Proposed Amended Rule 1180
(PAR 1180)
Fenceline and Community Air Monitoring for Petroleum Refineries and Related Facilities

Proposed Rule 1180.1
(PR 1180.1)
Fenceline and Community Air Monitoring for Other Refineries

Working Group Meeting #5
October 12, 2023
1:00 PM (PDT) and
6:00 PM (PDT)

South Coast AQMD

Join Zoom Webinar Meeting:
https://scaqmd.zoom.us/j/96956378405
Webinar Meeting ID: 969 5637 8405

Agenda

- Background
- Stakeholder Meetings and Site Visits
- Rulemaking Process
- Further Revision after Public Workshop
- Community Air Monitoring Stations and Air Monitoring Fees

Background

Background on South Coast AQMD Rule 1180

Rule 1180 was adopted in December 2017

Applicable to petroleum refineries that process more than 40,000 barrels per day of crude oil

- Includes all the major petroleum refineries

Requires facilities to:

- Conduct real-time fenceline monitoring and allow community to opt-in to receive notifications if air pollutants are detected above certain thresholds
- Fund community air monitoring systems

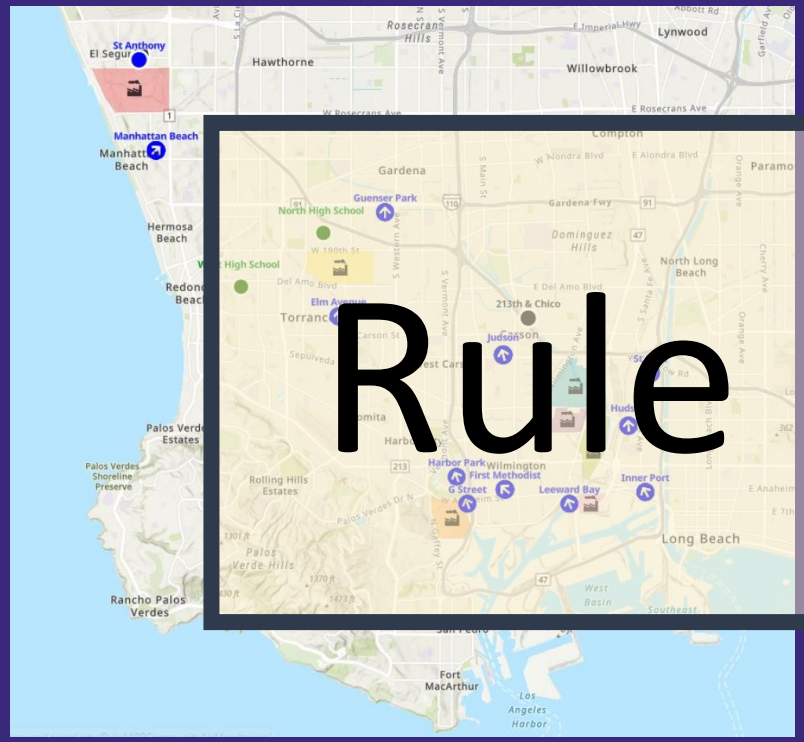
- Fenceline and community monitoring has been implemented since 2020

Designed to comply with Assembly Bill 1647 and Health and Safety Code 42705.6, approved in October 2017

Refinery Air Monitoring at South Coast AQMD

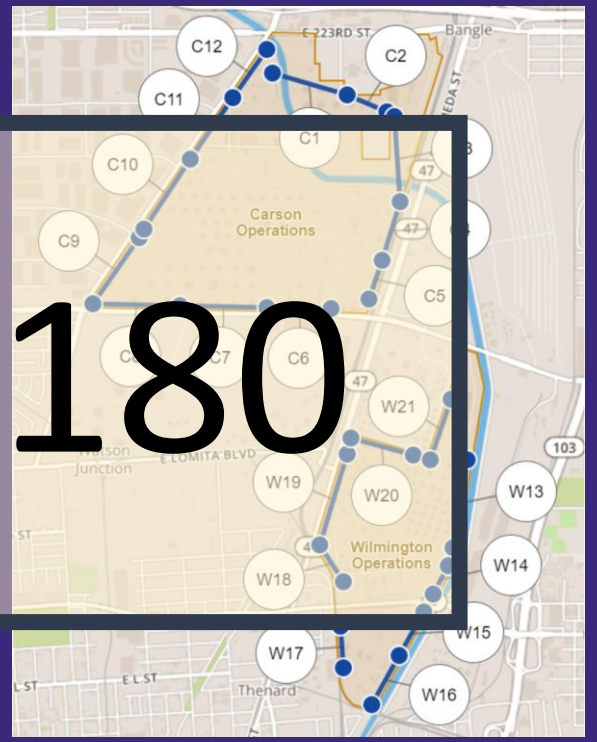
- Refinery air monitoring at South Coast AQMD includes at least three layers of air monitoring
  - 1180 community and fenceline air monitoring are continuous efforts, the mobile monitoring surveys were periodic campaigns conducted for a U.S. EPA grant and AB 617

1180 Community Air Monitoring



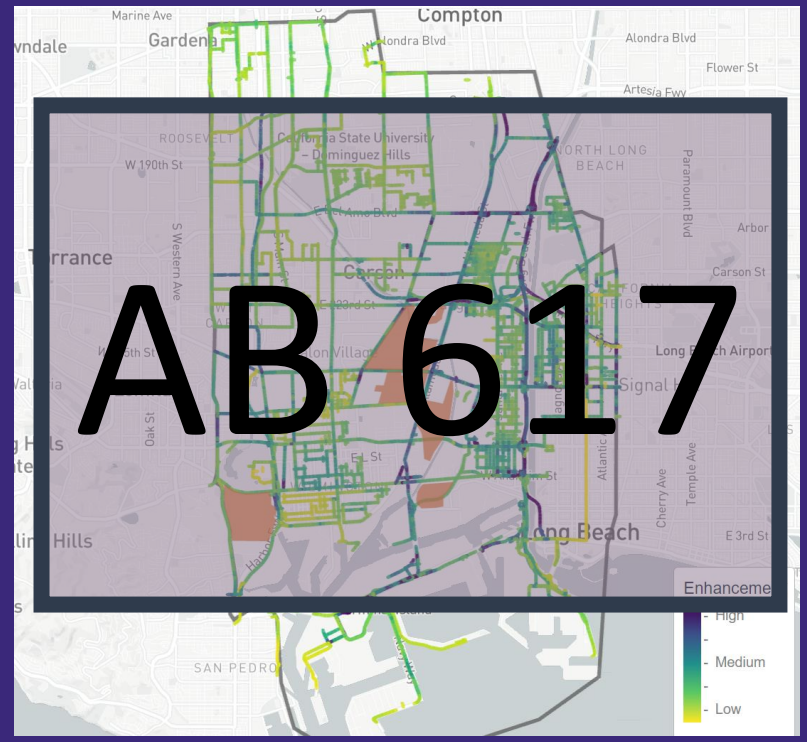
Existing Rule 1180 Community Monitoring Stations Link

Fenceline Air Monitoring



Example of a Facility Fenceline Air Monitoring System Link

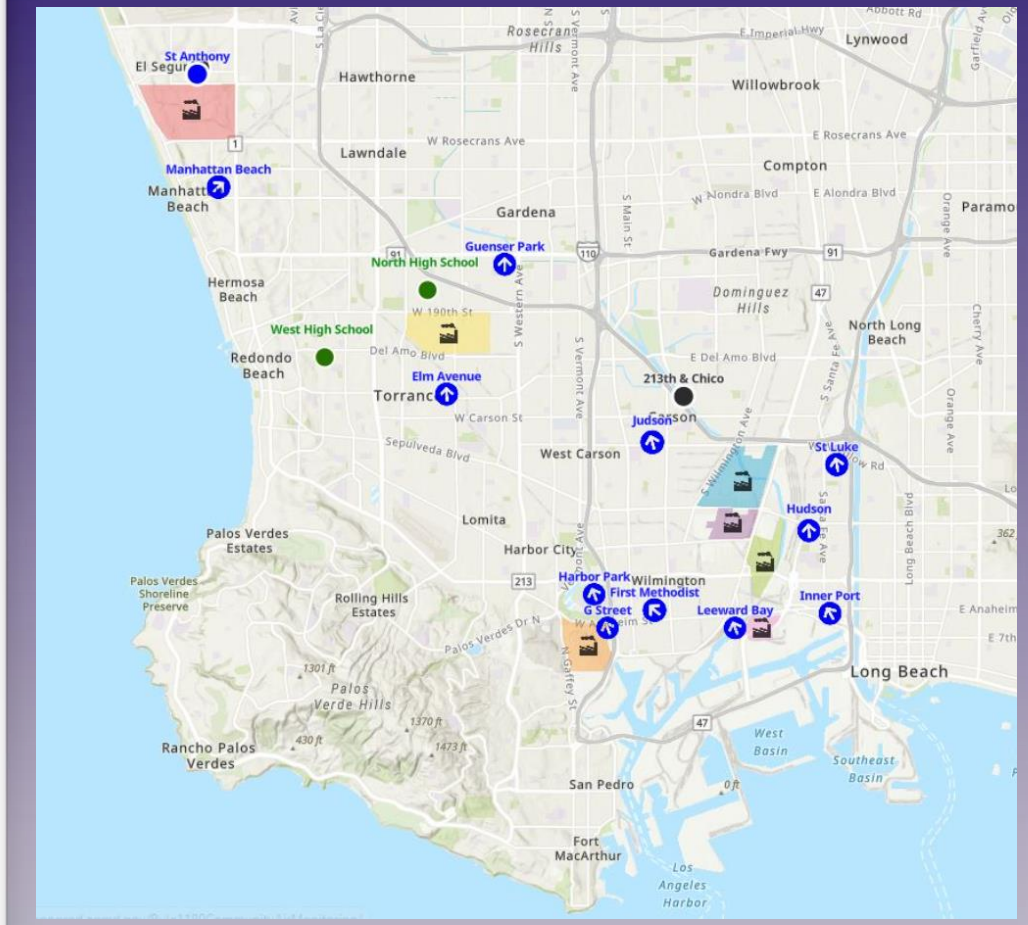
Mobile Monitoring (AB 617)



Example of Mobile Monitoring Platform Routes (Refineries highlighted) Link

Community Air Monitoring at South Coast AQMD

- Community Air Monitoring has been conducted at South Coast AQMD implementing Rule 1180 through:
  - 12 monitoring stations near refineries
    - Ten fully equipped stations
    - Two partially equipped stations
- South Coast AQMD has developed interactive dashboards to provide data access and visualization for:
  - Continuous real-time and hourly measurements
  - Rule 1180 real-time continuous measurements
  - Trends analysis based on continuous data



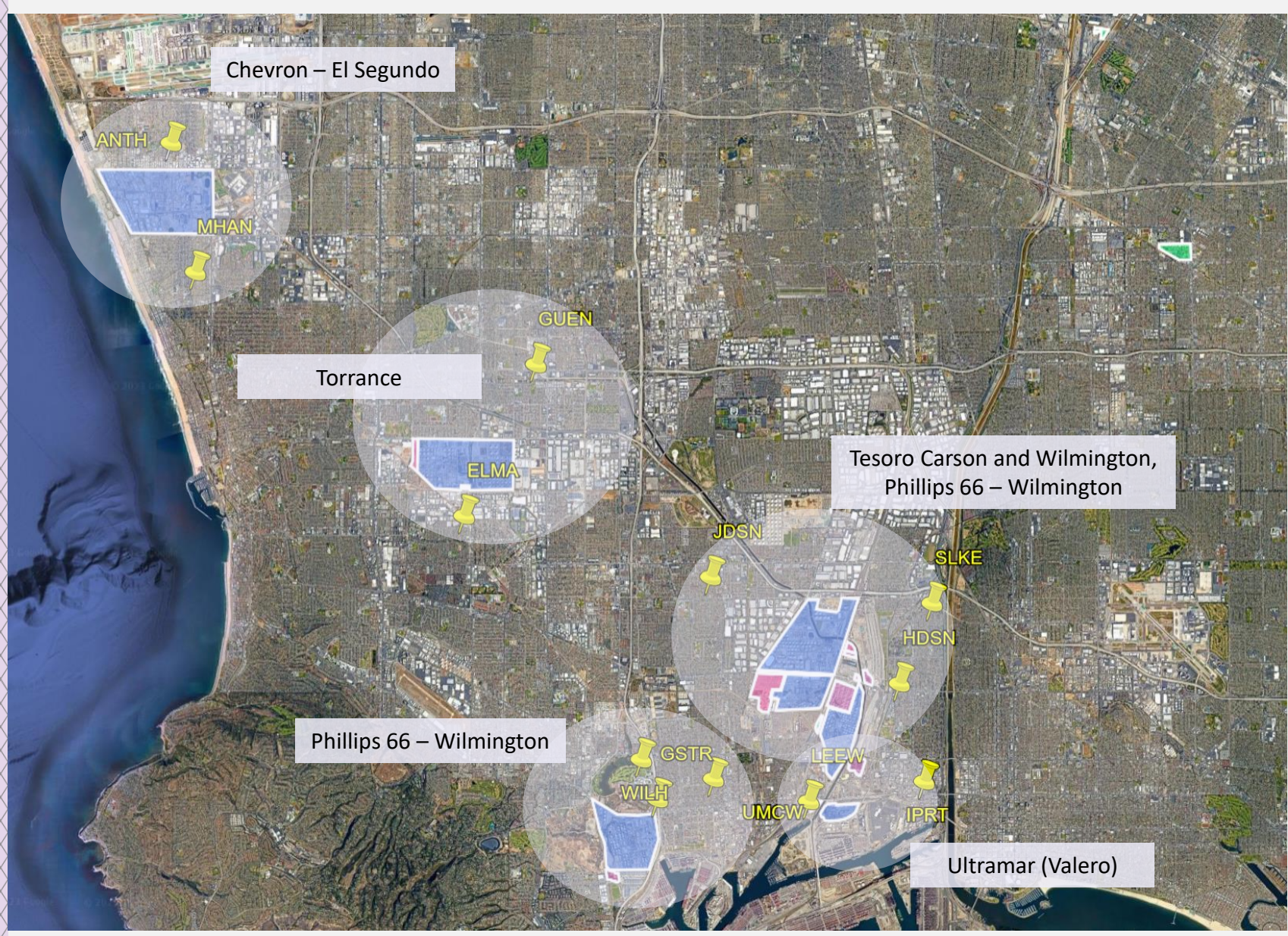
Link to Rule 1180 Community Air Monitoring Webpage

1180 Community Air Monitoring

Site Name/ ID	Commission Date	Address
Hudson/HDSN	December 10, 2019	2425 Webster St, Long Beach, CA, 90810
Judson/JUDS	February 25, 2020	451 E 223rd St, Carson, CA, 90745
St. Luke/SLKE	February 7, 2020	3415 Delta Ave, Long Beach, CA, 90810
First Methodist/UMCW	March 4, 2020	928 N Lagoon Ave, Wilmington, CA, 90744
Harbor Park/WILH	February 1, 2020	1221 N Figueroa Pl, Wilmington, CA , 90744
G Street/GSTR*	January 21, 2021	1446 W G St, Wilmington, CA, 90744
Inner Port/IPRT	February 25, 2020	1200 Canal St, Long Beach, CA, 90813
Leeward Bay/LEEW*	December 26, 2019	611 N Henry Ford Ave, Wilmington, CA, 90744
Guenser Park/GUEN	April 23, 2020	17800 Gramercy Pl, Torrance, CA, 90544
Elm Avenue/ELMA	April 26, 2022	1000 Elm Ave, Torrance, CA, 90503
St. Anthony School/ANTH	April 23, 2020	215 Lomita St, El Segundo, CA, 90245
Manhattan Beach/MHAN	March 24, 2020	1200 Pacific Ave, Manhattan Beach, CA, 90266

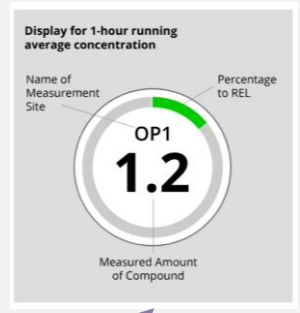
* Monitors for limited # of air pollutants

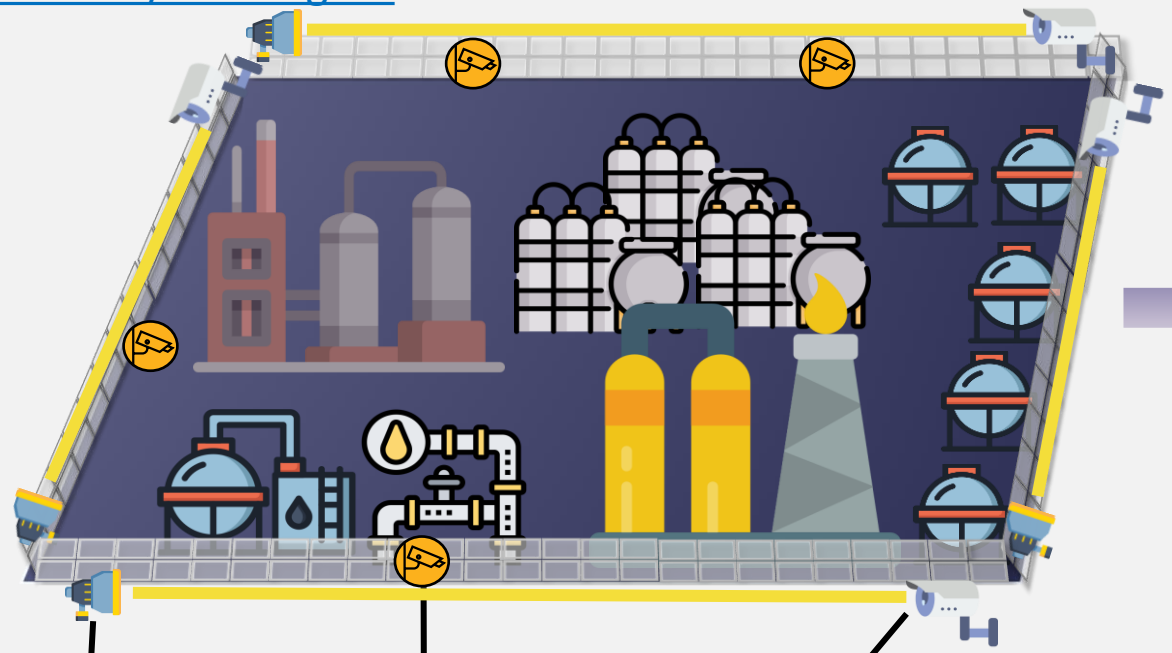
Existing Rule 1180 Community Monitoring Stations

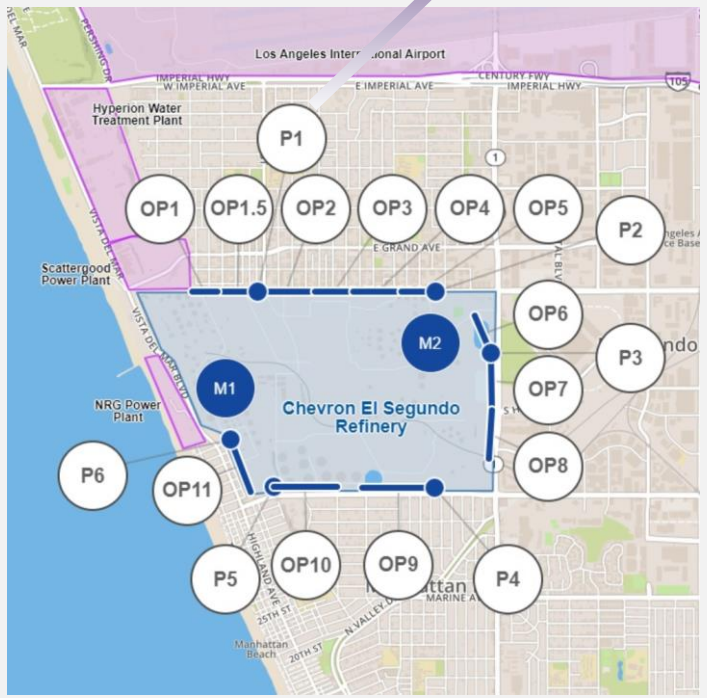


Fenceline Air Monitoring

- A Fenceline Monitoring System employs a network of air quality sensors strategically placed around a facility's perimeter to continuously monitor emissions
- It typically includes sensors, data loggers, communication devices, and a central control system for real-time analysis and reporting
- Major refineries conduct continuous fenceline measurements of a comprehensive list of pollutants and display their data in near real-time, links below:
- Marathon Carson/Wilmington
- Phillips-66 Carson/Wilmington
- Chevron
- Torrance
- Valero

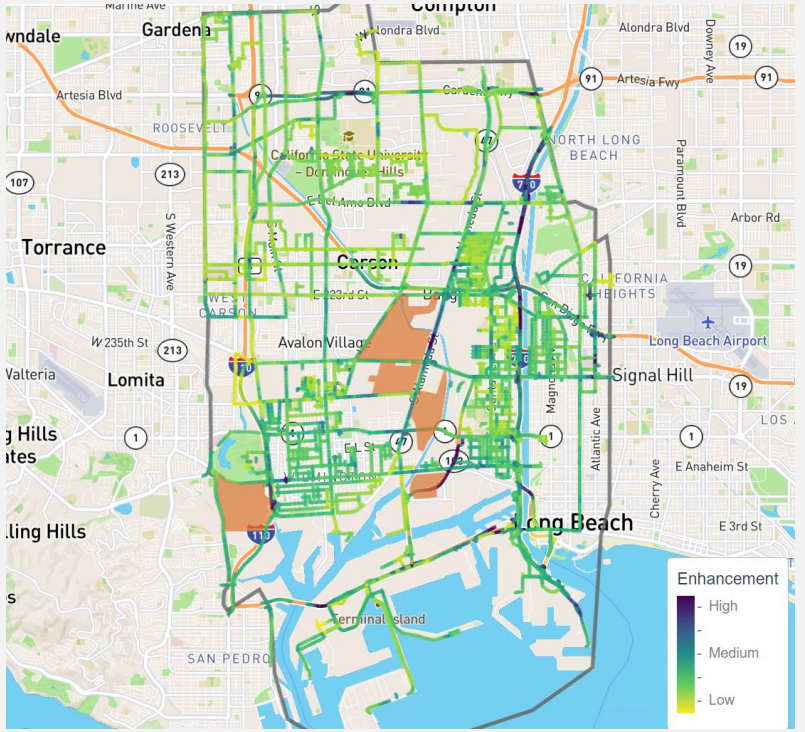






Mobile Monitoring

- As part of community monitoring activities, South Coast AQMD conducts air monitoring surveys using multiple mobile platforms at AB 617 Communities
  - Each platform can measure one or more distinct classes of air pollutants and/or air toxics including Black Carbon, NO2, Methane, non-methane VOCs, SO2, NH3, Benzene, Toluene, Ethylbenzene, and Xylenes
- Air pollutant concentrations near refineries are measured in AB 617 Communities using mobile monitoring platforms
  - Wilmington, Carson, West Long Beach community has refineries
  - Link to Wilmington, Carson, West Long Beach Community
- Links to other AB 617 community's webpage:
  - San Bernardino, Muscoy Community
  - East Los Angeles, Boyle Heights, West Commerce
  - Southeast Los Angeles Community
  - Eastern Coachella Valley Community
  - South Los Angeles Community



Need for PAR 1180 and PR 1180.1

In 2022, Earthjustice filed a lawsuit against South Coast AQMD

- Cited the Rule 1180 exemption for refineries with capacities below 40,000 barrels per day

Initiated a rulemaking process to amend PAR 1180 and adopt PR 1180.1

- Addresses the lawsuit and incorporates other updates

Worked to align rule requirements with Senate Bill 674

Update on Senate Bill 674 (SB 674)

On February 16, 2023, Senator Lena Gonzalez (Long Beach), introduced SB 674 – The Refinery Air Pollution Transparency and Reduction Act

SB 674 would extend the requirements of Assembly Bill (AB) 1647 (Muratsuchi, Chapter 589, Statutes of 2017) – Petroleum refineries: air monitoring systems by:

- Expanding the definition of refineries to include non-crude oil feedstock refineries and auxiliary facilities; and
- Requiring refineries to improve public notification processes, reporting, data accessibility, and to conduct third-party audits and root cause analyses of any threshold exceedances

On September 14, 2023, the bill was moved to inactive file for this legislative session, meaning it can be moved off the inactive file and continue legislative process in 2024

Considerations for PAR 1180 and PR 1180.1

Rule development is no longer moving in parallel to the development of SB 674

- The bill has been moved to an inactive file for this legislative session, so it might not ultimately become a state law

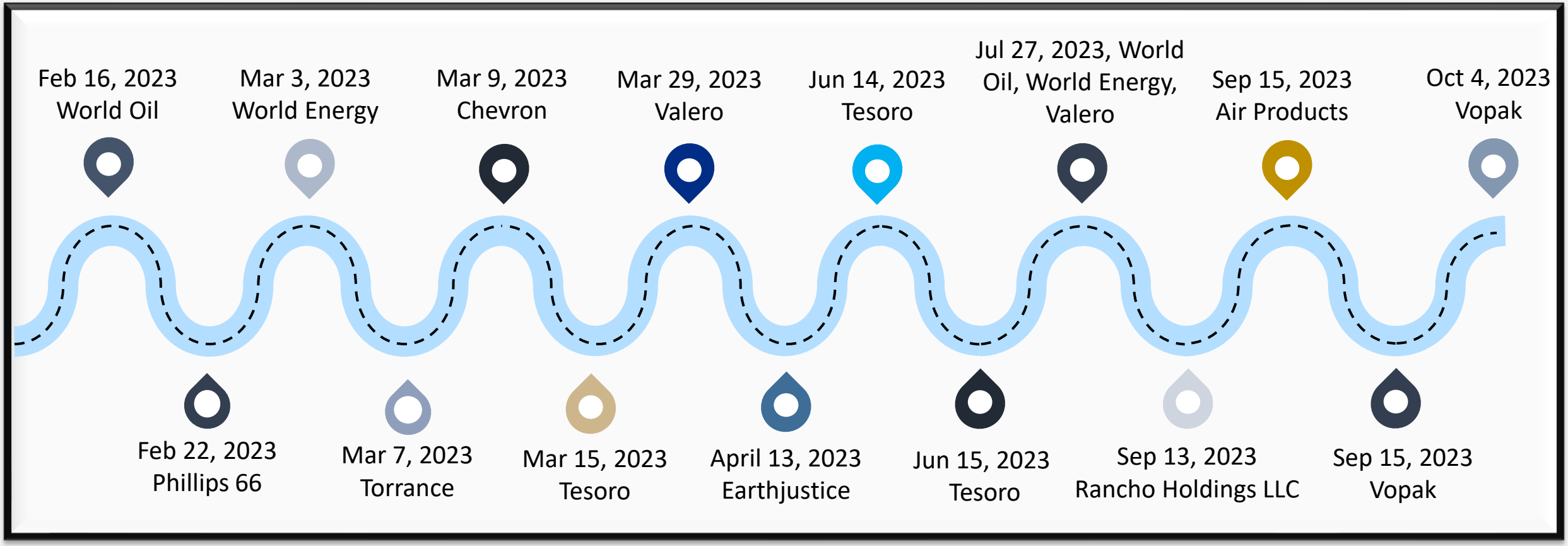
Staff is considering which provisions in SB 674 should be implemented in PAR 1180 or PR 1180.1

- Many of the proposed SB 674 requirements were included in staff's initial recommendations
- SB 674 recommended expanding rule applicability to include facilities whose operations largely support the refineries regardless of who owned or operated the facility
- Staff is considering including facilities with related operations to the refineries if they are adjacent or contiguous to the refineries if those operations largely support the refineries
  - Allows for a holistic assessment of emissions at the fenceline and within the communities

Stakeholder Meetings and Rule Making Process

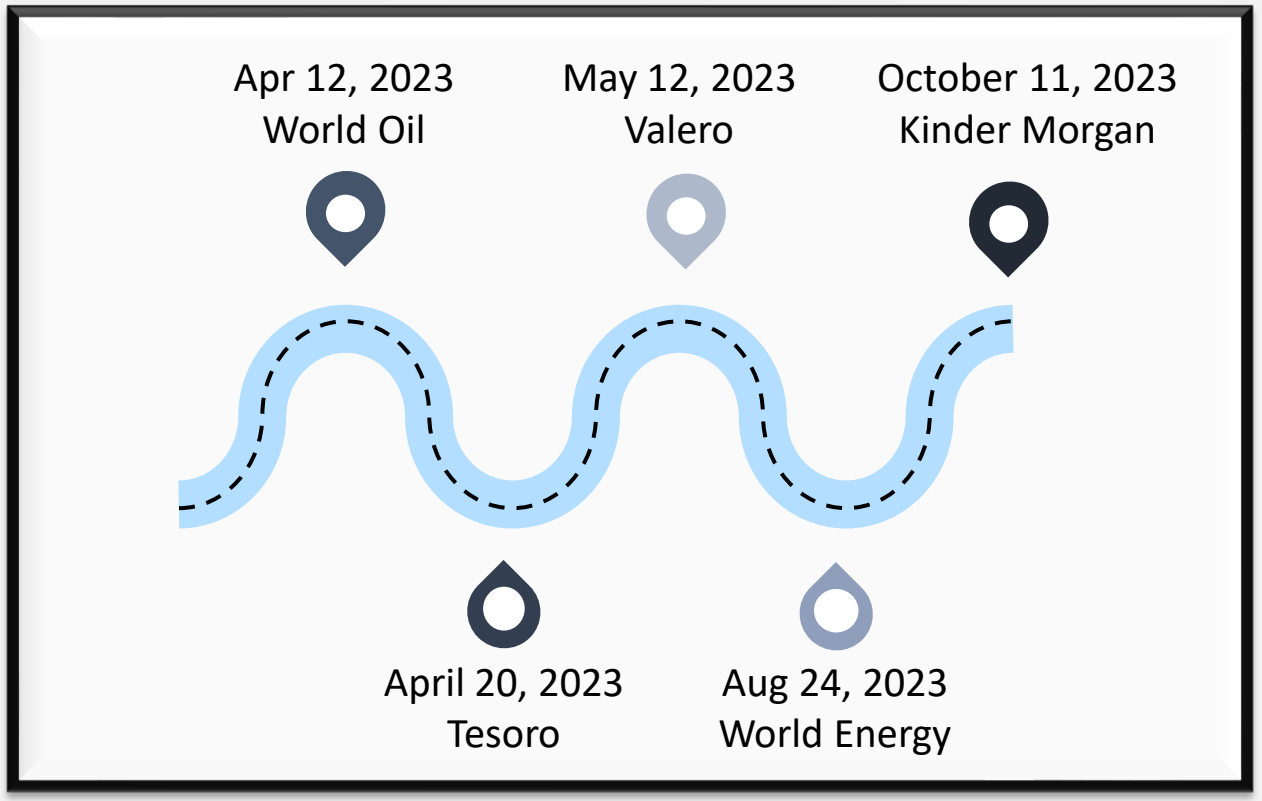
Stakeholder Meetings

- Staff is meeting with PAR 1180 and PR 1180.1 stakeholders including existing and new potential facilities and environmental organizations

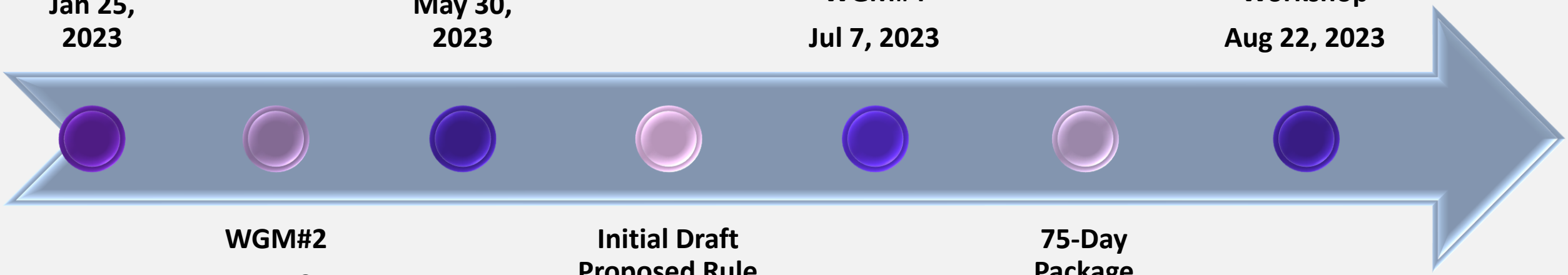


Site Visits

- Staff is conducting site visits with PAR 1180 and PR 1180.1 stakeholders including existing and new potential facilities



Rule Making Process



Summary of Public Workshop

Summary of Public Workshop:

- Conducted Public Workshop on August 22, 2023, with a day session and an evening session with Spanish translation
- Presented proposed rule language and received public feedbacks

Since the Public Workshop:

- Staff has continued meetings with stakeholders and conducted site visits
- Presented the proposal to the Stationary Source Committee in September
- Senate Bill (SB) 674 has been moved to inactive file on September 14, 2023
- Further revised the proposed rule language

Further Revisions After Public Workshop

Summary of the Proposed Revisions Since Public Workshop

- Revised PAR 1180 Applicability
- Adjusted Compliance Schedule
- Streamlined Fenceline Air Monitoring Plan (FAMP) Timeline
- Enhanced Fenceline and Community Notification
- Provided Text Message Notification Option
- Proposed Amendments to the Notification Timeline
- Modified Independent Audit Provisions Including Corrective Actions
- Added Requirements for Root Cause Analysis
- Added a Timeline to Resolve Data Quality Flags and Finalize the Data

PAR 1180 Applicability

PAR 1180 proposed applicability is for petroleum refineries and facilities with operations related to petroleum refineries located on properties adjacent to or contiguous with a petroleum refinery (related facilities)

Staff considering to revise the definition for related facilities to those that received or provided more than 50 percent of their input from, or production output to a petroleum refinery in the 2022 calendar year

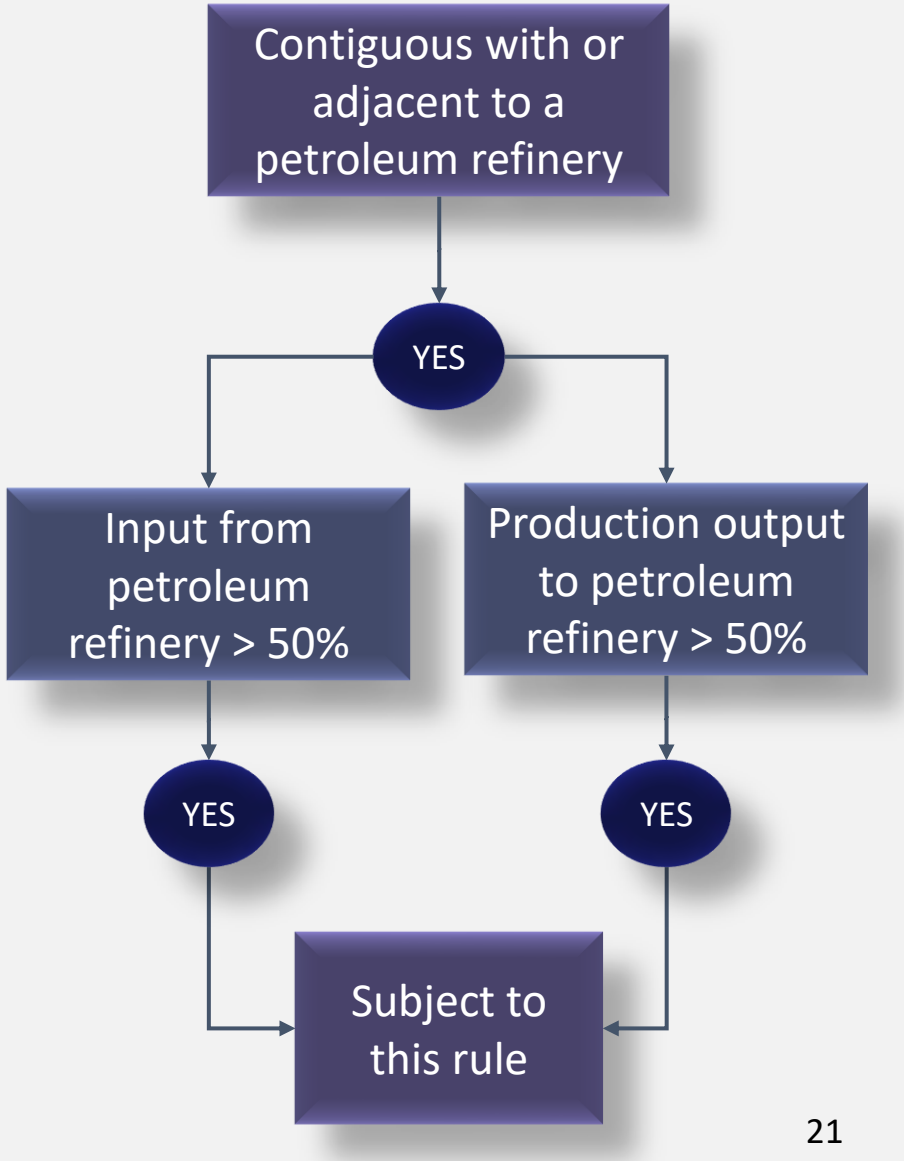
Determining Applicability For Related Facilities

Considering facilities contiguous or adjacent to petroleum refineries with input from or production output above 50 percent to the petroleum refineries in the calendar year 2022 to be subject to this rule

- Demonstrated via supporting documentation (e.g., invoices, contracts, etc.)

Staff has identified several facilities that potentially could be subject to this rule as "Related Facility"

Staff is in the process of gathering information to determine which facilities will be subject to the rule



PAR 1180 Applicability Proposed at Public Workshop

Petroleum Refineries

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

Related Facilities*

- **Hydrogen Plants**
  - Air Products Carson
  - Air Products Wilmington
- **Sulfur Recovery Plant**
  - Tesoro Sulfur Recovery Plant (SRP)
- **Terminals**
  - Chemoil Refinery Corp. (Olympus Terminals LLC)
  - Kinder Morgan Liquids Terminals LLC
  - Tesoro Carson Crude Terminal
  - Tesoro Carson Product Terminal
  - Tesoro Logistics Wilmington Terminal
  - Torrance Logistics Company
- **Reviewing other potential facilities**

*In the process of determining applicability

Update on PAR 1180 Applicability

- Staff previously identified Torrance Logistics Company as a related facility but the facility is no longer considered applicable
  - Facility has no above ground storage tanks
  - Minimal risk for leaks or air emissions
  - Not considered a terminal as defined by PAR 1180
- Some new potential related facilities were identified since the Public Workshop
  - Staff is conducting further assessments to determine the applicability for:
    - Rancho LPG Holdings, LLC
    - Vopak Terminal Los Angeles, Inc

Potential Related Facilities*

- **Hydrogen Plants**
  - Air Products Carson
  - Air Products Wilmington
- **Sulfur Recovery Plant**
  - Tesoro Sulfur Recovery Plant (SRP)
- **Tank Terminals**
  - Kinder Morgan Liquids Terminals LLC
  - Olympus Terminals LLC
  - Rancho LPG Holdings, LLC
  - Tesoro Carson Crude Terminal
  - Tesoro Carson Product Terminal
  - Tesoro Logistics Wilmington Terminal
  - ~~Torrance Logistics Company~~
  - Vopak Terminal Los Angeles, Inc.

*In the process of determining applicability

Compliance Schedule

- Staff is proposing a longer compliance schedule for the related facilities to install fenceline air monitoring systems
  - Monitoring systems are complex and will require time to install and commence operations
  - For new related facilities, including related facilities under common ownership, proposing to allow an additional 6 months
    - Increased timeline from one year to 18 months after plan approval
- PAR 1180 existing facilities will be required to install additional monitors within one year from plan approval
  - New monitors needed for additional compounds (metals and PM)
  - Smaller scale changes will be required

Submit a new or revised Fenceline Air Monitoring Plan (FAMP) after rule adoption	
Within six months for a facility with an existing FAMP	Within one year for a facility without an existing FAMP

Complete installation and begin operation		
PAR 1180 Existing Facilities	PAR 1180 New Facilities	PR 1180.1
No later than **one year** after FAMP approval	No later than **18 months** after FAMP approval	No later than **two years** after FAMP approval

Fenceline Air Monitoring Plan (FAMP) Timeline

Revised

- Proposing several changes to the timeline to revise a Fenceline Air Monitoring Plan
  - Proposed changes underlined

Owner or Operator shall submit a revised FAMP to the Executive Officer:

10 days	45 days	60 days
• After any unplanned modification that an approved or partially approved FAMP does not adequately address	• Before date of implementation of any planned modification that an approved or partially approved FAMP does not adequately address	• After date of receiving notification FAMP does not measure any air pollutants in Table 1 • From initial Fenceline Air Monitoring System downtime or malfunction where a revised FAMP is required • ~~After date the Corrective Action Plan is submitted to the Executive Officer if modification of FAMP is required~~ • ~~After a Root Cause Analysis determines a modification of FAMP is required~~ • After Executive Officer notifies in writing that the independent audit or follow-up independent audit indicates deficiencies • After Executive Officer provides written notice that Real-Time monitoring of PAHs is feasible

New Requirements

Fenceline and Community Notification Enhancements

- Staff proposing to require the following information be included in the exceedance notification in paragraph (g)(2), most are already common practice:
  - Facility name
  - Location, site, date, and time of exceedance
  - Air pollutant name, concentration measured, and Notification Threshold
  - A unique identification number for each notification
  - Link to OEHHA Air Chemical Database
- Notification mechanisms
  - Currently, all notifications are sent via emails
  - Considering requiring a text message option for notifications, if requested
  - In addition, the South Coast AQMD app will integrate both fenceline and community notifications within the next few years

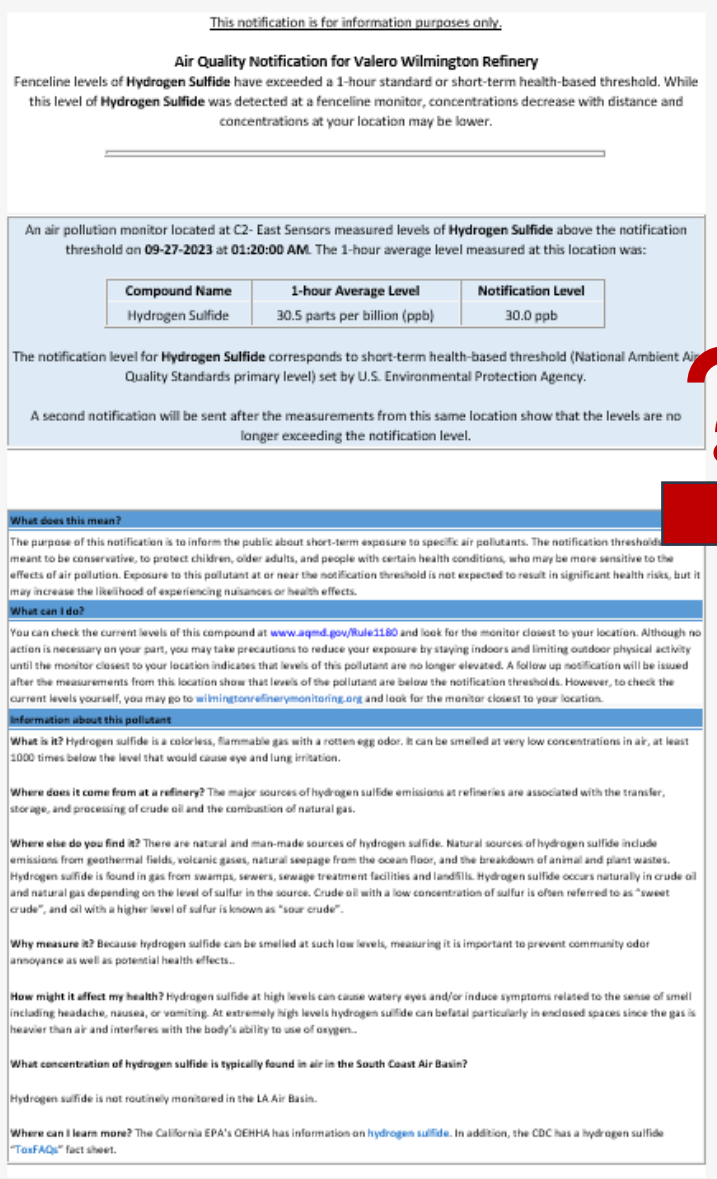
New Requirements

Feasibility of Text Notifications	
Pros	**Cons**
• Allow more people to receive notifications	• Text message fees may apply to end user • Messages may be too short to put all necessary information in, due to character limit • If a web link is provided, access to a smart phone with internet is needed

Link to South Coast AQMD app

Text Notifications

- An example of email notification shown
- A text message would have limited content
- Stakeholders can provide input for what should be included in text messages



This notification is for information purposes only.

Air Quality Notification for Valero Wilmington Refinery

Fenceline levels of **Hydrogen Sulfide** have exceeded a 1-hour standard or short-term health-based threshold. While this level of **Hydrogen Sulfide** was detected at a fenceline monitor, concentrations decrease with distance and concentrations at your location may be lower.

An air pollution monitor located at C2- East Sensors measured levels of **Hydrogen Sulfide** above the notification threshold on **09-27-2023** at **01:20:00 AM**. The 1-hour average level measured at this location was:

Compound Name	1-hour Average Level	Notification Level
Hydrogen Sulfide	30.5 parts per billion (ppb)	30.0 ppb

The notification level for **Hydrogen Sulfide** corresponds to short-term health-based threshold (National Ambient Air Quality Standards primary level) set by U.S. Environmental Protection Agency.

A second notification will be sent after the measurements from this same location show that the levels are no longer exceeding the notification level.

What does this mean?

The purpose of this notification is to inform the public about short-term exposure to specific air pollutants. The notification thresholds are meant to be conservative, to protect children, older adults, and people with certain health conditions, who may be more sensitive to the effects of air pollution. Exposure to this pollutant at or near the notification threshold is not expected to result in significant health risks, but it may increase the likelihood of experiencing nuisances or health effects.

What can I do?

You can check the current levels of this compound at www.aqmd.gov/Rule1180 and look for the monitor closest to your location. Although no action is necessary on your part, you may take precautions to reduce your exposure by staying indoors and limiting outdoor physical activity until the monitor closest to your location indicates that levels of this pollutant are no longer elevated. A follow up notification will be issued after the measurements from this location show that levels of the pollutant are below the notification thresholds. However, to check the current levels yourself, you may go to wilmingtonrefinerymonitoring.org and look for the monitor closest to your location.

Information about this pollutant

What is it? Hydrogen sulfide is a colorless, flammable gas with a rotten egg odor. It can be smelled at very low concentrations in air, at least 1000 times below the level that would cause eye and lung irritation.

Where does it come from at a refinery? The major sources of hydrogen sulfide emissions at refineries are associated with the transfer, storage, and processing of crude oil and the combustion of natural gas.

Where else do you find it? There are natural and man-made sources of hydrogen sulfide. Natural sources of hydrogen sulfide include emissions from geothermal fields, volcanic gases, natural seepage from the ocean floor, and the breakdown of animal and plant wastes. Hydrogen sulfide is found in gas from swamps, sewers, sewage treatment facilities and landfills. Hydrogen sulfide occurs naturally in crude oil and natural gas depending on the level of sulfur in the source. Crude oil with a low concentration of sulfur is often referred to as "sweet crude", and oil with a higher level of sulfur is known as "sour crude".

Why measure it? Because hydrogen sulfide can be smelled at such low levels, measuring it is important to prevent community odor annoyance as well as potential health effects..

How might it affect my health? Hydrogen sulfide at high levels can cause watery eyes and/or induce symptoms related to the sense of smell including headache, nausea, or vomiting. At extremely high levels hydrogen sulfide can befatal particularly in enclosed spaces since the gas is heavier than air and interferes with the body's ability to use of oxygen..

What concentration of hydrogen sulfide is typically found in air in the South Coast Air Basin?

Hydrogen sulfide is not routinely monitored in the LA Air Basin.

Where can I learn more? The California EPA's OEHHA has information on hydrogen sulfide. In addition, the CDC has a hydrogen sulfide "ToxFAQs" fact sheet.

This text box has one hundred and sixty characters. If the South Coast AQMD and refineries decide to use a Short Message Service (SMS), this would be the limit.

The South Coast AQMD and refineries can use multimedia messaging service (MMS), where the character limit is 1600. Links can be included in the message.

Proposed Amendments to the Notification Timeline

The web-based fenceline data display and notification program shall automatically generate and send a notification as soon as technically feasible, but no later than 15 minutes after, any air pollutant exceeds the notification threshold

A follow-up notification is required after the air pollutant has been continuously detected below the notification threshold for 30 minutes

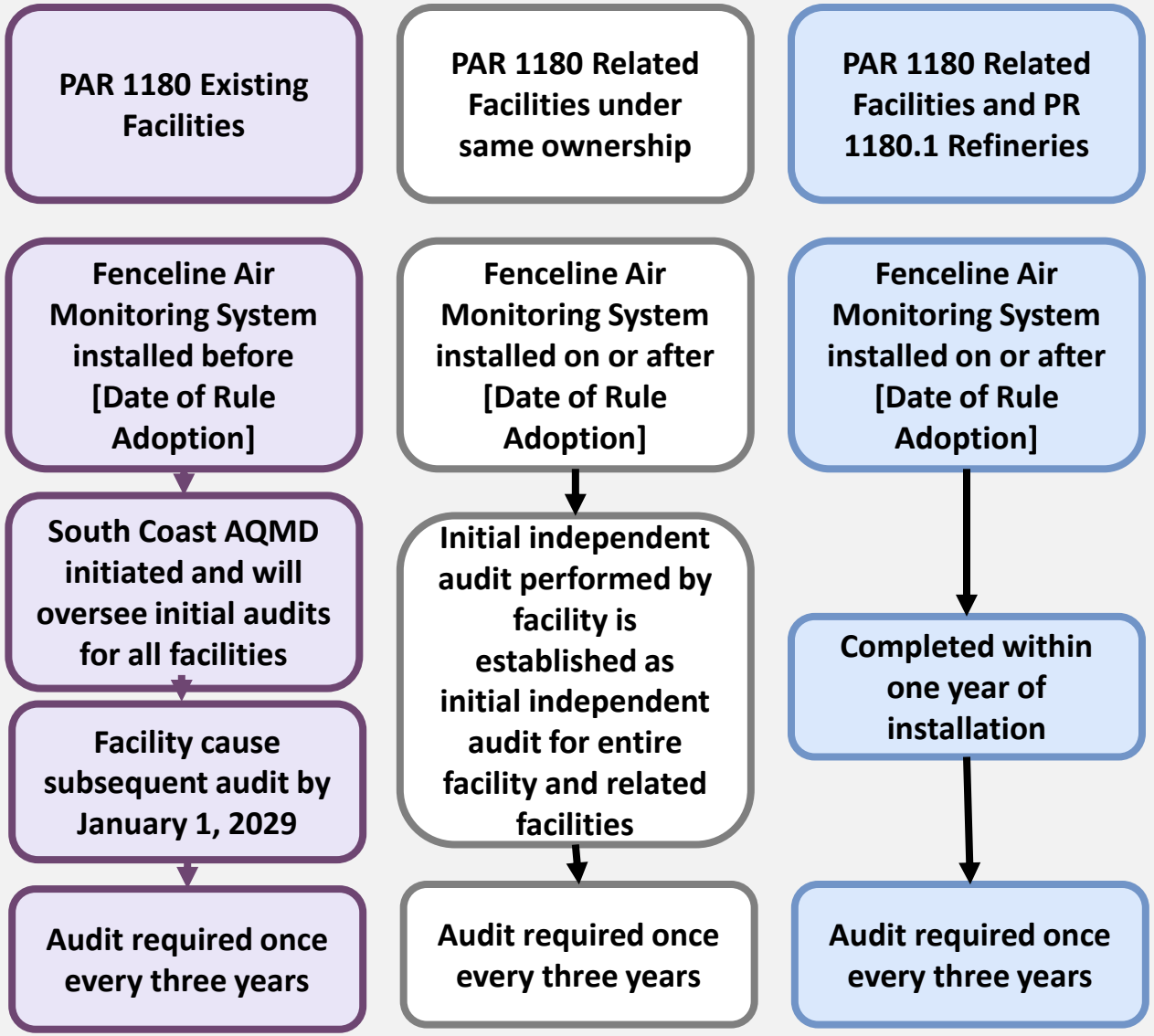
New Requirement

- Staff added clarification on when to send follow-up notifications
  - Trying to avoid sending numerous notifications if air pollutant is fluctuating above and below threshold
  - Require measurements to be continuously below threshold for 30 minutes prior to sending follow-up notification

Initial Independent Audit Background

- South Coast AQMD has initiated the initial independent audit for the refineries fenceline air monitoring systems and developing an audit protocol
  - Selected National Physical Laboratory (NPL) in a request for proposal process (RFP #P2022-13) to:
    - Conduct the independent audit and
    - Develop an audit protocol for future audits of fenceline monitoring systems
- Timeline to developing the protocol will be included in the contract with NPL
- The independent audits for petroleum refineries by NPL will be initiated in 2024
- Audit protocol is anticipated to be released for public review by the end of 2024

Independent Audit Timeline



- Three scenarios with independent audit timelines, depending on Fenceline Air Monitoring System installation date and operations related to a facility
- The audit initiated and overseen by the South Coast AQMD covers the **initial** audit for petroleum refineries and is not included in rule language
- The new changes include:
  - First audit required to be caused by the Petroleum Refineries will be January 1, 2029
  - Streamlining audit schedule for petroleum refineries with related facilities (e.g., Tesoro and their related facilities will all be on the same audit schedule)

Corrective Action Plan Background

The independent audit will identify any deficiencies in the fenceline air monitoring system

A corrective action plan is a compliance plan that details the actions a Facility will take to correct any deficiencies identified in an independent audit report

The corrective action plan should describe:

- All actions that will be taken to address all deficiencies; and
- 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

Corrective action plan require Executive Officer approval

Independent Audit Corrective Action Plan

- Corrective Action Plan requirements shown in flowchart below
- The schedule for corrective actions shall be specified in the Corrective Action Plan, which requires Executive Officer approval
- Corrective action plan must be made available to the public on facility's data display website

Audit report identifies deficiencies and Facilities must develop Corrective Action Plan within two months of the audit report

Submit the Corrective Action Plan to the Executive Officer and make it available on the facility's web-based fenceline data display once it is approved

Perform all corrective actions pursuant to the schedule in an approved Corrective Action Plan

Within one month of completing corrective actions, cause qualified independent party to conduct and complete follow-up performance audit

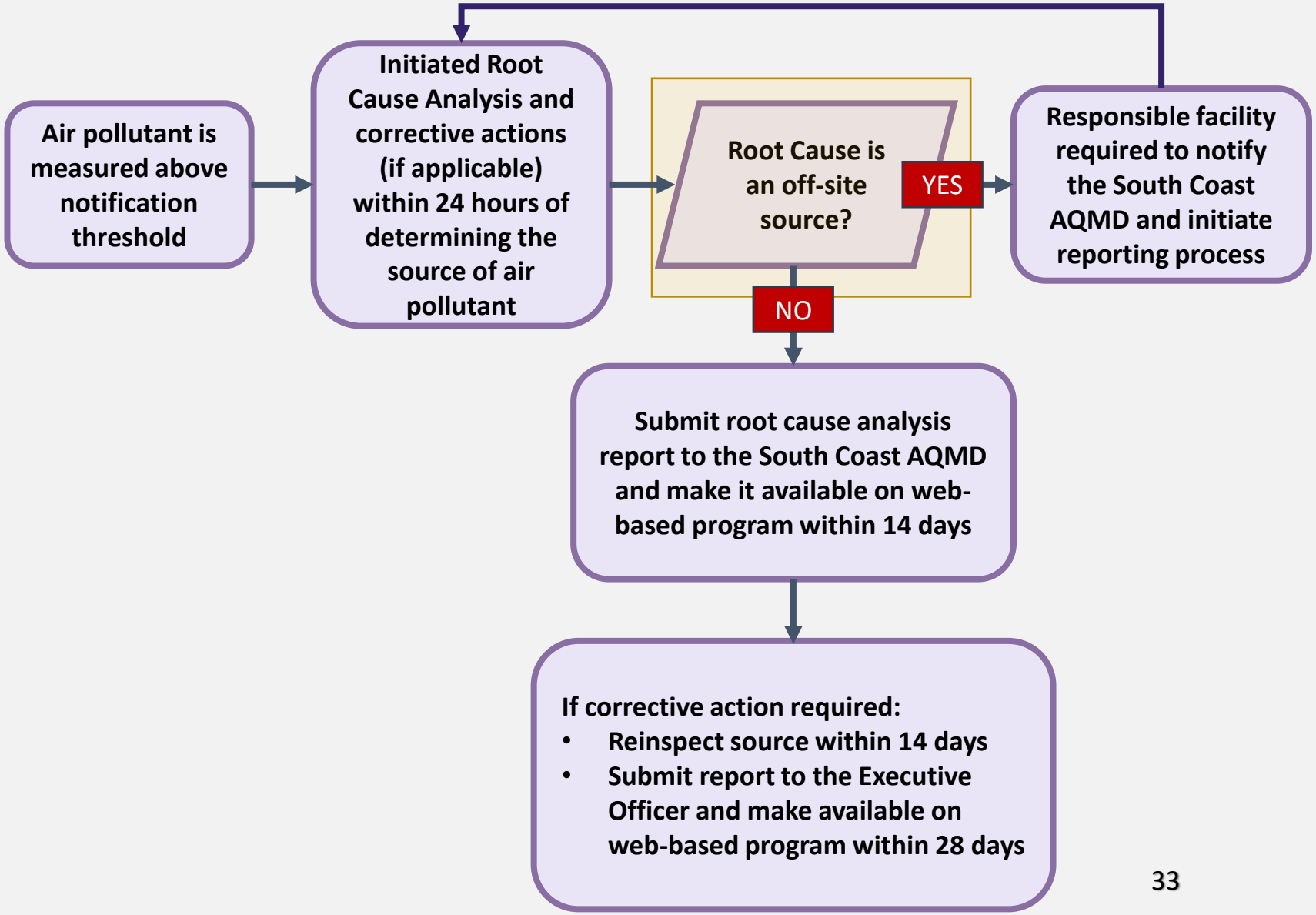
Submit revised FAMP if independent audit or follow-up independent audit indicates deficiencies in the FAMP

Root Cause Analysis

Revised

- Root Cause Analysis are proposed in subdivision (j): Recordkeeping and Reporting
- Root Cause Analysis process chart shown to the right
  - Added requirements for when the root cause is determined to be from an off-site source

New Requirement



Root Cause Analysis

Revised

- New requirement proposed if the same cause or undetermined cause for exceeding the notification threshold occurs more than three times

If three root cause analyses indicate:

- The same cause for the same air pollutant by the same monitor OR
- The cause cannot be determined

The facility is required to:

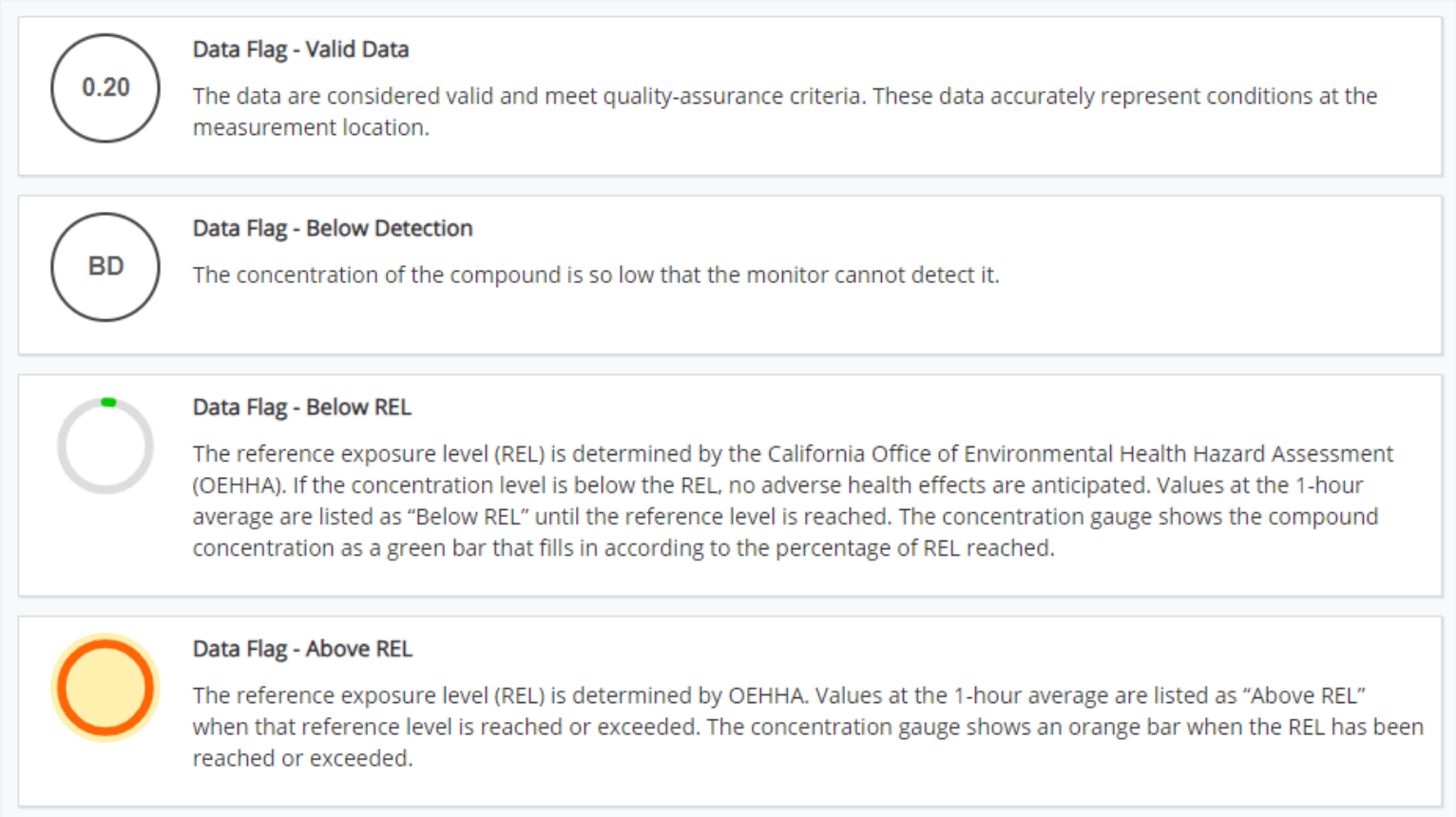
- Cause a qualified independent party to conduct a root cause analysis
- Initiate corrective actions
- ~~Update their FAMP within 60 days to prevent further non-compliance if root cause analysis does not identify source of elevated concentration~~
- Submit a Root Cause Analysis report certified by the qualified independent party and make it available on the web-based program within 14 days

New Requirements

Data Quality Flag Background

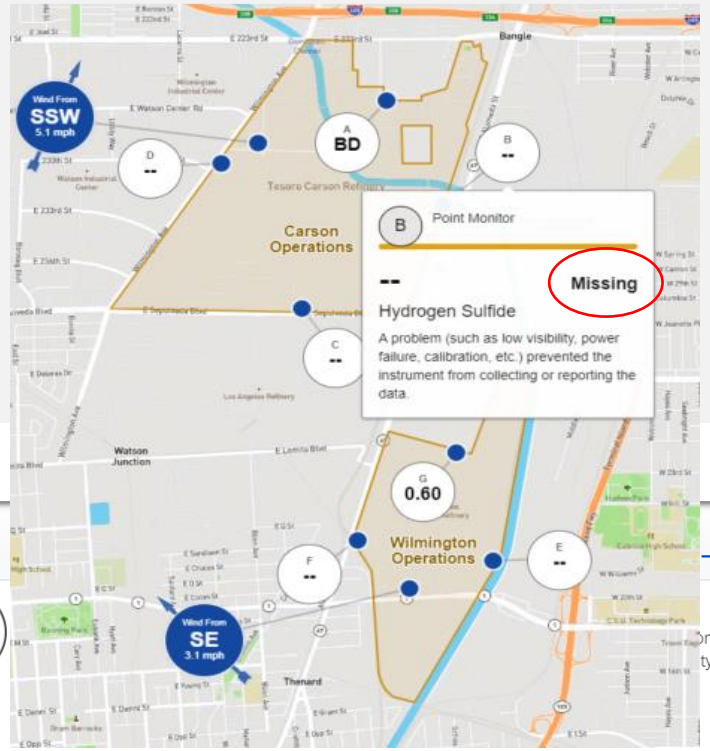
- Data quality flags are indicators that designate the status, quality, or reliability of the data measured by the fenceline air monitoring system
- Data quality flags are defined in the Quality Assurance Project Plan (QAPP)
- Examples of data quality flags:
  - N/A – Not Available
  - Cal – Calibration
  - Maint – Maintenance
  - <MDL – Below Minimum Detection Limit
  - Questionable – Problem with data identified

Example of data quality flags from Marathon LAR

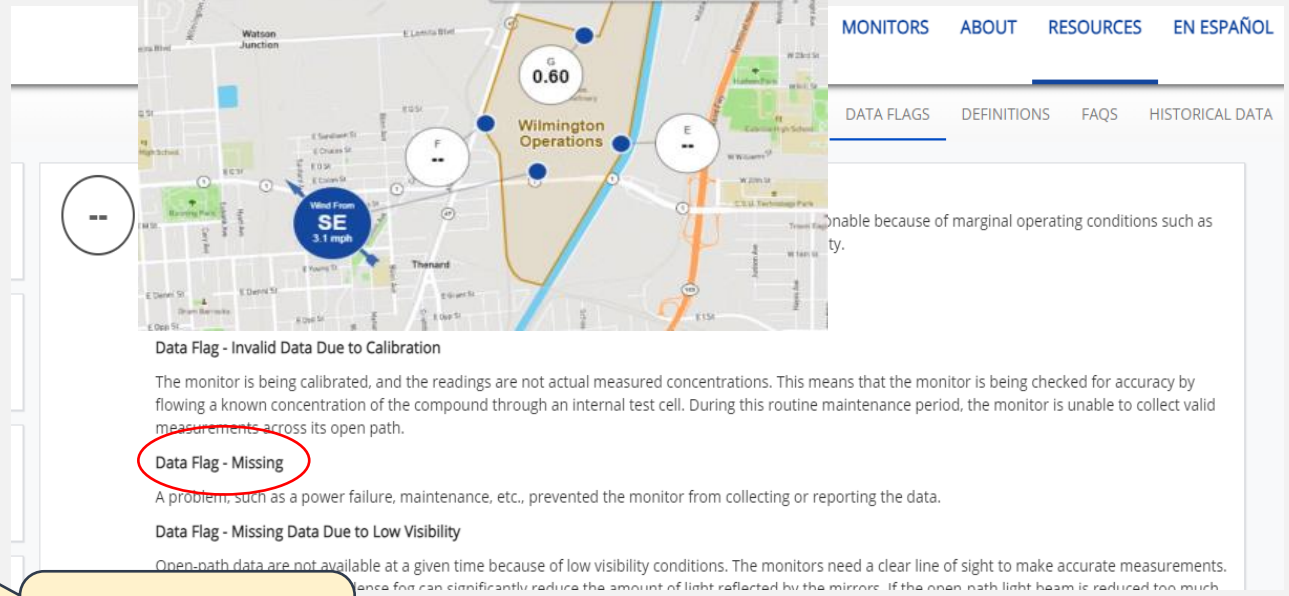


Data Quality Flags (cont.)

- Web-based fenceline display and notification program are required to display defined data quality flags
- In paragraph (j)(3), staff is proposing the following new requirements, by which facility must:
  - Indicate the data is unavailable, with the appropriate data quality flag, when experiencing a known downtime or malfunction
    - For example, during an outage caused by an earthquake, the facility must indicate that the data is not available instead of listing zero ppm
  - Review and resolve data quality flags and finalize the data when the quarterly report is submitted



Web-based data display from [Marathon LAR]



New Requirement

Community Monitoring Stations and Air Monitoring Fees

Background on Community Air Monitoring Stations

As part of Rule 1180 adopted in 2017, community air monitoring has been conducted near all major refineries in the South Coast Air Basin since 2020

- Ten fully equipped community air monitoring stations and two partial stations are currently in operation

Refineries are responsible for the community air monitoring fees

- Rule 1180 has a fee schedule in which refineries pay for the cost of designing, developing, installing, operating and maintaining refinery-related community air monitoring sites

For additional related facilities staff is considering to require additional community monitoring stations; costs will be shared by facilities

- Hydrogen production plants and sulfur recovery plant will fund at least one fully equipped monitoring station
- Terminals will fund at least one VOC only, VOC+H2S, or Butane only monitoring stations
- Costs will include the initial cost for installing the stations and on-going cost for operation and maintenance

Estimated Community Monitoring System One Time Cost Breakdown

Note: metal analyzers may not be required for stations located near related facilities

Initial Capital Cost	Full Station	VOC + H2S Station	Butane Station
Monitoring Equipment			
H_2S Analyzer	$20,000	$20,000	N/A
$PM_{2.5}$ and PM_{10} Analyzer	$60,000	N/A	N/A
Black Carbon Analyzer	$30,000	N/A	N/A
Speciated Metal Analyzer	*$180,000*	N/A	N/A
Optical Multi-Pollutant Analyzers	$250,000	$250,000	$125,000
Automated Gas Chromatograph	$85,000	$85,000	$85,000
Meteorological Station	$20,000	$20,000	$20,000
Zero Air Generator and Dilution System	$25,000	$25,000	$25,000
Monitoring Equipment (Sum)	$665,000	$395,000	$250,000
Site Preparation	$140,000	$140,000	$140,000
Data System	$30,000	$30,000	$30,000
Technical Labor (e.g., installation)	$50,000	$31,000	$20,000
South Coast AQMD Personnel Cost	$170,000	$104,000	$70,000
TOTAL	$1,060,000	$705,000	$515,000

Estimated Community Monitoring System Operating and Maintenance (O&M) Cost Breakdown

O&M Cost	Full Station	VOC + H2S Station	Butane Station
Monitoring Site (utilities, lease, etc.)	$40,000	$40,000	$40,000
Monitoring Equipment (calibration gases, maintenance, etc.)	$80,000	$67,000	$67,000
Technical Contractor (specialized support from instrument manufacturer)	$60,000	$48,000	$48,000
South Coast AQMD Personnel Cost	$530,000	$245,000	$245,000
TOTAL	$710,000	$400,000	$400,000

Sample of positions and responsibilities for South Coast AQMD staff for O&M Cost

Position / Branch	Example of Duties
Air Quality Instrument Specialist	• Assure uninterrupted operation of all air monitoring, meteorological and other support equipment • Conduct instrument maintenance and repair • Maintain recordkeeping and data backups • Maintain necessary supply of consumables and replacement or spare parts/instruments • Contribute to quality assurance project plan (QAPP) and standard operating procedures (SOPs)
Air Quality Specialist	• Conduct community air monitoring data review, validation, and analysis • Advise and assist and develop procedures for operation and maintenance of advanced air monitoring analyzers • Prepare air monitoring plans, QAPPs, technical summaries, reports, and presentations
Program Supervisor and/or Manager	• Manage and supervise technical and professional staff • Draft, review, and approve technical and administrative documents and reports • Coordinate with other branches and divisions
Quality Assurance Branch	• Review and approve QAPPs and Standard Operating SOPs • Develop Quality Assurance Procedures • Conduct annual performance evaluation audits • Oversee independent audit

PAR 1180 and PR 1180.1 Fenceline Monitoring Cost

- Due to this rulemaking:
  - PAR 1180 petroleum refineries will update their fenceline air monitoring systems with additional monitors for several new compounds
  - PAR 1180 related operations and PR 1180.1 facilities will install new fenceline air monitoring systems

Estimated Fenceline Air Monitoring System Upgrade or Installation Costs			
	PAR 1180		PR 1180.1
	Petroleum Refineries	Related Operation	Other Refineries
Per Facility	$600k – $900k	$500k – $800k	$1.4 - 2MM

Next Steps

November 17, 2023

- Stationary Source Committee

December 5, 2023

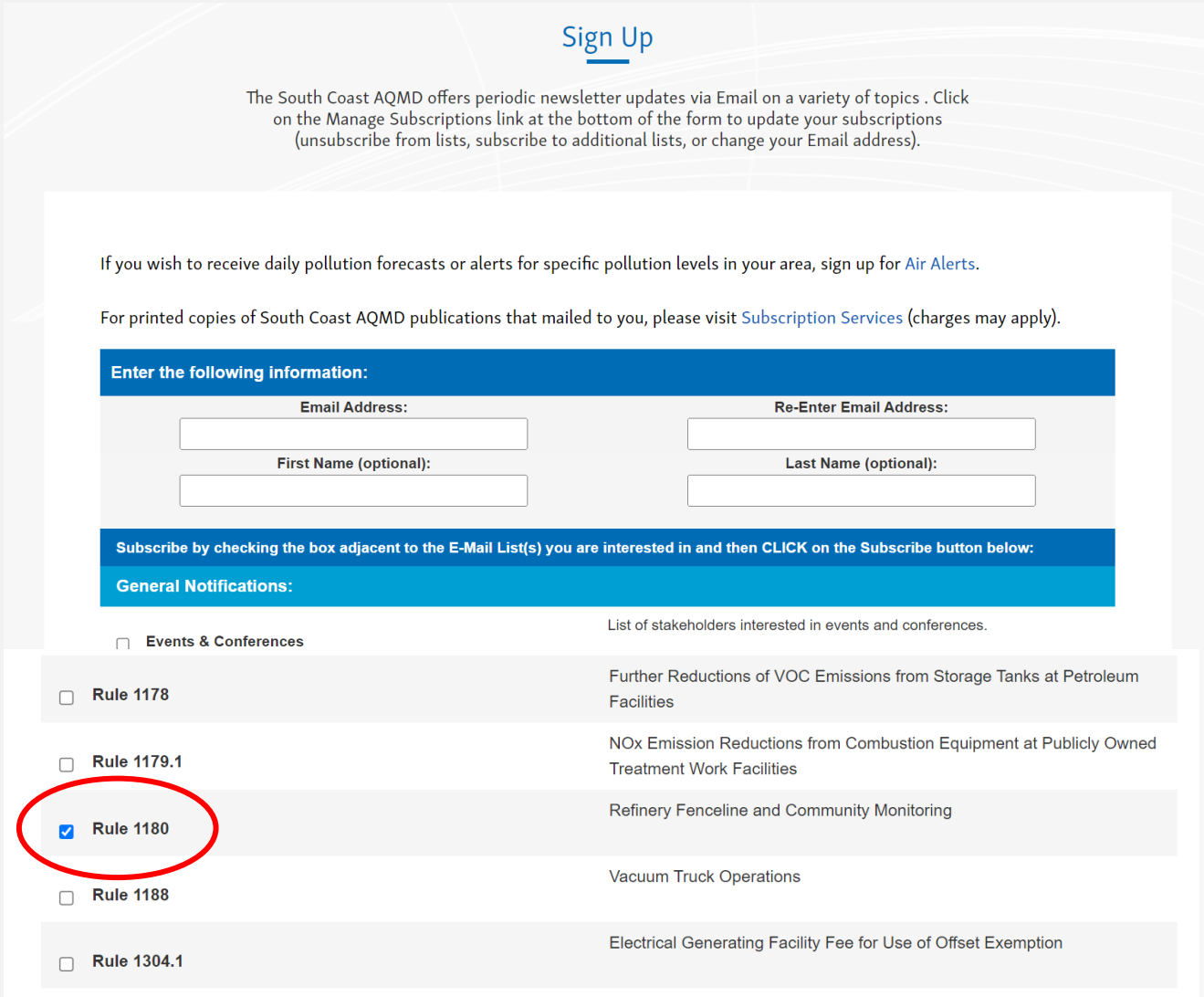
- 30-Day Package (PAR 1180, PR 1180.1, Guidelines, and Staff Report)

January 5, 2024

- Public Hearing

Sign Up for Rule Development Updates

- For receiving newsletter updates via email for notifications regarding Rule 1180 and Rule 1180.1 development, please subscribe by checking the appropriate check box through: http://www.aqmd.gov/sign-up
- For printed copies of South Coast AQMD publications that get mailed to you, please visit: http://www.aqmd.gov/nav/contact/subscription-services



Sign Up

The South Coast AQMD offers periodic newsletter updates via Email on a variety of topics . Click on the Manage Subscriptions link at the bottom of the form to update your subscriptions (unsubscribe from lists, subscribe to additional lists, or change your Email address).

If you wish to receive daily pollution forecasts or alerts for specific pollution levels in your area, sign up for Air Alerts.

For printed copies of South Coast AQMD publications that mailed to you, please visit Subscription Services (charges may apply).

Enter the following information:

Email Address: | Re-Enter Email Address:

First Name (optional): | Last Name (optional):

Subscribe by checking the box adjacent to the E-Mail List(s) you are interested in and then CLICK on the Subscribe button below:

General Notifications:

☐ Events & Conferences	List of stakeholders interested in events and conferences.
☐ Rule 1178	Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities
☐ Rule 1179.1	NOx Emission Reductions from Combustion Equipment at Publicly Owned Treatment Work Facilities
☑ Rule 1180	Refinery Fenceline and Community Monitoring
☐ Rule 1188	Vacuum Truck Operations
☐ Rule 1304.1	Electrical Generating Facility Fee for Use of Offset Exemption

Staff Contacts

Michael Krause
Assistant DEO
mkrause@aqmd.gov
909.396.2706

Heather Farr
Planning and Rules Manager
hfarr@aqmd.gov
909.396.3672

Yanrong Zhu
Program Supervisor
yzhu1@aqmd.gov
909.396.3289

Mojtaba Moghani, Ph.D.
AQ Specialist
mmoghani@aqmd.gov
909.396.2527

Jennifer Vinh
AQ Specialist
jvinh@aqmd.gov
909.396.2148