the owner or operator of the Facility shall:
 - (A) Initiate a Specific Cause Analysis upon notification, but no later than 24 hours after being notified that their Facility is the cause of the air pollutant emissions using techniques in clauses (k)(2)(A)(i) to (k)(2)(A)(iv);
 - (B) Initiate corrective action(s), if applicable, as soon as practicable, but no later than 24 hours of identifying the specific cause;
 - (C) Submit a Specific Cause Analysis report to the Executive Officer and make it available on the web-based fence line data display and notification program within 14 calendar days of identifying the specific cause. The report shall include at a minimum the information in clauses (k)(2)(D)(i) to (k)(2)(D)(v); and
 - (D) If corrective action(s) is required pursuant to subparagraph (k)(3)(B), the owner or operator of the Facility shall:
 - (i) Conduct a reinspection of the source within 14 calendar days of completing the corrective action(s) to assess if the corrective action(s) reduced or eliminated the source(s) of the air pollutant; and
 - (ii) Submit a report to the Executive Officer and make the report available on the web-based fence line data display and notification program within 28 calendar days of completing the corrective action(s) describing how the corrective action(s) addressed the source(s) of the air pollutant.

- (k) (4) For the purpose of this provision, an air pollutant measured above the applicable Notification Threshold in Table 1 on a Facility Fenceline Air Monitoring System within a seven calendar-day period shall be considered one event. If three events require Specific Cause Analyses within the same calendar year indicate the same cause, or indicate the cause cannot be determined, for the same air pollutant detected above the Notification Threshold by the same monitor of a Fenceline Air Monitoring System, the owner or operator of a Facility shall:
- (A) Cause a Qualified Independent Party with relevant technical expertise in refinery operations or Fenceline Air Monitoring Systems to initiate a Specific Cause Analysis, which may include installing additional temporary monitors to identify the source of the air pollutants, within 14 calendar days of the most recent instance when the Notification Threshold was exceeded to determine the specific cause and corrective action(s) that could prevent future emissions;
 - (B) Cause the Qualified Independent Party to produce a Specific Cause Analysis report, certified under penalty of law, based on information and belief formed after reasonable inquiry, that the statements and information in the Specific Cause Analysis report and in all attachments and other materials are true, accurate, and complete;
 - (C) Submit a Specific Cause Analysis report, certified by the Qualified Independent Party pursuant to paragraph (k)(4)(B), to the Executive Officer and make it available on the web-based fenceline data display and notification program within 14 calendar days of the Specific Cause Analysis conducted pursuant to that includes, at a minimum:
 - (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;
 - (iii) Any mitigation and corrective action(s) taken to stop the exceedance or taken to prevent a similar recurrence;
 - (iv) If a corrective action would take more than 14 calendar days, the reason(s) why; and
 - (v) Any monitoring data requested by the Executive Officer;
 - (D) Initiate corrective action(s) to stop the exceedance or prevent a similar recurrence, if applicable, as soon as practicable, but no later than 24 hours of the Qualified Independent Party identifying the specific cause; and

- (k) (4) (E) If the Specific Cause Analysis conducted by the Qualified Independent Party required corrective action(s), the owner or operator of a Facility shall:
 - (i) Conduct a reinspection of the source within 14 calendar days of completing the corrective action(s) to assess if the corrective action(s) reduced or eliminated the source(s) of the air pollutant; and
 - (ii) Submit a report to the Executive Officer and make the report available on the web-based fenceline data display and notification program within 28 calendar days of completing the corrective action(s) describing how the corrective action(s) addressed the source(s) of the air pollutant.

(5) 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 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 Rule 1180 and Rule 1180.1 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 indicating the concentration trend for each air pollutant;
- (B) Data processing calculations, such as conversion calculations of instrument signal to pollutant concentration;
- (C) Summary of calibration data;
- (D) Description of data completeness, accuracy, and precision;
- (E) Quality assurance/quality control measures;
- (F) Instrument maintenance and performance checks;
- (G) Any instance when an air pollutant was measured above a Notification Threshold;
- (H) Any instance when a Fenceline Air Monitoring System downtime or malfunction required a notification to Executive Officer pursuant to subdivision (i) or corrective action(s); and
- (I) Review and resolve any Data Quality Flags and finalize the data.

- (l) Community Air Monitoring Fees
 - (1) No later than January 31, 2025, an owner or operator of a Petroleum Refinery shall pay the applicable installation fee for community air monitoring systems established in Table 2.
 - (2) No later than January 31, 2025, for phase one implementation and January 31, 2026, for phase two implementation, an owner or operator of a Related Facility, or for a Petroleum Refinery with Related Facilities with the same board of directors or parent corporation, the owner or operator of the Petroleum Refinery, shall pay the applicable installation fee for community air monitoring systems established in Table 3.
 - (3) An owner or operator of a Facility shall pay the annual operating and maintenance fees for the community air monitoring system(s) pursuant to Rule 301–Permitting and Associated Fees.
 - (4) The community air monitoring fees required by paragraphs (l)(1), (l)(2), and (l)(3) are in addition to permit and other fees otherwise authorized to be collected from such facilities.

- (m) Compliance
 - (1) For a Petroleum Refinery with Related Facilities with the same board of directors or parent corporation, compliance with this rule shall be the responsibility of the owner or operator of the Petroleum Refinery.
 - (2) Once a FAMP is approved or partially approved by the Executive Officer, the owner or operator of a Facility must comply with all portions of the FAMP.

- (n) Exemptions
 - (1) An owner or operator of a refinery subject to Rule 1180.1 is exempt from the requirements of this rule.
 - (2) An owner or operator of a Terminal with total tank storage capacity less than 310,000 barrels is exempt from the requirements of this rule.
 - (3) 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 in a calendar year, provided:
 - (A) 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; and

- (n) (3) (B) The owner or operator of the facility complies with the notification requirement pursuant to subdivision (i).
- (4) An owner or operator of a Related Facility located entirely within the boundary of a Petroleum Refinery is exempt from the requirements of this rule provided the Petroleum Refinery's existing Real-Time Fenceline Air Monitoring Systems adequately cover the entire Facility's fenceline or property.
- (5) An owner or operator of the following Facilities are exempt from monitoring the specified air pollutant from Table 1:
 - (A) An owner or operator of a Facility is exempt from monitoring hydrogen fluoride if hydrogen fluoride is not used or stored at the Facility;
 - (B) An owner or operator of a Related Facility is exempt from monitoring black carbon and metal compounds; and
 - (C) An owner or operator of a Terminal is exempt from monitoring all the air pollutants in Table 1 other than the volatile organic compounds and hydrogen sulfide.

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

Air Pollutants	Health Standard-Based Notification Threshold*	Information-Based Notification Threshold
Criteria Air Pollutants		
Sulfur Dioxide	75 ppb	N/A
Oxides of Nitrogen	100 ppb	N/A
Particulate Matter		
PM2.5	35 µg/m ³ (24-hour avg.)	N/A
PM10	50 µg/m ³ (24-hour avg.)	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	
Naphthalene	N/A	N/A
Polycyclic Aromatic Hydrocarbons (PAHs)	N/A	N/A
Styrene	5,000 ppb	N/A
Benzene	8 ppb	N/A
Toluene	1,300 ppb	N/A
Ethylbenzene	N/A	N/A
Xylenes	5,000 ppb	N/A
Metals		
Cadmium	N/A	N/A
Manganese	0.17 µg/m ³ (8-hour avg.)	N/A
Nickel	0.2 µg/m ³	N/A
Other Air Pollutants		
Hydrogen Sulfide	30 ppb	N/A
Carbonyl Sulfide	270 ppb	N/A
Ammonia	4,507 ppb	N/A
Black Carbon	N/A	N/A
Hydrogen Cyanide	309 ppb	N/A
Hydrogen Fluoride	289 ppb	N/A

* Notification Thresholds are based on 1-hour averaging time unless otherwise noted.

Table 2 – Refinery-Related Community Air Monitoring System Fees for Petroleum Refineries

Facility ID	Facility Name	Location	Effective Date and Fee Requirement
			No later than January 31, 2025
174655	Tesoro Refining & Marketing Co, LLC	Carson	\$753,192
800436	Tesoro Refining & Marketing Co, LLC	Wilmington	\$376,596
800030	Chevron Products Co.	El Segundo	\$753,192
171109	Phillips 66 Company/Los Angeles Refinery	Carson	\$376,596
171107	Phillips 66 Company/LA Refinery Wilmington Pl	Wilmington	\$376,596
181667	Torrance Refining Company LLC	Torrance	\$753,192
800026	Valero (Permitted as Ultramar Inc.)	Wilmington	\$376,596

Table 3 – Refinery-Related Community Air Monitoring System Fees for Related Facilities

Facility ID	Facility Name	Location	Effective Date and Fee Requirement	
			No later than January 31, 2025	No later than January 31, 2026
3417	Air Products & Chemicals, Inc.	Carson	\$76,982	\$179,626
101656	Air Products and Chemicals, Inc.	Wilmington	\$76,982	\$179,626
151798	Tesoro Refining and Marketing Co, LLC (Sulfur Recovery Plant)	Carson	\$76,982	\$179,626
800057	Kinder Morgan Liquids Terminals, LLC)	Carson	\$103,786	\$242,168
174694	Tesoro Logistics, Carson Crude Terminal	Carson	\$103,786	\$242,168