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AGENDA: 4

Mid-Year Review of the 2023 Regulatory Agenda

**Stationary Source and Climate Impacts
Committee Meeting
July 12, 2023**

**Elizabeth Yura
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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

Prioritization Framework



- 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



Mandate/Commitment

- Legal/prior commitments

Environmental/Health Impact

- Magnitude of emissions, relative potency of pollutant (e.g., GWP, toxicity), and/or exposure potential

Authority/Purview

- Air District's statutory authority or purview to regulate/reduce emissions

Control/Reduction Potential

- Availability and feasibility of controls, and/or achieved and demonstrated performance levels

Other Feasibility Considerations/Impacts

- Economic, socioeconomic, other environmental, and equity impacts

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



Progress and Proposed Updates, cont.

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

Progress and Proposed Updates, cont.



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

Progress and Proposed Updates, cont.



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



Progress and Proposed Updates, cont.

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?



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AGENDA: 5

Refinery Community and Fenceline Monitoring

**Stationary Source and Climate Impacts
Committee Meeting
July 12, 2023**

**Kate Hoag, Ph.D., Assistant Manager
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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 H₂S and QA revisions
- Refineries submitted revised air monitoring plans to include H₂S 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