(Adopted December 1, 2017) (Amended [Date of Rule Adoption])

[RULE INDEX TO BE ADDED AFTER RULE ADOPTION]

PROPOSED AMENDED RULE 1180. FENCELINE AND COMMUNITY AIR MONITORING FOR REFINERYPETROLEUM REFINERIES AND RELATED FACILITIES FENCELINE AND COMMUNITY AIR MONITORING

(a) Purpose

The purpose of this rule is to require $\underline{rReal} + \underline{T}$ ime \underline{fF} enceline \underline{aA} ir \underline{mM} onitoring \underline{sS} ystems 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 <u>compounds air pollutants</u>, at or near the property boundaries of <u>petroleum refineries Petroleum Refineries</u> and in nearby communities.

(b) Applicability

This rule applies to petroleum refineries Petroleum Refineries and Related Facilities. 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.

(c) Definitions

For the purposes of this rule, the following definitions shall apply:

- COMMUNITY AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations in communities near a petroleum refineryFacility.
- (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 than 50 percent of their process feed stock from, or provide more than 50 percent of their production output to, any Petroleum Refinery 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 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.
- (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 process and store historical data, public websites where data is displayed, and public fenceline notification systems.
- (8) HYDROGEN PRODUCTION PLANT is an establishment that produces hydrogen by steam hydrocarbon reforming, partial oxidation of hydrocarbons, or other processes which primarily supplies hydrogen for Petroleum Refineries and Related Facilities.
- (9) INDEPENDENT AUDIT is an assessment conducted by a qualified independent party, i.e., a party with technical expertise with Fenceline Air Monitoring Systems that has not been involved in the implementation of Rule 1180 fenceline air monitoring plan (FAMP) by the Facility, including but not limited to the Facility Fenceline Air Monitoring System installation, operation, maintenance, and quality assurance procedures.
- (10) NOTIFICATION THRESHOLD is a level above which Facilities are required to send a fenceline notification.

- (311) PETROLEUM REFINERY is an establishment facility, as defined in the Standard Industrial Classification Manual as Industry No. 2911, that is permitted to processes petroleum.
- (412) REAL-TIME is the actual or near actual time during which <u>air</u> pollutant levels occur at or near the property boundary of a petroleum refinery or in a nearby community.
- (513) RULE 1180 REFINERY FENCELINE AIR MONITORING PLAN GUIDELINES are a written framework to be used by the Executive Officer to evaluate a refinery fenceline air monitoring plan FAMP.
- (14) ROOT 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.
- (15) 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.
- (16) TERMINAL is an establishment used to store crude oil, petroleum products, and/or petrochemical products in above-ground storage tanks.
- (d) Plan Requirements
 - (1) No later than August 1, 2018, or at least one year prior to commencing operations at a new Facility, the owner or operator of a Facility shall submit to the Executive Officer a written fenceline air monitoring plan FAMP for establishing and operating a $\frac{R}{R}$ eal- $\frac{1}{T}$ ime fenceline aAir mMonitoring sSystem.
 - (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 Related Facility with the same board of directors or parent corporation, that will be included in the Facility's existing 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)(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 Related Facility without an existing FAMP shall submit to the Executive Officer a

written FAMP for establishing and operating a Real-Time Fenceline Air Monitoring System.

- (24) The owner or operator of a Facility shall revise an existing FAMP or shall prepare The fenceline air monitoring plan a FAMP-shall in accordance with the Refinery 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 <u>air pollutants specified in Table 1, in \underline{rR} eal- \underline{tT} ime, at or near the property boundary of the <u>petroleum refineryFacility</u>;</u>
 - (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 Refinery Fenceline Air Monitoring 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;
 - (B) Siting and equipment specifications:
 - (D) Equipment specifications and Facility maps with locations of fenceline air monitoring equipment;
 - (DE) Procedures for <u>fFenceline aAir mMonitoring equipment System</u> maintenance and failures. The procedures for <u>equipment system</u> maintenance and failures shall include a plan that describes the maintenance activities necessary to maintain proper performance of the <u>fFenceline aAir</u> <u>mMonitoring equipment System</u> and a plan that <u>deals with addresses</u> <u>equipment system</u> failures. At a minimum, the maintenance and failure plan shall describe the following:
 - (i) Routine maintenance requirements for equipment;
 - (ii) A planned schedule for routine maintenance performed on equipment;
 - (iii) <u>Estimated Ll</u>ength of time that <u>equipment system</u> will not be operating during routine maintenance activities; and
 - (iv) Temporary <u>air monitoring measures measurements</u> that will be <u>takenimplemented</u> in the event of an <u>systemequipment</u> failure or during routine maintenance activities and used until the <u>fF</u>enceline

 $a\underline{A}$ ir $\underline{m}\underline{M}$ onitoring $\underline{s}\underline{S}$ ystem_is restored to normal operating conditions.

- (E) Procedures for implementing quality assurance by a qualified independent party, including quality control and audits of the fenceline air monitoring systems;
- (F) Procedures for implementing the <u>fenceline air monitoring plan FAMP</u>, including, information pertaining to the installation, operation, maintenance, and quality assurance <u>and quality control</u>, for the <u>fFenceline</u> <u>aAir mMonitoring <u>sSystem</u>;</u>
- (G) Methods for disseminating on of data collected by the equipment specified in subparagraphs (d)(24)(A) and (d)(24)(C) to the public, local response agencies, and South Coast AQMD as expeditiously as possible. but no later than 15 minutes;
- (H) Methods for making electronic Real-Time Data and historical data collected by the equipment specified in subparagraphs (d)(4)(A) and (d)(4)(C) available for public download in an easily downloadable, accessible, and interoperable electronic format that is approved by the Executive Officer;
- (I) Methods for making electronic Real-Time Data and historical data collected by the equipment specified in subparagraphs (d)(4)(A) and (d)(4)(C) available to the Executive Officer 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 Refinery Fenceline Air Monitoring Guidelines for the FAMP.
- (3) The fenceline air monitoring plan required by paragraph (d)(1) shall address realtime air monitoring for the air pollutants specified in Table 1 on a continuous basis. The Fenceline Air Monitoring System required by subdivision (e) shall monitor for all pollutants identified in Table 1. The owner or operator of a petroleum refinery must provide an explanation for not including real time air monitoring for any of the pollutants specified in Table 1 in the fenceline air monitoring plan. Explanations for not including real time air monitoring for any of the pollutants specified in Table 1 must be consistent with the criteria in the Rule 1180 Fenceline Air Monitoring Guidelines.

- (4) The review and approval of the fenceline air monitoring plan shall be subject to plan fees as specified in Rule 306 Plan Fees.
- (5) The owner or operator of a <u>petroleum refinery Facility</u> shall submit an <u>updated</u> <u>revised fenceline air monitoring planFAMP</u> to the Executive Officer as follows:
 - (A) Ten (10) days after the date of any unplanned facility, equipment, process, or administrative modification that could result in changes to an approved or partially approved fenceline air monitoring plan FAMP does not adequately address;
 - (B) Forty-five (45) days before the date of implementation of any planned facility, equipment, process, or administrative modification that could result in changes to an approved fenceline air monitoring plan or partially approved FAMP does not adequately address;
 - (C) Sixty (60) days after the date of receiving information that an approved fenceline air monitoring plan or partially approved FAMP does not adequately measure any air pollutant(s) identified in Table 1 that are emitted from the petroleum refinery Facility-;
 - (D) Sixty (60) days from the initial Fenceline Air Monitoring System downtime or malfunction that required a revised FAMP pursuant to paragraph (h)(3);
 - (E) Sixty (60) days after the Executive Officer notifies the Facility in writing that Independent Audit or follow-up Independent Audit indicates deficiencies in the FAMP; and
 - (G) Sixty (60) days after the Executive Officer provides the Facilities written notice that Real-Time monitoring of Polycyclic Aromatic Hydrocarbons (PAHs) is feasible.
 - (D) Failure to comply with the requirements of subparagraphs (d)(5)(A) through (d)(5)(C) shall result in revocation of an approved fenceline air monitoring plan. Thirty (30) days after revocation of an approved fenceline air monitoring plan_the owner or operator of a petroleum refinery shall submit a new fenceline air monitoring plan to the Executive Officer pursuant to paragraphs (d)(1) through (d)(4) and (d)(6) through (d)(7). The updated fenceline air monitoring plan shall not be subject to the implementation schedule in subdivision (e). An updated implementation schedule subject to approval by the Executive Officer shall be included in the new fenceline air monitoring plan but in no case shall be longer than 180 days.

- (6) The owner or operator of a <u>petroleum refinery Facility</u> may include the use of emerging technologies in a <u>fenceline air monitoring planFAMP</u> that is compliant with the requirements of this rule.
- (7) All fenceline air monitoring plans shall be consistent with the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines.
- (e) Fenceline Air Monitoring System Requirements Compliance Schedule
 - (1) <u>*The owner or operator of a petroleum refinery-Facility</u> shall complete installation and begin operation of a <u>*Real-tTime fFenceline aAir mMonitoring sSystem or</u> <u>modify the operation of the Fenceline Air Monitoring System</u> in accordance with the approved <u>or partially approved fenceline air monitoring planFAMP:</u>
 - (A) Beginning no later than one year after a fenceline air monitoring planFAMP submitted pursuant to paragraph (d)(1) and subparagraphs (d)(2)(B) and (d)(2)(C) is approved, or partially approved, by the Executive Officer;
 - (B) Beginning no later than 18 months after a FAMP submitted pursuant to subparagraph (d)(2)(A) and paragraph (d)(3) is approved, or partially approved, by the Executive Officer;
 - (C) No later than six months after the Executive Officer approves, or partially approves, a revised FAMP required pursuant to paragraph (d)(5); and
 - (D) Prior to commencing operations at a new Facility.
- (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 as follows:. Determination of approval status for the fenceline air monitoring plan shall be based on, at a minimum, submitted of information that satisfies the criteria in subdivision (d) and the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines.
 - (A) The FAMP will be approved if 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 all sections are approved; and
 - (B) The FAMP may be granted partial approved if only individual sections are approved.
 - (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 <u>FAMP</u>, subject to plan fees specified in Rule 306, within 30 calendar days after notification of disapproval of the plan. The resubmitted <u>revised</u> 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) <u>The Executive Officer will make the A fenceline air monitoring planFAMP or revised FAMP</u> 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 compliance plan review fees as specified in Rule 306 – Plan Fees for the review, approval, and modifications of FAMPs and revised FAMPs.
- (g) 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 Refinery Fenceline Air Monitoring Plan Guidelines to display and store at least five years of data collected from the Fenceline Air Monitoring Systems, 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 type of Notification Threshold (health-based or information-based);
 - (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);
- (G) Root Cause Analysis as required pursuant to paragraphs (j)(2) and (j)(3);
- (H) Quarterly reports as required pursuant to paragraph (j)(4);
- (I) Corrective Action Plans pursuant to paragraph (i)(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) online 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;
- (3) The owner or operator of a Facility shall send a follow-up notification to the notification required pursuant to paragraph (g)(2) after the air pollutant has been continuously detected at a level below the applicable Notification Threshold for 30 minutes and 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 follow-up notification shall include an explanation as to the cause of the erroneous fenceline notification;
- (4) 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.
- (gh) Notifications Fenceline Air Monitoring System Downtime or Malfunction
 - Upon installation and operation of a <u>fF</u>enceline <u>aAir mM</u>onitoring <u>sS</u>ystem as required <u>by paragraph (d)(5) or subdivision (e)</u>, the owner or operator of a <u>petroleum refinery Facility</u> shall comply with the following notification requirements-<u>by</u>:
 - (A) Calling 1-800-CUT-SMOG[®] to notify the Executive Officer <u>at least 48</u> hours prior to the planned maintenance <u>and modification activity</u> subject to subparagraphs (d)(24)(<u>DE</u>) and (d)(5)(B) by providing the name of the <u>petroleum refinery Facility</u>, 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 of the start of downtime or malfunction, that the Fenceline Air Monitoring Systemequipment described in the fenceline air monitoring planFAMP subject to subdivision (d) failed to accurately provide rReal-tTime air monitoring information for more than one hour. The owner or operator shall also provide the name of the petroleum refineryFacility; the name of the air monitor, the part(s) of the impacted Fenceline Air Monitoring System; the impacted data; the date and time of the occurrence; and the reason for the lapse in collecting and/or reporting the rReal-tTime air monitoring information.
 - (2) The owner or operator of the petroleum refinery Facility shall submit a written notification to the Executive Officer of any equipment failure Fenceline Air Monitoring System downtime or malfunction that also results in a failure to accurately provide continuous, rReal-tTime fenceline air monitoring information as required by the approved, fenceline air monitoring plan 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 discoverying, and no more than 30 hours of the start of the equipment failure Fenceline Air Monitoring System downtime and shall include the following:

- (A) An <u>explanation_description_of activitiesactions_currently</u> being taken to remedy the <u>equipment failure_Fenceline Air Monitoring System downtime</u> <u>or malfunction;</u>
- (B) Estimated time needed to restore the fenceline air monitoring equipment Fenceline Air Monitoring System or time the Fenceline Air Monitoring System was returned to normal operating conditions that comply with the approved or partially approved fenceline and community air monitoring planFAMP; and
- (C) Temporary <u>fenceline</u> air monitoring measures subject to subparagraph (d)(24)(ED) from that comply with the approved fenceline air monitoring <u>plan</u> or partially approved FAMP to be implemented until the <u>fF</u>enceline <u>aAir mM</u>onitoring <u>sS</u>ystem 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 qualify air pollutant measurements displayed on their web-based fenceline data display and notification program with a Data Quality Flag indicating the data is unavailable.
- (4) The owner or operator of a <u>petroleum refineryFacility</u> shall submit an <u>updated</u> <u>revised fenceline air monitoring plan-FAMP</u> to the Executive Officer, <u>pursuant to</u> <u>the schedule in subparagraph (d)(5)(D)</u>, if an <u>Fenceline Air Monitoring System</u> <u>downtime or malfunction equipment failure</u> results in a failure to accurately provide continuous, <u>rReal-tTime fenceline</u> air monitoring information for more than 30 days.

(i) 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.
- (2) The Independent Audit shall:
 - (A) Identify any deficiencies in the Fenceline Air Monitoring System and quality assurance procedures; and
 - (B) Produce an audit report that shall be:
 - (i) Signed by the qualified independent 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 audit report and in all attachments and other materials are true, accurate, and complete; and

- (ii) Submitted to the Executive Officer and made available to the webbased fenceline data display and notification system within 90 days after the audit has been performed.
- (3) The owner or operator of a Facility shall cause an Independent Audit according to the following schedule:
 - (A) For a Fenceline Air Monitoring System installed before [*Date of Rule* Adoption], an Independent Audit shall be completed by January 1, 2029, and once every three years thereafter; 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 thereafter.
 - (C) A Facility with a Fenceline Monitoring System installed before [Date of Rule Adoption] that was required to amend their FAMP to include Related Facilities shall complete the Independent Audits pursuant to the schedule in subparagraph (i)(3)(A).
- (4) Corrective Action Plan

If the 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 two months of the audit report, describing:
 - (i) All actions that will be taken to address all deficiencies; and
 - (ii) Any deficiency included in the 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;
- (B) Submit the Corrective Action Plan to the Executive Officer for review and make it available on the Facility's web-based fenceline data display and notification program once it is approved pursuant to paragraph (i)(5):
- (C) Perform all corrective actions pursuant to the schedule in an approved <u>Corrective Action Plan; and</u>
- (D) Maintain a record indicating when the correctives actions were 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 (i)(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 updated 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 (i)(4)(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 qualified independent party conduct and complete a follow-up performance audit within one month of completing the corrective actions pursuant to subparagraph (i)(4)(C) and produce an audit report that shall be:
 - (i) Signed by the qualified independent 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 audit report and in all attachments and other materials are true, accurate, and complete; and
 - (ii) Submitted to the Executive Officer and made available to the webbased fenceline data display and notification system within 90 days after the follow-up audit has been performed;
- (B) Develop a Corrective Action Plan pursuant to paragraph (i)(4) that shall be approved pursuant to paragraph (i)(5) if the 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 (d)(5)(E) if the Executive Officer

notifies the Facility in writing that the Independent Audit or follow-up Independent Audit indicates deficiencies in the FAMP.

(ij) Recordkeeping and Reporting

(1) The owner or operator of a petroleum refinery Facility shall maintain records of all information required under this rule for at least five years and shall make the information available to SCAQMD personnel the Executive Officer upon request. Records for at least the two most recent years shall be kept onsite.

(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 utilizes the Fenceline Air Monitoring System that measured the air pollutant shall:

(A) Initiate a Root Cause Analysis within 24 hours including determining the source(s) of 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) Initiate corrective actions, if applicable, as soon as practicable but no later than 24 hours of identifying the root cause, if the root cause was determined to be from an on-site source;
- (C) If the root cause was determined to be from an off-site source located at a Facility subject to this rule:
 - (i) Notify the Facility and the Executive Officer as soon as the root cause is determined;
 - (ii) The Facilities responsible for the air pollutant emissions shall initiate a Root Cause Analysis within 24 hours of being notified their facility is the cause of the air pollutant emissions using techniques in clauses (j)(2)(A)(i) to (j)(2)(A)(iv); and
 - (iii) The Facility responsible for the air pollutant emissions shall initiate corrective actions, if applicable, as soon as practicable but no later than 24 hours of identifying the root cause, once they confirm the root cause of the air pollutant emissions.

- (D) The Facility responsible for the air pollutant emissions shall submit a Root Cause Analysis report to the South Coast AQMD and make it available on the web-based program within 14 days of identifying the root 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 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 responsible for the air pollutant emissions shall:
 - (i) Conduct a reinspection of the source within 14 days of the corrective action; and
 - (ii) 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
- (3) If three Root 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 to conduct a Root Cause Analysis within 14 days of the most recent instance when the Notification Threshold was exceeded to determine corrective actions that could prevent future emissions;
 - (B) Submit a Root Cause Analysis report, certified by the qualified independent party, to the Executive Officer and make it available on the web-based program within 14 days of the Root 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 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.
- (C) Initiate corrective actions, if applicable, as soon as practicable but no later than 24 hours of the independent party identifying the root cause;, and
- (D) If the Root Cause Analysis conducted by the independent party 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
 - (ii) 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

(4) 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 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 that required a fenceline notification pursuant to paragraphs (g)(2);

- (H) Any instance when a Fenceline Air Monitoring System downtime or malfunction required a notification to Executive Officer pursuant to paragraph (h)(1) or corrective actions; and
- (I) Review and resolve any Data Quality Flags and finalize the data.
- (jk) Community Air Monitoring Fees
 - 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 January 1, 2025, the owner or operator of a Facility shall make the payment to the Executive Officer as specified in Table 2 and Table 3.
 - (3) No later than January 1, 2026. The owner or operator of a Related Facility shall make the payment to Executive Officer as specified in Table 3.
 - (4<u>3</u>) 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 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.
 - (6) No later than January 1, 2025, and every five years thereafter, the Executive Officer shall conduct a refinery-related community air monitoring assessment to evaluate adequate coverage and/or need for equipment upgrades.
- (kl) Exemptions
 - (1) 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, 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
- (B) The owner or operator of the facility complies with the notification requirement pursuant to subdivision (h).
- (3) 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.
- (4) An owner or operator of a Related Facility is exempt from monitoring black carbon.
- (5) An owner or operator of a Terminal is exempt from monitoring cadmium, manganese, and nickel.

Air Pollutants Health Standard-Based Notification Threshold* Information-Based Notification Threshold* Criteria Air Pollutants 75 ppb N/A Sulfur Dioxide 75 ppb N/A Nitrogen Oxides 100 ppb N/A Particulate Matter - - PM2.5 35 μg/m³ (24-hour avg.) N/A PM10 50 μg/m³ (24-hour avg.) N/A Volatile Organic Compounds - - Total VOCs N/A 730 ppb (Non-Methane Hydrocarbons) - - Formaldehyde 44 ppb N/A Acetaldehyde 260 ppb N/A Acetaldehyde 200 ppb N/A Acetaldehyde 200 ppb N/A Acetaldehyde 200 ppb N/A Polycyclic aromatic hydrocarbons (PAHs) N/A N/A Syrene S.000 ppb N/A Benzene 8 ppb N/A Toluene 1.30 upd ps N/A Cadmium N/A N/A Man	Fenceline Air Monitoring PlansFAMPs				
Sulfur Dioxide 75 ppb N/ANitrogen Oxides100 ppbN/AParticulate Matter100 ppbN/APM10 $50 \mu g/m^3 (24 \text{-hour avg.})$ N/APM10 $50 \mu g/m^3 (24 \text{-hour avg.})$ N/APM10 $50 \mu g/m^3 (24 \text{-hour avg.})$ N/AVolatile Organic Compounds 730 ppb Total VOCsN/A 730 ppb (Non-Methane Hydrocarbons) N/A Formaldehyde44 ppbN/AAcetaldehyde260 ppbN/AAcetolein1.1 ppbN/A1,3 Butadiene297 ppbN/ANaphthaleneN/AN/APolycyclic aromatic hydrocarbonsN/AN/AStyrene 5.000 ppb N/ABenzene 8 ppb N/AToluene1,300 ppbN/AKylnes $0.17 \mu g/m^3 (8 \text{-hour avg.})$ N/AMetals $0.2 \mu g/m^3$ N/AOther Compounds 1.0 ppb N/ABlack Carbon N/A $30 \mu g/m^3$ Hydrogen Sulfide 30 ppb N/ABlack Carbon N/A $30 \mu g/m^3$ Hydrogen Fluoride**+ 289 ppb N/AHydrogen Fluoride**+ 289 ppb N/A	Air Pollutants				
Nitrogen Oxides100 pphN/AParticulate Matter $100 pph$ N/APM10 $50 \mu g/m^3 (24 \text{-hour avg.})$ N/APM10 $50 \mu g/m^3 (24 \text{-hour avg.})$ N/AVolatile Organic Compounds $100 pph$ N/ATotal VOCsN/A730 pph(Non-Methane Hydrocarbons) $100 pph$ N/AFormaldehyde44 pphN/AAcetaldehyde260 pphN/AAcetaldehyde227 pph $1.1 pph$ NaphthaleneN/AN/APolycyclic aromatic hydrocarbonsN/AN/APolycyclic aromatic hydrocarbonsN/AN/AStyrene $5.000 pph$ N/ABenzene $8 ppb$ N/AToluene $1.300 ppb$ N/AEthylbenzeneN/AN/AMetals $0.17 \mu g/m^3 (8 \text{-hour avg.})$ N/AOther Compounds $270 pph$ N/AManganese $0.17 \mu g/m^3 (8 \text{-hour avg.})$ N/ABlack Carbon $30 pph$ N/AHydrogen Sulfide $30 pph$ N/AAmmonia $4.507 pph$ N/AHydrogen Fluoride**+ $289 pph$ N/AHydrogen Fluoride**+ $289 pph$ N/A	Criteria Air Pollutants				
Nitrogen Oxides100 ppbN/AParticulate Matter $100 ppb$ N/APM10 $50 \mu g/m^3 (24 + hour avg.)$ N/APM10 $50 \mu g/m^3 (24 + hour avg.)$ N/AVolatile Organic Compounds $100 ppb$ N/AVolatile Organic Compounds $100 ppb$ N/ATotal VOCsN/A $730 ppb$ (Non-Methane Hydrocarbons) $100 ppb$ N/AAcetaldehyde $44 ppb$ N/AAcetaldehyde $260 ppb$ N/AAcctaldehyde $297 ppb$ N/A1,3 Butadiene $297 ppb$ N/ANaphthaleneN/AN/APolycyclic aromatic hydrocarbons (PAHs)N/AStyrene $5.000 ppb$ N/ABenzene $8 ppb$ N/AToluene $1.300 ppb$ N/AEthylbenzeneN/AN/AMaganese $0.17 \mu g/m^3 (8-hour avg.)$ N/AMaganese $0.17 \mu g/m^3 (8-hour avg.)$ N/AMickel $30 ppb$ N/ABlack CarbonN/A $30 \mu g/m^3$ Hydrogen Sulfide $30 ppb$ N/AAnnmonia $4.507 ppb$ N/AHydrogen Fluoride**+ $289 ppb$ N/A	Sulfur Dioxide	75 ppb	N/A		
Particulate MatterImage: constraint of the system of the sys	Nitrogen Oxides				
PM10 50 μg/m³ (24-hour avg.) N/A Volatile Organic Compounds N/A 730 ppb Total VOCs N/A 730 ppb (Non-Methane Hydrocarbons) 44 ppb N/A Formaldehyde 44 ppb N/A Acetaldehyde 260 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 Maganese 0.17 μg/m³ (8-hour avg.) N/A Maganese 0.17 μg/m³ (8-hour avg.) N/A Other Compounds U U U Hydrogen Sulfide 30 ppb N/A A Gamonia 4.507 ppb N/A M/A Black Carbon <td></td> <td></td> <td></td>					
PM10 $50 \ \mu g/m^3 (24 \ hour avg.)$ N/AVolatile Organic CompoundsTotal VOCsN/A730 ppb(Non-Methane Hydrocarbons)44 ppbN/AFormaldehyde260 ppbN/AAcetaldehyde260 ppbN/AAcrolein1.1 ppbN/A1,3 Butadiene297 ppbNaphthaleneN/AN/APolvcyclic aromatic hydrocarbons (PAHs)N/AN/AStyrene $5.000 \ ppb$ N/ABenzene $8 \ ppb$ N/AToluene1.300 ppbN/AEthylbenzeneN/AN/AMaganese $0.17 \ \mu g/m^3 (8 \ hour avg.)$ N/AManganese $0.17 \ \mu g/m^3 (8 \ hour avg.)$ N/AOther Compounds $270 \ ppb$ N/AHydrogen Sulfide $30 \ ppb$ N/ABlack CarbonN/A $30 \ \mu g/m^3$ Hydrogen Fluoride**+ $289 \ ppb$ N/A	PM2.5	<u>35 μg/m³ (24-hour avg.)</u>	N/A		
Total VOCs (Non-Methane Hydrocarbons)N/A730 ppbFormaldehyde $44 ppb$ N/AAcetaldehyde $260 ppb$ N/AAcetaldehyde $260 ppb$ N/AAcrolein $1.1 ppb$ N/A1,3 Butadiene $297 ppb$ N/ANaphthaleneN/AN/APolycyclic aromatic hydrocarbons (PAHs)N/AN/AStyrene $5.000 ppb$ N/ABenzene $8 ppb$ N/AStyrene $5.000 ppb$ N/ABenzene $8 ppb$ N/AColuene $1.300 ppb$ N/AEthylbenzene $5.000 ppb$ N/AMetals $5.000 ppb$ N/AMetals $5.000 ppb$ N/AManganese $0.17 \mu g/m^3 (8-hour avg.)$ N/AMickel $0.2 \mu g/m^3$ N/AOther Compounds $30 ppb$ N/AHydrogen Sulfide $30 ppb$ N/ABlack CarbonN/A $30 \mu g/m^3$ Hydrogen Fluoride**+ $289 ppb$ N/A	<u>PM10</u>		N/A		
(Non-Methane Hydrocarbons)Image: Constraint of the symbol of	Volatile Organic Compounds				
Formaldehyde 44 ppb N/AAcetaldehyde 260 ppb N/AAcrolein 1.1 ppb N/A1,3 Butadiene 297 ppb NaphthaleneN/AN/APolycyclic aromatic hydrocarbons (PAHs)N/AN/AStyrene $5,000 \text{ ppb}$ N/ABenzene 8 ppb N/AToluene $1,300 \text{ ppb}$ N/AEthylbenzene $5,000 \text{ ppb}$ N/AMetals $5,000 \text{ ppb}$ N/AStyrene $5,000 \text{ ppb}$ N/AToluene $1,300 \text{ ppb}$ N/AMichals $5,000 \text{ ppb}$ N/AKylenes $5,000 \text{ ppb}$ N/AMetals $0.17 \mu g/m^3 (8-hour avg.)$ N/AManganese $0.17 \mu g/m^3 (8-hour avg.)$ N/AOther Compounds 30 ppb N/AHydrogen Sulfide 30 ppb N/ABlack CarbonN/A $30 \mu g/m^3$ Hydrogen Fluoride**+ 289 ppb N/A	Total VOCs	<u>N/A</u>	<u>730 ppb</u>		
Acetaldelyde 260 pb N/AAcrolein1.1 ppbN/A1,3 Butadiene 297 ppb N/ANaphthaleneN/AN/APolycyclic aromatic hydrocarbons (PAHs)N/AN/AStyrene $5,000 \text{ ppb}$ N/ABenzene 8 ppb N/AToluene1.300 ppbN/AEthylbenzene N/A N/AXylenes $5,000 \text{ ppb}$ N/AMctals V/A N/AManganese $0.17 \mu g/m^3$ (8-hour avg.)N/ANickel $0.2 \mu g/m^3$ N/AOther Compounds 30 ppb N/AHydrogen Sulfide 30 ppb N/ABlack Carbon N/A $30 \mu g/m^3$ Hydrogen Cyanide 309 ppb N/AHydrogen Fluoride ^{***} + 289 ppb N/A	(Non-Methane Hydrocarbons)				
Acrolein1.1 pbN/A1,3 Butadiene $297 ppb$ NaphthaleneN/AN/APolycyclic aromatic hydrocarbons (PAHs)N/AN/AStyrene $5,000 ppb$ N/ABenzene $8 ppb$ N/AToluene $1,300 ppb$ N/AEthylbenzene N/A N/AXylenes $5,000 ppb$ N/AMetals N/A N/ACadmiumN/AN/AManganese $0.17 \mu g/m^3$ (8-hour avg.)N/ANickel $0.2 \mu g/m^3$ N/AOther Compounds $30 ppb$ N/AHydrogen Sulfide $30 ppb$ N/ABlack CarbonN/A $30 \mu g/m^3$ Hydrogen Fluoride **+ $289 ppb$ N/A	Formaldehyde	<u>44 ppb</u>			
1,3 Butadiene297 ppbNaphthaleneN/AN/APolycyclic aromatic hydrocarbons (PAHs)N/AN/AStyrene5,000 ppbN/ABenzene8 ppbN/AToluene1,300 ppbN/AEthylbenzeneM/AN/AXylenes5,000 ppbN/AMetals5,000 ppbN/ACadmiumN/AN/AManganese0.17 μ g/m³ (8-hour avg.)N/ANickel0.2 μ g/m³N/AOther Compounds30 ppbN/AHydrogen Sulfide30 ppbN/AAmmonia4,507 ppbN/ABlack CarbonN/A30 μ g/m³Hydrogen Cyanide309 ppbN/AHydrogen Fluoride***+289 ppbN/A	Acetaldehyde	<u>260 ppb</u>	<u>N/A</u>		
NaphthaleneN/ANaphthaleneN/APolycyclic aromatic hydrocarbons (PAHs)N/AStyrene5,000 ppbStyrene8 ppbBenzene8 ppbToluene1,300 ppbN/AEthylbenzeneN/AXylenes5,000 ppbMctalsCadmiumN/AMaganese0.17 µg/m³ (8-hour avg.)N/ANickel0.2 µg/m³Other CompoundsHydrogen Sulfide30 ppbCarbonyl SulfideAmmonia4,507 ppbN/ABlack CarbonN/AMydrogen Fluoride**+289 ppbN/A		<u>1.1 ppb</u>	<u>N/A</u>		
Polycyclic aromatic hydrocarbons (PAHs)N/AN/APolycyclic aromatic hydrocarbons (PAHs)N/AN/AStyrene $5,000$ ppbN/ABenzene8 ppbN/AToluene $1,300$ ppbN/AEthylbenzeneN/AN/AXylenes $5,000$ ppbN/AMetals $5,000$ ppbN/ACadmiumN/AN/AManganese $0.17 \mu g/m^3$ (8-hour avg.)N/ANickel $0.2 \mu g/m^3$ N/AOther Compounds $14,507$ ppbN/AAmmonia $4,507$ ppbN/ABlack Carbon N/A $30 \mu g/m^3$ Hydrogen Fluoride**+ 289 ppbN/A	· ·	<u>297 ppb</u>			
(PAHs)Image: constraint of the systemStyrene $5,000 \text{ ppb}$ N/ABenzene 8 ppb N/AToluene $1,300 \text{ ppb}$ N/AEthylbenzeneN/AN/AXylenes $5,000 \text{ ppb}$ N/AMetals $5,000 \text{ ppb}$ N/AMetals 0.17 µg/m^3 (8-hour avg.)N/ANickel 0.2 µg/m^3 N/AOther Compounds 130 ppb N/AHydrogen Sulfide 30 ppb N/ACarbonyl Sulfide 270 ppb N/ABlack CarbonN/A 30 µg/m^3 Hydrogen Fluoride**+ 289 ppb N/A	<u> </u>	<u>N/A</u>	<u>N/A</u>		
Styrene $5,000 \text{ ppb}$ N/ABenzene 8 ppb N/AToluene $1,300 \text{ ppb}$ N/AEthylbenzeneN/AN/AXylenes $5,000 \text{ ppb}$ N/AMetals V/A N/ACadmiumN/AN/AManganese $0.17 \mu g/m^3$ (8-hour avg.)N/ANickel $0.2 \mu g/m^3$ N/AOther Compounds V/A V/A Hydrogen Sulfide 30 ppb N/ACarbonyl Sulfide 270 ppb N/ABlack Carbon N/A $30 \mu g/m^3$ Hydrogen Fluoride **+ 289 ppb N/A		<u>N/A</u>	<u>N/A</u>		
Benzene $8 ppb$ N/AToluene $1,300 ppb$ N/AEthylbenzeneN/AN/AXylenes $5,000 ppb$ N/AMetals $5,000 ppb$ N/ACadmiumN/AN/AManganese $0.17 \mu g/m^3 (8-hour avg.)$ N/ANickel $0.2 \mu g/m^3$ N/AOther Compounds $130 ppb$ N/AHydrogen Sulfide $30 ppb$ N/ACarbonyl Sulfide $4,507 ppb$ N/ABlack Carbon N/A $30 \mu g/m^3$ Hydrogen Cyanide $309 ppb$ N/AHydrogen Fluoride**+ $289 ppb$ N/A					
Toluene1,300 ppbN/AEthylbenzeneN/AN/AXylenes5,000 ppbN/AMetalsSSCadmiumN/AN/AManganese0.17 µg/m³ (8-hour avg.)N/ANickel0.2 µg/m³N/AOther CompoundsSSHydrogen Sulfide30 ppbN/ACarbonyl Sulfide270 ppbN/ABlack CarbonN/A30 µg/m³Hydrogen Cyanide309 ppbN/AHydrogen Fluoride**+289 ppbN/A	-				
EthylbenzeneN/AKylenesN/AXylenes5,000 ppbMetalsCadmiumN/AManganese0.17 μg/m³ (8-hour avg.)N/AMickel0.2 μg/m³Other CompoundsHydrogen Sulfide30 ppbN/ACarbonyl Sulfide30 ppbN/ABlack CarbonHydrogen CyanideHydrogen Fluoride**+289 ppbN/A					
Xylenes $5,000 \text{ ppb}$ N/AMetals V/A N/ACadmiumN/AN/AManganese $0.17 \mu \text{g/m}^3$ (8-hour avg.)N/ANickel $0.2 \mu \text{g/m}^3$ N/AOther Compounds V/A Hydrogen Sulfide 30 ppb N/ACarbonyl Sulfide 270 ppb N/ABlack Carbon N/A $30 \mu \text{g/m}^3$ Hydrogen Cyanide 309 ppb N/AHydrogen Fluoride**+ 289 ppb N/A					
MetalsCadmiumN/AManganese0.17 μg/m³ (8-hour avg.)N/AMickel0.2 μg/m³N/ANickel0.2 μg/m³N/AOther CompoundsHydrogen Sulfide30 ppbN/ACarbonyl Sulfide270 ppbN/AAmmonia4,507 ppbN/ABlack CarbonN/A30 μg/m³Hydrogen Fluoride**+289 ppbN/A					
CadmiumN/AN/AManganese0.17 μg/m³ (8-hour avg.)N/ANickel0.2 μg/m³N/AOther CompoundsHydrogen Sulfide30 ppbN/ACarbonyl Sulfide270 ppbN/AAmmonia4,507 ppbN/ABlack CarbonN/A30 μg/m³Hydrogen Fluoride**+289 ppbN/A		<u>5,000 ppb</u>	<u>N/A</u>		
Manganese0.17 μg/m³ (8-hour avg.)N/ANickel0.2 μg/m³N/AOther Compounds0.2 μg/m³N/AHydrogen Sulfide30 ppbN/ACarbonyl Sulfide270 ppbN/AAmmonia4,507 ppbN/ABlack CarbonN/A30 μg/m³Hydrogen Cyanide309 ppbN/AHydrogen Fluoride**+289 ppbN/A					
Nickel0.2 μg/m³N/AOther CompoundsHydrogen Sulfide30 ppbCarbonyl Sulfide270 ppbAmmonia4,507 ppbBlack CarbonN/AHydrogen Cyanide309 ppbHydrogen Fluoride**+289 ppb					
Other CompoundsImage: Compound of the second of					
Hydrogen Sulfide30 ppbN/ACarbonyl Sulfide270 ppbN/AAmmonia4,507 ppbN/ABlack CarbonN/A30 µg/m³Hydrogen Cyanide309 ppbN/AHydrogen Fluoride**+289 ppbN/A		<u>0.2 µg/m³</u>	<u>N/A</u>		
Carbonyl Sulfide270 ppbN/AAmmonia4,507 ppbN/ABlack CarbonN/A30 µg/m³Hydrogen Cyanide309 ppbN/AHydrogen Fluoride**+289 ppbN/A					
Ammonia4,507 ppbN/ABlack CarbonN/A30 µg/m³Hydrogen Cyanide309 ppbN/AHydrogen Fluoride**+289 ppbN/A		<u>30 ppb</u>			
Black CarbonN/A30 µg/m³Hydrogen Cyanide309 ppbN/AHydrogen Fluoride**+289 ppbN/A					
Hydrogen Cyanide309 ppbN/AHydrogen Fluoride**+289 ppbN/A		<u>4,507 ppb</u>	<u>N/A</u>		
Hydrogen Fluoride <u>**</u> +289 ppbN/A		<u>N/A</u>	<u>30 µg/m³</u>		
		<u>309 ppb</u>	<u>N/A</u>		

Table 1– Air Pollutants and Notification Thresholds to be Addressed by Fenceline Air Monitoring PlansFAMPs

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

******+ If the facility uses hydrogen fluoride.

			Effective Date	es and Fee Re	quirement s
<u>Facility</u> <u>ID</u>	Facility Name and Location	<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)	<u>No later</u> <u>than</u> <u>January</u> <u>1, 2025</u>
<u>174655</u>	Andeavor Corporation (Carson)Tesoro Refining & Marketing Co, LLC	<u>Carson</u>	\$429,078	\$1,001,181	<u>\$231,736</u>
<u>800436</u>	Andeavor Corporation (Wilmington) Tesoro Refining & Marketing Co, LLC	Wilmington	\$214,539	\$ 500,591	<u>\$115,868</u>
<u>800030</u>	Chevron U.S.A, Inc. (El Segundo)Chevron Products Co.	El Segundo	\$429,078	\$1,001,181	<u>\$231,736</u>
	Delek U.S. Holdings, Inc. (Paramount)		\$107,269	\$250,295	
<u>171109</u>	Phillips 66 Company (Carson)Phillips 66 Company/Los Angeles <u>Refinery</u>	<u>Carson</u>	\$214,539	\$ 500,591	<u>\$115,868</u>
<u>171107</u>	Phillips 66 Company (Wilmington)Phillips 66 Company/LA Refinery Wilmington Pl	<u>Wilmington</u>	\$214,539	\$500,591	<u>\$115,868</u>
<u>181667</u>	PBF Energy, Torrance Refining Company (Torrance) Torrance Refining Company LLC	Torrance	\$ 429,078	\$1,001,181	<u>\$231,736</u>

Table 2 – Refinery-Related Community Air Monitoring System Fees

(Adopted December 1, 2017 Amended [Date of Rule Adoption])

			Effective Date	es and Fee Re	quirement s
Facility ID	Facility Name and Location	<u>Location</u>	No later than July 1, 2018, petroleum refinerics 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)	<u>No later</u> <u>than</u> <u>January</u> <u>1, 2025</u>
800026	Valero Energy (Wilmington)-(Permitted as Ultramar Inc.)	<u>Wilmington</u>	\$214,539	\$500,591	<u>\$115,868</u>

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

			Effective Date and Fee Requirement	
Facility ID	Facility Name	Location	No later than January 1, 2025	<u>No later than</u> January 1, 2026
<u>3417</u>	Air Prod & Chemicals Inc.	<u>Carson</u>	TBD	<u>TBD</u>
<u>101656</u>	Air Products and Chemicals Inc.	<u>Wilmington</u>	TBD	<u>TBD</u>
<u>800057</u>	<u>Kinder Morgan Liquids</u> <u>Terminals, LLC)</u>	<u>Carson</u>	TBD	<u>TBD</u>
<u>195925</u>	<u>Olympus Terminals</u> <u>LLC</u>	<u>Carson</u>	TBD	<u>TBD</u>
<u>158910</u>	<u>Rancho LPG Holdings,</u> <u>LLC</u>	San Pedro	TBD	<u>TBD</u>
<u>174694</u>	<u>Tesoro Logistics,</u> <u>Carson Crude Terminal</u>	<u>Carson</u>	TBD	<u>TBD</u>
<u>167981</u>	<u>Tesoro Logistics,</u> <u>Wilmington Terminal</u>	<u>Wilmington</u>	TBD	<u>TBD</u>
<u>174703</u>	<u>Tesoro Logistics,</u> <u>Carson Prod Terminal</u>	<u>Carson</u>	TBD	<u>TBD</u>
<u>151798</u>	<u>Tesoro Refining and</u> <u>Marketing Co, LLC</u>	<u>Carson</u>	<u>TBD</u>	<u>TBD</u>
<u>21482</u>	<u>Vopak Terminal Los</u> <u>Angeles, Inc.</u>	<u>Wilmington</u>	<u>TBD</u>	<u>TBD</u>