# [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, including, but not limited to, Asphalt Plants. This rule does not apply to facilities subject to Rule 1180 – Fenceline and Community Air Monitoring for Petroleum Refineries and Related Operations.

#### (c) Definitions

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

- (1) ASPHALT PLANT is a facility permitted to process petroleum, that primarily produces asphaltic materials, as defined in the Standard Industrial Classification Manual as Industry No. 2911.
- (2) ALTERNATIVE FEEDSTOCK is any feedstock, intermediate, product or byproduct material containing organic material that is not derived from crude oil product, coal, natural gas, or any other fossil-fuel based organic material.
- (3) COMMUNITY AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations in communities near a Refinery.
- (4) CORRECTIVE ACTION PLAN is a compliance plan that details the corrective actions a Refinery will make to correct any deficiencies or recommendations in an Independent Audit report.
- (5) DATA QUALITY FLAGS are indicators used to assess the quality or reliability of the data measured by the Fenceline Air Monitoring System.
- (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. The Fenceline Air Monitoring Plan includes the Refinery'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 is 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 an informational analysis of past fenceline monitoring data, above which Facilities are required to send a fenceline notification.
- (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 is to convert crude oil or Alternative Feedstock to produce more usable products such as gasoline, diesel fuel, aviation fuel, lubricating oils, asphalt or petrochemical feedstocks, or any other similar product.
- (11) REFINERY is a facility that is permitted to Refine crude oil as defined in the Standard Industrial Classification Manual as Industry No. 2911 and/or a facility that is permitted to Refine Alternative Feedstocks. Refinery does not include petroleum refineries subject to Rule 1180.
- (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 without an existing FAMP 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) 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 Refinery;
  - (D) Equipment specifications and facility maps with locations of fenceline air monitoring equipment;
  - (E) Procedures for fenceline 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) Estimated length of time that equipment will not be operating during routine maintenance activities; and
    - (iv) Temporary measurements 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.
  - (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)(3)(A) and (d)(3)(C) to the public, local response agencies, and South Coast AQMD as expeditiously as possible.
- (H) Methods for making near real-time and historical data collected by the equipment specified in subparagraphs (d)(3)(A) and (d)(3)(C) available for public download in an easily downloadable, accessible electronic format that is approved by the Executive Officer;
- (I) Methods for making electronic near Real-Time Data and historical data collected by the equipment specified in subparagraphs (d)(3)(A) and (d)(3)(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.
- (4) The owner or operator of a Refinery shall submit a revised 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 or partially 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 or partially approved FAMP does not adequately address;
  - (C) Sixty (60) 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 Refinery; or
  - (D) Sixty (60) days from the initial Fenceline Air Monitoring System downtime if it results in a failure to accurately provide continuous, Real-Time air monitoring information for more than 30 days pursuant to paragraph (h)(3); or
  - (E) Sixty (60) days after the date the Corrective Action Plan is submitted to the Executive Officer pursuant to paragraph (i)(4) if the Corrective Action Plan indicates that a modification of FAMP is required.
- (5) 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.

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

# (f) Plan Review Process

- (1) The Executive Officer will notify the owner or operator of a Refinery in writing whether the FAMP submitted pursuant to paragraph (d)(1), or the revised FAMP submitted pursuant to paragraph (d)(2) or (d)(4), is approved, partially approved, or disapproved. The FAMP shall be approved or partially approval if the following criteria is met:
  - (A) The owner or operator of a Refinery submits all of the information in paragraph (d)(3) and the Refinery Fenceline Air Monitoring Plan Guidelines; and
  - (B) The Executive Officer will partially approve a FAMP if all sections of the FAMP are approved except the QAPP.
- (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 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.
- (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) The Executive Officer will make the FAMP or revised FAMP that is submitted pursuant to subdivision (d) available for public review no less than fourteen (14) days prior to approval.
- (5) The owner or operator of a Refinery shall pay plan 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 Refinery shall maintain a web-based fenceline data display and notification program according to the Refinery Fenceline Air Monitoring Plan Guidelines to display and store information collected from the Fenceline Air Monitoring Systems, which includes at least five years of data as required pursuant to paragraph (j)(1), and make, at a minimum, the following information publicly available:
    - (A) Description of all instances when an air pollutant was measured above a Notification Threshold, measurement techniques, Notification Thresholds, and source of the Notification Threshold;
    - (B) Real-Time and historic concentrations of all air pollutants measured on the Fenceline Air Monitoring System including Data Quality Flags;
    - (C) Real-Time and historic wind speed and wind direction data;
    - (D) Definition of Data Quality Flags;
    - (E) The most recently approved, or partially approved, FAMP and QAPP prominently labeled to indicate the approval status;
    - (F) Report(s) generated from Independent Audit conducted pursuant to subdivision (i)(1);
    - (G) Root Cause Analysis as required pursuant to paragraph (j)(2);
    - (H) Quarterly report as required pursuant to paragraph (j)(3);
    - (I) Corrective Action Plans pursuant to paragraph (i)(4); and
    - (J) A mechanism for the public to provide comments and feedback and procedures to respond.
  - (2) The web-based fenceline notification system operated by the owner or operator of a Refinery shall, at a minimum:

- (A) Include all the data collected by the Fenceline Air Monitoring System pursuant to the requirements in the Refinery Fenceline Air Monitoring Plan Guidelines;
- (B) Automatically generate and send a fenceline notification as soon as technically feasible, but no later than 15 minutes after any air pollutant listed in Table 1 is detected at a level that exceeds the applicable Notification Thresholds in the approved, or partially approved, FAMP;
- (C) Automatically generate and send a follow-up fenceline notification as soon as technically feasible, but no later than 15 minutes after the air pollutant subject to subparagraph (g)(2)(B) is detected at a level below the applicable Notification Threshold, which includes:
  - (i) The maximum concentration of the air pollutant detected during the period after the Notification Threshold was exceeded pursuant to subparagraph (g)(2)(B); and
  - (ii) The duration for which the fenceline notification was exceeded;
- (D) Send a notification if a fenceline notification sent pursuant to subparagraph (g)(2)(B) was sent in error with an explanation as to the cause of the false fenceline notification;
- (E) Include a mechanism for the public to opt-in to receive fenceline notifications and to opt-out of fenceline notifications; and
- (F) Send the fenceline notifications, by email, text message, or other approved communication method to members of the public who opt-in to receive fenceline notifications.
- (h) Notifications to the Executive Officer for Fenceline Air Monitoring System Downtime
  - (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:
    - (A) Calling 1-800-CUT-SMOG® to notify the Executive Officer at least 48 hours prior to the planned maintenance activity subject to subparagraph (d)(3)(E) and (d)(4)(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® to notify the Executive Officer within two hours of discovering that the Fenceline Air Monitoring System 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 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 Real-Time air monitoring information.

- (2) The owner or operator of the Refinery shall submit a written notification to the Executive Officer of any Fenceline Air Monitoring System downtime that also results in a failure to accurately provide continuous, Real-Time 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 discovering the Fenceline Air Monitoring System downtime and shall include the following:
  - (A) A description of actions currently being taken to remedy the Fenceline Air Monitoring System downtime;
  - (B) Estimated time needed to restore the Fenceline Air Monitoring System to normal operating conditions that comply with the approved or partially approved FAMP; and
  - (C) Temporary fenceline air monitoring measures subject to subparagraph (d)(3)(D) that comply with the approved or partially 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 pursuant to subparagraph (d)(4)(D) if an Fenceline Air Monitoring System downtime results in a failure to accurately provide continuous, Real-Time fenceline air monitoring information for more than 30 days.

#### (i) Independent Audits

- (1) The owner or operator of a Refinery shall hire a qualified independent party to conduct and complete an Independent Audit according to an independent audit protocol approved by the Executive Officer.
- (2) The Independent Audit shall:
  - (A) Identify any deficiencies in the Fenceline Air Monitoring System and quality assurance procedures; and
  - (B) Result in an audit report that shall be:
    - (i) Signed by the qualified independent party, certifying under penalty of law, based on information and belief formed after reasonable inquiry, that the statements and information in audit report and in all

- attachments and other materials are true, accurate, and complete; and
- (ii) Submitted to the South Coast AQMD, the owner or operator of a Facility, and made available to the web-based fenceline data display and notification system within 90 days after the audit has been performed.
- (3) The owner or operator of a Refinery share hire a qualified independent party to conduct and complete an Independent Audit according to the following schedule:
  - (A) For a Fenceline Monitoring System installed before [Date of Rule Adoption], the initial Independent Audit shall be completed no later than July 1, 2024and subsequent audits shall be completed once every three years after completing the initial audit; and
  - (B) For a Fenceline Monitoring System installed on or after [Date of Rule Adoption], the initial audit shall be completed within one year after the installation and operation of the Fenceline Air Monitoring System and subsequent audits shall be completed once every three years after completing the initial audit.
- (4) Corrective Action Plan

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

- (A) Develop a Corrective Action Plan within one month 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 Refinery considers a safety concern and is proposing to exempt from corrective action;
- (B) Submit the Corrective Action Plan to the Executive Officer and make it available on the Refinery's web-based fenceline data display and notification program within two months of the audit report;
- (C) Perform all corrective actions within six months of the audit report;
- (D) Hire a qualified independent party to conduct a follow-up performance audit within one month of completing the corrective actions pursuant to subparagraph (i)(4)(C) and make it available on the Refinery's web-based fenceline data display and notification program within two months of the follow-up performance audit; and

(E) Submit a revised FAMP to the Executive Officer pursuant to subparagraph (d)(4)(E) if the Corrective Action Plan identifies that a modification of FAMP is required.

# (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 and shall make the information available to 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 Refinery Fenceline Air Monitoring System, the owner or operator of any Refinery that relies on the Fenceline Air Monitoring System that measures the air pollutant shall:

- (A) Initiate a Root Cause Analysis within 24 hours;
- (B) Initiate corrective actions, if applicable, as soon as practicable once the root cause has been determined:
- (C) Submit a Root Cause Analysis report to the South Coast AQMD and make it available on the web-based program within 14 days;
- (D) Include, at a minimum, the following in the Root Cause Analysis:
  - (i) Cause and duration of the air pollutant emissions;
  - (ii) Determination of the source(s) of air pollutant emissions and methodology used to determine the source, including:
    - (A) Visual inspection;
    - (B) Optical gas imaging;
    - (C) Leak inspection using EPA Method 21; or
    - (D) Other test or monitoring method approved by the Executive Officer;
  - (iii) Any mitigation and corrective actions taken to stop the exceedance or taken to prevent a similar recurrence;
  - (iv) An explanation of the reason(s) for any corrective actions taking more than 14 days; and
  - (v) Any monitoring data requested by the Executive Officer.
- (E) If the Root Cause Analysis required corrective action, the owner or operator of a Refinery 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) Quarterly Report

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

- (A) Summary of the air pollutant concentrations;
- (B) Data processing calculations, such as conversion calculations of instrument signal to pollutant concentration;
- (C) Summary of calibration data;
- (D) Description of data completeness, accuracy, and precision;
- (E) Quality assurance/quality control;
- (F) Instrument maintenance and performance checks;
- (G) Any instance when an air pollutant was measured above a Notification Threshold that required a fenceline notification pursuant to paragraphs (g)(2); and
- (H) Any instance when a Fenceline Air Monitoring System downtime required a notification to Executive Officer pursuant to paragraph (h)(1) or corrective actions.

# (k) Community Air Monitoring Fees

- (1) An owner or operator of a Refinery shall pay an installation fee for Refinery-related Community Air Monitoring Systems based on the fee schedule established in Table 2.
- (2) No later than July 1, 2024, the owner or operator of a Refinery shall make an initial minimum payment to the South Coast AQMD as specified in Table 2 for phase one implementation.
- (3) No later than January 30, 2025, the owner or operator of a Refinery shall make a final payment to the South Coast AQMD for the remaining balance of the

- installation fee as specified in Table 2 for phase two implementation. The remaining balance shall be equal to the installation fee minus the initial minimum payment required by paragraph (k)(2).
- (4) Annual operating and maintenance fees for the Community Air Monitoring System shall be paid pursuant to Rule 301–Permitting and Associated Fees, when applicable.
- (5) The community air monitoring fees required by paragraph (k)(1) are in addition to permit and other fees otherwise authorized to be collected from such Refineries.

# (1) 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

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

Table 2 – Refinery-Related Community Air Monitoring System Fees

# Effective Dates and Fee Requirements

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