

Adopted [Date of Adoption]

[RULE INDEX TO BE ADDED AFTER RULE ADOPTION]

**PROPOSED RULE 1180.1. OTHER REFINERY FENCELINE AND  
COMMUNITY AIR MONITORING**

(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 refineries and in nearby communities.

(b) Applicability

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

(c) Definitions

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

- (1) ALTERNATIVE FEEDSTOCK is any feedstock, intermediate, product or byproduct material containing organic material that is not derived from crude oil product, coal, natural gas, or any other fossil-fuel based organic material.
- (2) COMMUNITY AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations in communities near a Refinery.
- (3) CORRECTIVE ACTION PLAN means a compliance plan that details the corrective actions a Facility will make to correct any deficiencies or recommendations in an Independent Audit report.
- (4) DATA QUALITY FLAGS are indicators used to assess the quality or reliability of the data measured by the Fenceline Air Monitoring System.
- (5) 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. The Fenceline Air Monitoring Plan 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.

- (6) FENCELINE AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a Refinery.
  - (7) INDEPENDENT AUDIT means an assessment conducted by a qualified independent party, i.e., a party unrelated to either the Refinery or the South Coast AQMD, regarding the Refinery's Fenceline Air Monitoring System and quality assurance procedures.
  - (8) NOTIFICATION THRESHOLD is a health standard-based level, or a level developed by the Executive Officer through a statistical analysis of past fenceline monitoring data that initiates a notification requirement for air pollutant(s) listed in Table 1 – Air Pollutants and Notification Thresholds to be Addressed by Fenceline Air Monitoring Plans (Table 1).
  - (9) REAL-TIME is the actual or near actual time during which pollutant levels occur at or near the property boundary of a Refinery or in a nearby community.
  - (10) REFINE means to convert crude oil or Alternative Feedstock to produce more usable products such as gasoline, diesel fuel, aviation fuel, lubricating oils, asphalt or petrochemical feedstocks, or any other similar product.
  - (11) REFINERY is a facility that is permitted to Refine crude oil as defined in the Standard Industrial Classification Manual as Industry No. 2911 and/or a facility that is permitted to Refine Alternative Feedstocks. Refinery does not include petroleum refineries subject to Rule 1180.
  - (12) REFINERY FENCELINE AIR MONITORING PLAN GUIDELINES are a written framework to be used by the Executive Officer to evaluate a Refinery FAMP.
  - (13) ROOT CAUSE ANALYSIS is a process conducted by a Refinery to investigate the detection of compound(s) listed in Table 1 above an applicable Notification Threshold.
- (d) Plan Requirements
- (1) No later than one year after [Date of Rule Adoption], or at least one year prior to commencing operations at a new Refinery, the owner or operator of the Refinery shall submit to the Executive Officer a written FAMP for establishing and operating a Real-Time Fenceline Air Monitoring System, or at least one year prior to commencing operations at a new Refinery.

- (2) No later than six months after [Date of Rule Adoption], the owner or operator of a Refinery with an existing Fenceline Air Monitoring Plan (FAMP) shall submit a revised FAMP to include any air pollutant in Table 1 that the Executive Officer provides determined the Real-Time monitoring of an air pollutant is feasible.
- (3) The FAMP shall 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 in Real-Time, at or near the property boundary of the Refinery;
  - (B) Equipment to be used to continuously monitor, record, and report wind speed and wind direction, installed in at least one location per Refinery;
  - (C) Siting and equipment specifications;
  - (D) Procedures for air monitoring equipment maintenance and failures. The procedures for equipment maintenance and failures shall include a plan that describes the maintenance activities necessary to maintain proper performance of the fenceline air monitoring equipment and a plan that addresses equipment 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) Length of time that equipment will not be operating during routine maintenance activities; and
    - (iv) Temporary air monitoring measures that will be implemented in the event of an equipment failure or during routine maintenance activities and used until the Fenceline Air Monitoring System is restored to normal operating conditions.
  - (E) Procedures for implementing the FAMP, including, information pertaining to the installation, operation, maintenance, and quality assurance, for the Fenceline Air Monitoring System;
  - (F) Methods for dissemination of data collected by the equipment specified in subparagraphs (d)(3)(A) and (d)(3)(B) to the public, local response agencies, and South Coast AQMD as expeditiously as possible.
  - (G) Notification Thresholds for each air pollutant listed in Table 1, unless the air pollutant was excluded in the approved or partially approved FAMP. Notification Thresholds shall be based on one of the following, whichever is lower:

- (i) Office of Environmental Health Hazard Assessment (OEHHA) Acute Reference Exposure Level (REL);
  - (ii) The one-hour National Ambient Air Quality Standard (NAAQS);
  - (iii) The one-hour California Ambient Air Quality Standard (CAAQS);  
or
  - (iv) Statistical-based Notification Threshold listed in Table 1; and
- (H) Any other information specified in the Refinery Fenceline Air Monitoring Guidelines for the FAMP.
- (4) The FAMP required by paragraph (d)(1) or (d)(2) shall address Real-Time 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 air pollutants identified in Table 1, unless the air pollutant was excluded in the approved FAMP. The owner or operator of a Refinery must provide a technical justification for not including Real-Time air monitoring for any of the pollutants specified in Table 1 in the FAMP. 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 Refinery Fenceline Air Monitoring Guidelines.
- (5) The owner or operator of a Refinery shall submit an updated FAMP to the Executive Officer as follows:
  - (A) Ten (10) days after the date of any unplanned Refinery, equipment, process or administrative modification that an approved FAMP does not adequately address;
  - (B) Forty-five (45) days before the date of implementation of any planned Refinery, equipment, process or administrative modification that an approved FAMP does not adequately address;
  - (C) Sixty (60) days after the date of receiving information that an approved FAMP does not adequately measure any pollutant(s) identified in Table 1 that are emitted from the Refinery; or
  - (D) Thirty (30) days after any health standard used as the Notification Threshold has been revised or developed for an air pollutant included in a FAMP.
- (6) The owner or operator of a Refinery may include the use of emerging technologies in a FAMP that is compliant with the requirements of this rule.
- (7) The review and approval of the FAMP shall be subject to plan fees as specified in Rule 306 – Plan Fees.
- (8) All FAMPs shall be consistent with the Refinery Fenceline Air Monitoring Plan Guidelines.

- (e) Fenceline Air Monitoring Compliance Schedule
  - (1) The owner or operator of an existing Refinery shall complete installation and begin operation of Real-Time Fenceline Air Monitoring System or modify the operation of the Fenceline Air Monitoring System in accordance with the approved, or partially approved, FAMP:
    - (A) Beginning no later than two years after a FAMP submitted pursuant to paragraph (d)(1) is approved, or partially approved, by the Executive Officer;
    - (B) Beginning no later than one year after a FAMP submitted pursuant to paragraph (d)(2) is approved, or partially approved, by the Executive Officer;
    - (C) No later than six months after the Executive Officer approves, or partially approves, an updated FAMP required pursuant to paragraph (d)(5); and
    - (D) Prior to commencing operations at a new Refinery.
- (f) Plan Review Process
  - (1) The Executive Officer shall notify the owner or operator of a Refinery in writing whether the FAMP submitted pursuant to paragraphs (d)(1), or the revised FAMP submitted pursuant to paragraphs (d)(2), (d)(5), or (h)(3), is approved, partially approved, or disapproved. Determination of approval status for the FAMP shall be based on, at a minimum, submittal of information that satisfies the criteria in paragraphs (d)(3), (d)(4), and the Refinery Fenceline Air Monitoring Plan Guidelines.
  - (2) If the FAMP, or revised FAMP, submitted pursuant to paragraph (f)(1) is disapproved, the owner or operator of a Refinery shall submit an updated FAMP, within 30 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.
  - (3) The Executive Officer will either approve the revised and resubmitted FAMP submitted pursuant to (f)(2) or modify the plan and approve it as modified. If the Refinery 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 Refinery may appeal the FAMP modified by the Executive Officer to the Hearing Board pursuant to Rule 216 – Appeals and Rule 221 – Plans.

- (4) A FAMP that is submitted pursuant to subdivision (d) shall be made available, by the Executive Officer, for public review no less than fourteen (14) days prior to approval.
  - (5) Review, approval, and modifications of FAMPs and updated FAMPs shall be subject to plan fees as specified in Rule 306 – Plan Fees.
- (g) Web-based Fenceline Notification Program
- (1) The owner or operator of a Refinery shall maintain a web-based fenceline notification program according with the Refinery Fenceline Air Monitoring Plan Guidelines to display, store, and make at a minimum the following information publicly available:
    - (A) Description of all pollutants measured and measurement techniques;
    - (B) Real-Time and historic concentrations, which includes at least five years of data as required pursuant to paragraph (j)(1), 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;
    - (F) Report(s) generated from Independent Audit conducted pursuant to subdivision (i);
    - (G) Root Cause Analysis as required pursuant to paragraph (j)(2);
    - (H) Quarterly report as required pursuant to paragraph (j)(3);
    - (I) Corrective Action Plans or revised Corrective Action Plans, if applicable, as required pursuant to *[TBD – Rule or Guidelines]*; and
    - (J) A mechanism for the public to provide comments and feedback and procedures to respond.
  - (2) The web-based fenceline notification system operated by the owner or operator of a Refinery shall, at a minimum:
    - (A) Integrate all the data collected by the Fenceline Air Monitoring System pursuant to the requirements in the Refinery Fenceline Air Monitoring Plan Guidelines;
    - (B) Automatically generate and issue a notification as soon as technologically feasible but no longer than 15 minutes after any air pollutant listed in Table 1 is detected at a level that exceeds the applicable Notification Thresholds in the approved, or partially, approved FAMP;
    - (C) Include feature for public to opt-in to receive fenceline notifications; and

- (D) Send the fenceline notifications, by email and/or text message, to members of the public who opted-in to receive notifications.
- (h) Notifications for Equipment Failure
- (1) Upon installation and operation of a Fenceline Air Monitoring System as required by paragraph (d)(4) or subdivision (e), the owner or operator of a Refinery shall comply with the following notification requirements by:
    - (A) Calling 1-800-CUT-SMOG<sup>®</sup> to notify the Executive Officer at least 48 hours prior to the planned maintenance activity subject to subparagraph (d)(3)(D) and (d)(5)(B) by providing the name of the Refinery, the name of the monitor, and the planned date(s) of the occurrence(s); and
    - (B) Calling 1-800-CUT-SMOG<sup>®</sup> to notify the Executive Officer within two hours of discovering that equipment described in the FAMP subject to subdivision (d) failed to accurately provide Real-Time air monitoring information. The owner or operator shall provide the name of the Refinery, the name of the air monitor, the air pollutant(s) it measures; the date and time of the occurrence, and the reason for the lapse in collecting and/or reporting the Real-Time air monitoring information.
  - (2) The owner or operator of the Refinery shall submit a written notification to the Executive Officer of any equipment failure that also results in a failure to accurately provide continuous, Real-Time air monitoring information as required by the 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 discovering the equipment failure and shall include the following:
    - (A) An explanation of actions currently being pursued or taken to remedy the equipment failure;
    - (B) Estimated time needed to restore the fenceline air monitoring equipment to normal operating conditions that comply with the approved fenceline and community air monitoring plan; and
    - (C) Temporary air monitoring measures subject to subparagraph (d)(3)(D) from the approved FAMP to be implemented until the Fenceline Air Monitoring System is restored to normal operating conditions.
  - (3) The owner or operator of a Refinery shall submit a revised FAMP to the Executive Officer if an equipment failure results in a failure to accurately provide continuous Real-Time air monitoring information for more than 30 days. The updated fenceline

monitoring plan shall be submitted no later than 60 days from the initial equipment failure.

- (i) Independent Audits  
PLACEHOLDER FOR POTENTIAL FUTURE LANGUAGE

May include audit requirements in rule or have it in the guidance document

- (j) Recordkeeping and Reporting
  - (1) The owner or operator of a Refinery shall maintain records of all information required under this rule for at least five years from the commencement of fenceline air monitoring and shall make the information available to South Coast AQMD personnel 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 Refinery Fenceline Air Monitoring System, any Refinery that relies on the Fenceline Air Monitoring System that measured the air pollutant shall:

    - (A) Initiate a Root Cause Analysis within 24 hours;
    - (B) Submit a Root Cause Analysis report to the South Coast AQMD and make it available on the web-based program within 14 days;
    - (C) Include, at a minimum, the following in the Root Cause Analysis:
      - (i) Cause and duration of the air pollutant emissions;
      - (ii) Determination of the source(s) of air pollutant emissions and methodology used to determine the source, including:
        - (A) Visual inspection;
        - (B) Optical gas imaging;
        - (C) Leak inspection using EPA Method 21; or
        - (D) Other test or monitoring method approved by the Executive Officer;
      - (iii) Any mitigation and corrective actions taken to stop the exceedance or to be taken to prevent a similar recurrence;
      - (iv) An explanation of the reason(s) why the amount of time required for the corrective actions if it is more than 14 days; and
      - (v) Any monitoring data requested by the Executive Officer.
    - (D) If the Root Cause Analysis requires corrective action, the owner or operator of a Facility shall conduct a reinspection of the source within 14 days of the corrective action and submit a report to the Executive Officer and make the report available on the refinery fenceline monitoring webpage.



**(3) Quarterly Report**

The owner or operator of a Refinery shall submit a quarterly report within 60 calendar days after the conclusion of each quarter. The report shall be consistent with the Refinery Fenceline Air Monitoring Plan Guidelines and at a minimum include:

- (A) Summary of the measurements and data processing;
- (B) Data completeness, accuracy and precision;
- (C) Quality assurance/quality control;
- (D) Instrument maintenance and performance checks; and
- (E) Any instance when an air pollutant was measured above a Notification Threshold that required a notification pursuant to paragraphs (g)(2); and
- (F) Any instance when air pollution equipment failure required a notification pursuant to paragraph (h)(1) and corrective actions.

**(k) Community Air Monitoring Fees**

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

**(l) Exemptions**

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

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

| Air Pollutants                             | Health Standard-Based<br>Notification Threshold<br>(ppb) <sup>++</sup> | Statistical-Based<br>Notification Threshold<br>(ppb)* |
|--|--|---|
| <b>Criteria Air Pollutants</b>             |  |   |
| Sulfur Dioxide                             | 75   | N/A   |
| Nitrogen Oxides                            | 100  | N/A   |
| Particulate Matter                         | N/A  | TBD   |
| <b>Volatile Organic Compounds</b>          |  |   |
| Total VOCs<br>(Non-Methane Hydrocarbons)   | N/A  | TBD   |
| Formaldehyde                               | 44   | N/A   |
| Acetaldehyde                               | 260  | N/A   |
| Acrolein                                   | 1.1  | N/A   |
| 1,3 Butadiene                              | 297  |   |
| Naphthalene                                | N/A  | N/A   |
| <del>Diethanolamine**</del>                | <del>N/A</del>   | <del>N/A</del>  |
| Polycyclic aromatic hydrocarbons<br>(PAHs) | N/A  | N/A   |
| Styrene                                    | 5000   | N/A   |
| Benzene                                    | 8  | N/A   |
| Toluene                                    | 1300   | N/A   |
| Ethylbenzene                               | N/A  | TBD   |
| Xylenes                                    | 5000   | N/A   |
| <b>Metals ***</b>                          |  |   |
| Cadmium                                    | N/A  | N/A   |
| Manganese                                  | N/A  | N/A   |
| Nickel                                     | 0.2 µg/m <sup>3</sup>  | N/A   |
| <b>Other Compounds</b>                     |  |   |
| Hydrogen Sulfide                           | 30   | N/A   |
| Carbonyl Sulfide                           | 270  | N/A   |
| Ammonia                                    | 4507   | N/A   |
| Black Carbon                               | N/A  | TBD   |
| Hydrogen Cyanide                           | 309  | N/A   |
| Hydrogen Fluoride <sup>+</sup>             | 289  | N/A   |
| <del>Sulfuric Acid**</del>                 | <del>29</del>  | <del>N/A</del>  |

+ If the facility uses hydrogen fluoride.

\* Staff intends to develop threshold based on historical/statistical data.

\*\* Compounds have short lifetimes in gas phase, therefore, will not remain airborne long enough to reach fenceline. Staff proposing to delete these compounds.

\*\*\* Considering establishing criteria to exclude.

|             |  | Effective Dates and Fee Requirements |                          |
|-------------|--|--------------------------------------|--------------------------|
| Facility ID | Refinery Name* and Location            | Phase One Implementation             | Phase Two Implementation |
| 187165      | AltAir Paramount                       | TBD                                  | TBD                      |
| 800080      | Lunday-Thagard<br>(World Oil Refining) | TBD                                  | TBD                      |
| 800393      | Valero Wilmington<br>Asphalt Plant     | TBD                                  | TBD                      |

\* Based on the current Refinery names. Any subsequent owner(s) or operator(s) of the above listed facilities shall be subject to this rule unless exempted pursuant to its terms.