Mid-Year Review of the 2023 Regulatory Agenda

Stationary Source and Climate Impacts Committee Meeting
July 12, 2023

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Presentation Outcome

• Provide a mid-year update on the 2023 Objectives for the Rules & Strategic Policy Division
Presentation Outline

• How are Objectives Established?
• Review of 2023 Objectives
• Progress and Proposed Updates
• Discussion
Presentation Requested Action

• None; informational item.
How Are Objectives Established?

• 2021 – Board request to speed up rule development process, increase efficiency
• Staff determined prioritization for rulemaking projects was needed
  • Long list of sources/rules to address – need to increase trust with transparency
  • Previously relied on Clean Air Plan to provide priorities
    • Need a nimbler more frequent process (annual) that can incorporate community priorities (e.g., CERP strategies)
• Consistency in selecting priorities means certainty for staff and increased efficiency
Staff developed a proposed prioritization framework by which we will prioritize projects (i.e., source evaluations and rulemaking)

First step: staff established a list of factors (“prioritization factors”) that will guide the prioritization

Born out of the multi-divisional work being done to prioritize actions for the Richmond-North Richmond-San Pablo Community Emissions Reduction Plan (CERP)
## Proposed Prioritization Factors

<table>
<thead>
<tr>
<th>Category</th>
<th>Factors</th>
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<tbody>
<tr>
<td>Mandate/Commitment</td>
<td>• Legal/prior commitments</td>
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<tr>
<td>Environmental/Health Impact</td>
<td>• Magnitude of emissions, relative potency of pollutant (e.g., GWP, toxicity), and/or exposure potential</td>
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<tr>
<td>Authority/Purview</td>
<td>• Air District's statutory authority or purview to regulate/reduce emissions</td>
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<tr>
<td>Control/Reduction Potential</td>
<td>• Availability and feasibility of controls, and/or achieved and demonstrated performance levels</td>
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<tr>
<td>Other Feasibility Considerations/Impacts</td>
<td>• Economic, socioeconomic, other environmental, and equity impacts</td>
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What Prioritization Factors are Key?

- Mandated commitments: Assembly Bill (AB) 617 Expedited Best Available Retrofit Control Technology (BARCT) Implementation Schedule
  - Deadline of December 31, 2023
- Lead with Health
  - Focus on the most impacted communities
  - Prioritize rules/projects that will bring the most health benefits to impacted communities
    - Regional sources (e.g., woodsmoke)
    - Localized sources (e.g., construction impacts, autobody shops)
    - Sources identified in CERPs
Review of 2023 Objectives

• Finalize in-process rules:
  • Amendments to Rules 9-4/9-6: Building Appliances
  • AB 617 Expedited BARCT Implementation Schedule
    • Rule 8-8: Wastewater Collection and Separation Systems
    • Rule 8-18: Equipment Leaks

• Continue supporting AB 617 Community Emission Reduction Planning processes
  • Richmond-North Richmond-San Pablo Path to Clean Air process
  • New East Oakland steering committee
Review of 2023 Objectives, cont.

• Complete development of white paper on fugitive dust

• Complete development of white paper on metal recycling and shredding operations

• Begin evaluating Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities for potential amendments to streamline and expedite regulatory implementation

• Begin white papers on additional sources from the AB 617 West Oakland Community Action Plan (WOCAP)
Progress and Proposed Updates

Finalize in-process rules:

- Amendments to Rules 9-4/9-6: Building Appliances

  **Status:**
  - Rule Amendments Completed – Public Hearing on March 15, 2023
  - First Implementation Working Group (IWG) – May 23, 2023

Next Steps: IWG technical and equity subcommittees later this summer
Finalize in-process rules:

AB 617 Expedited BARCT Implementation Schedule

• Amendments to Rule 8-8: Wastewater Treatment
  Status: Moving forward
  Next Steps:
  • Draft released May 2023
  • Update to SSCI Committee – Q3 2023
  • Expected Public Hearing – Q4 2023

• Amendments to Rule 8-18: Equipment Leaks
  Status: Moving forward
  Next Steps:
  • Update to SSCI Committee – Q3/Q4 2023
  • Expected Public Hearing – Q4 2023/Q1 2024
Continue to develop amendments to Rule 11-18

Regulation 11, Rule 18 (Rule 11-18): Reduction of Risk from Air Toxic Emissions at Existing Facilities

Status: Moving forward, regulatory concepts under development

Next Steps: Update to SSCI Committee and public engagement expected Q3/Q4 2023
Develop a white paper on fugitive dust

AB 617 West Oakland Community Action Plan (WOCAP) Further Study Measure #3: The Air District will investigate potential rulemaking to limit fugitive dust from construction activity

Status:
- Completed – April 2023

Next Steps:
- Develop draft regulatory language based on concept paper recommendations
- Additional public engagement later this year
Progress and Proposed Updates, cont.

Develop a white paper on metal shredding and recycling operations

WOCAP Stationary Source Strategy #68: The Air District will also consider potential amendments to Rule 6-4, Metal Recycling and Shredding Operations, and Rule 12-13, Foundry and Forging Operations, to further reduce fugitive particulate matter emissions

Status:

• In progress

Next Steps: Finalize white paper, bring to SSCI Committee Q4 2023
AB 617 Community Emissions Reduction Plan (CERP) support

Continue supporting the Richmond-North Richmond-San Pablo Path to Clean Air process

*Status:* Ongoing

*Next Steps:* Finalize strategy development this summer

Continue supporting the East Oakland CERP process

*Status:* Ongoing

*Next Steps:* Support where/when needed
Progress and Proposed Updates, cont.

New Projects

• Additional White Papers as capacity allows
  • Sources from the WOCAP: autobody operations, wastewater treatment plants and anaerobic digestion facilities, commercial cooking, and woodburning
  • Sources from Richmond-North Richmond-San Pablo CERP: TBD
• Engagement with the Bayview Hunters Point AB 617 Steering Committee
• Strategic planning process outcomes
Feedback Requested/Prompt

Questions and Comments?
Refinery Community and Fenceline Monitoring

Stationary Source and Climate Impacts Committee Meeting
July 12, 2023

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Presentation Requested Action

• None. Informational only.
Presentation Outline

• Current monitoring capabilities and limitations
  • Refinery fenceline and ground level monitoring
  • Refinery community air monitoring stations
  • Other emissions and air monitoring
• Opportunities to strengthen program
• SB 674
• Challenges
Current Refinery Air Monitoring Programs

• Includes fenceline and near-source air monitoring systems
  • Facility-operated **fenceline** monitoring systems
  • Facility-operated **ground level monitoring stations** (GLMs) at or near the facility boundary.
• Air District operated **community air monitoring stations**

• Goals for the data include:
  • Observe facility emissions released near the ground
  • Provide real-time air quality information
  • Track air quality in frontline communities over time

• Currently focused on expected emissions or health-relevant compounds, most commonly sulfur compounds and/or speciated volatile organic compounds (VOCs)
Other Emissions and Air Monitoring

Other measurements provide context for refinery-oriented air monitoring or detailed snapshots of emissions and air quality

• Long-term air monitoring
• Short-term air monitoring projects
• Air sensor networks
• Continuous emissions monitors, source tests, and other emissions-related measurements
Refinery Fenceline Monitoring Background

- Refinery requirements are in Regulation 12, Rule 15 (Rule 12-15), and the associated Air District monitoring guidelines

- Refineries required to obtain and maintain APCO approval of a plan for establishing and operating a fenceline monitoring system,
  - Including, at a minimum, real-time measurements of benzene, toluene, ethyl benzene, and xylenes (BTEX) and hydrogen sulfide (H₂S)
  - Include system design, operation, and quality assurance

- Guidelines issued with the rule were developed based on:
  - Expert panel convened after the 2012 Chevron refinery fire
  - Report developed by the Desert Research Institute (contracted by Air District)
Status of Refinery Fenceline Monitoring

• Fenceline monitoring plans for all refineries were conditionally approved in 2018
  • Pending selection of a monitoring method for H$_2$S and QA revisions
• Refineries submitted revised air monitoring plans to include H$_2$S monitoring systems in 2022
• Air District released the revised plans for public comment in 2023 and is currently reviewing the plans and public comments
• Air District will determine whether each plan meets requirements by July 19, 2023, then refineries have 45 days to re-submit plans if revisions are needed
Refinery Community Air Monitoring Background

• During Rule 12-15 development, Air District committed to implement the “Major Stationary Source Community Air Monitoring Program” to enhance air monitoring in refinery communities

• Objectives:
  • Provide refinery frontline communities with real time local-scale air pollution data reflecting day-to-day cumulative air pollution levels,
  • to track air pollution levels near refineries over time to assess trends and support long- and short-term air quality assessments

• Established a new fee schedule (X) to recover some of the costs associated with the program
Phases of Monitoring Site Development

**Siting**
- Community input
- Assessment of preferred locations
- Site identification
- Leasing
- Site design & permitting

**Construction**
- Site construction & station setup
- Equipment procurement
- Equipment installation
- Equipment testing

**Monitoring**
- Begin monitoring
- Ongoing station maintenance
- Data quality assurance
- Data analysis & reporting
Status of Refinery Community Monitoring

• Community input included four public workshops in 2018 and a follow up meeting in Benicia in 2021

• Assessment to determine preferred areas
  • Includes historical air quality, meteorology and topography information, input from public workshops, and population and cumulative impacts information from CalEnviroScreen 4.0
  • Program description and Valero site analysis posted in 2022, other four refineries coming in Q3 2023
Status of Refinery Community Monitoring, con’t.

• Valero monitoring station in Benicia
  • Active instrument and equipment deployment through Q3 2023
  • Instrument and communications testing through Q4 2023
  • Planned reporting to the website by Q2 2024

• Additional monitoring stations
  • Identification of locations near additional refineries is in progress.
Opportunities to Strengthen Refinery Community and Fenceline Monitoring

- Revise rule and guidelines to expand fenceline monitoring systems and increase transparency of data
- Improve analysis and reporting of existing monitoring data to share more contextualized insights with the public
- Strengthen engagement and collaboration with refinery corridor communities and partner agencies
Opportunities to Strengthen Refinery Community and Fenceline Monitoring, con’t.

• Opportunities to align with other discussions and planning including
  • Air District strategic planning
  • Incident response, including with ad hoc committee of the Board and Community Advisory Council
  • AB 617 Path to Clean Air Community Steering Committee CERP strategies
  • SB 674 (community and fenceline monitoring)
Senate Bill (SB) 674 – Refinery Air Pollution Transparency and Reduction Act

• Expand the requirements for fenceline and community monitoring systems including:
  • Adding new pollutants to align with OEHHA 2019 report on refinery emissions
  • Real-time reporting of data to a website and access through an application programming interface,
  • Quarterly reporting of data summaries, variations, and trends
  • 30-day public comment period on monitoring plans before approval and implementation
Senate Bill (SB) 674 – Refinery Air Pollution Transparency and Reduction Act, con’t

• Fenceline system requirements also include
  • Covering the entire perimeter of the refinery,
  • Public notifications of levels above health thresholds (exceedances),
  • Transparent root cause analyses of exceedances and corrective actions taken
  • Quarterly reporting of data summaries, variations, and trends, and
  • Routine independent audits
• Establish deadlines for community and fenceline monitoring revisions
• Confirm refineries are responsible for costs for both fenceline and community air monitoring systems
Challenges

- Timelines for developing and adopting rules and guidelines, creating new data systems, identifying and developing monitoring stations
- Feasibility of SB 674 requirements
- Time for coordination with refinery frontline communities and partner agencies
- Developing wholistic program to meet many objectives effectively
- Revenue and staff resources to implement improvements