



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 4

Amendments to Regulation 8: Organic Compounds, Rule 18: Equipment Leaks

**Stationary Source and Climate Impacts Meeting
October 11, 2023**

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Presentation Outcome



- Provide information and updates on the development of amendments to Regulation 8: Organic Compounds, Rule 18: Equipment Leaks (Rule 8-18).

Presentation Outline



- Background
- Draft Amendments
- Next Steps

Presentation Requested Action



- None; informational item only.

Background: Rule Purpose



- Rule 8-18 limits total organic compound emissions from equipment leaks at refineries, chemical plants, and facilities loading and storing gasoline in bulk quantities.
- These large-scale facilities process organic liquids through a variety of pipes, valves, connections, pumps, compressors, and other equipment where organic compounds may leak into the air. And these components may number in the thousands.
- The most effective means of controlling these leaks is through implementation of a Leak Detection and Repair (LDAR) program whereby equipment is monitored, and equipment found to be leaking is then repaired in a timely manner.
- Rule 8-18 provides the necessary LDAR provisions for use at these facilities.

Background: Previous Rulemaking



- 2015 – Rule amended to add components in heavy liquid service to LDAR program as part of Petroleum Refinery Emissions Reduction Strategy (Rules 6-5, 8-18, 9-14, and 11-10)
- 2015 - Adopting resolution directed staff to re-examine emissions reductions and cost effectiveness issues related to the inclusion of equipment in heavy liquid service
- Heavy Liquids Study already started (pre-2015) to improve emission factors for leaks from this equipment
- 2016 – Litigation; agreed to complete Heavy Liquids Study as basis for further rule amendments
- 2018 - Included in AB 617 Expedited BARCT Implementation Schedule pending completion of the Heavy Liquids Study
- 2022 – Heavy Liquids Study report issued

Heavy Liquids Study



- Arose in response to Refinery comments on Emissions Inventory Guidelines issued by the Air District
- Designed to improve obsolete emission factors for components processing Heavy Liquids
- Five-year study conducted jointly with the 5 refineries and WSPA
- Over 10,000 components screened across multiple facilities
- Components in gas/vapor service excluded from study
- Resulting emission factors are lower than those used previously (US EPA)

2023 Draft Amendments



- Subset of components in Heavy Liquid Service added into LDAR program
 - Valves and pumps handling lighter end heavy liquids
 - Components handling heavy liquids in a gaseous or vapor phase
- Additional definitions for clarity and completeness
- More stringent leak standards to reflect those achievable due to advances in equipment
 - 50 ppm for valves and connections, 100 ppm for pumps and compressors
- New operating requirements and standards for selected components
- Enhancement of inspection procedures, reporting and oversight requirements
- Other administrative updates and clarifications

Next Steps



- Q4 2023 – Publication of Draft Amendments and Preliminary Staff Report
- End of Q4 2023 – Publication of Hearing Notice for Draft Proposal and Final Staff Report
- Q1 2024 Board Hearing

Feedback Requested/Prompt



- Questions and comments?