



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 3

Revised Draft Regulation 13: Climate Pollutants, Rule 5: Petroleum Refinery Hydrogen Plants (Rule 13-5)

Stationary Source and Climate Impacts
Committee Meeting
July 19, 2021

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Presentation Outcome



- Provide information and updates on the development of Draft Regulation 13: Climate Pollutants, Rule 5: Petroleum Refinery Hydrogen Plants (Rule 13-5).
- Receive feedback from committee members on the revised Draft Rule and anticipated timeline.

Presentation Outline



- Background
- Rule Development Milestones
- June 2021 Revisions to Draft Rule
- Next Steps

Presentation Requested Action



- None; informational item

Background



- Climate Protection Goals:
 - Reduce greenhouse gas (GHG) emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050.
- Methane:
 - Potent and short-lived climate pollutant
 - Global warming potential:
 - 25 times that of carbon dioxide on a 100-year time horizon
 - 86 times that of carbon dioxide on a 20-year time horizon
- Draft Rule 13-5, Petroleum Refinery Hydrogen Plants:
 - Would limit vented emissions of total organic compounds (including methane)
 - From hydrogen production, hydrogen carrying systems, and hydrogen end users such as process units at petroleum refineries.

Rule Development Milestones



- December 2019 – Preliminary Staff Report and draft regulatory language published for public comment
- January 2020 – Public Workshop at Air District Headquarters in San Francisco
- September 2020 – Request for comments on revised preliminary Staff Report and revised draft rule
- June 2021 – Request for Comments on revised draft rule and Notice of Preparation and Initial Study for Draft Environmental Impact Report
- July 2021 – California Environmental Quality Act Scoping Meeting and tentative Refinery Technical Working Group Meeting
- Board Hearing: Q4 2021

June 2020 Revisions to Draft Rule



- Exemptions added for Deaerator and Carbon Dioxide Scrubbing Vents
- Existing and New Hydrogen Plants now subject to the same emissions standards
- New standard to prevent commingling and dilution as a means of meeting emissions standards
- Reporting requirements minimized and record retention enhanced
- Monitoring and testing methods clarified

Tentative Timeline



Feedback Requested/Prompt



- Questions and comments?



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AGENDA: 4

Refinery Rules Amendments

**Stationary Source and Climate Impacts
Committee Meeting
July 19, 2021**

**Chris Crowley
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Presentation Outcome



- Understand the potential regulatory impacts of refineries transitioning to renewable fuels.
- Be informed about the current rule making effort regarding refining operations.
- Understand the next steps and projected timeline for completion.

Presentation Outline



- Background and timeline for renewable fuels transitions
- Description of issue
- Scope of rules being amended
- Example of what is being proposed
- List of rules and procedures impacted
- Considerations/unintended consequences
- Rule development steps and schedule

Presentation Requested Action



- None – informational presentation

Background Information



- Bay Area is second largest refining center on West Coast.
- Climate is changing.
- 2 of the 5 Bay Area refineries slated to transition to 100% renewable fuels by 2024.
- What are renewable fuels?
- How does this transition affect emissions and regulatory applicability?

Issue and Goals



- There are a lot of unknowns.
- Prevent regulatory back-sliding.
- Ensure negligible California Environmental Quality Act (CEQA) and socioeconomic impacts.
- Ensure status quo is maintained.

Scope of Rule Development Effort



- What needs to be amended?
 - 34 rules
 - Any Air District rule where applicability is based on a narrow definition of *Petroleum*, *Petroleum Refinery*, *Petroleum Gas*, *Gasoline*, *Diesel*, *Fossil Fuel*, *Fuel Oil*, etc.

Example of Rule Amendment



- **Reg. 12, Rule 11 – Flare Monitoring at Petroleum Refineries**
 - **12-11-501 Vent Gas Flow Monitoring:** *“...the owner or operator of a petroleum refinery shall not operate a flare unless vent gas to the flare is continuously monitored for volumetric flow by a device that meets the following requirements:....”*

Example of Rule Amendment (cont.)



- **Reg. 12, Rule 11 – Flare Monitoring at Petroleum Refineries**

CURRENT Definition of Petroleum Refinery:

- ***12-11-205 Petroleum Refinery: A facility that processes petroleum, as defined in the North American Industrial Classification Standard No. 32411, and including any associated sulfur recovery plant.***

Example of Rule Amendment (cont.)



- Reg. 12, Rule 11 – Flare Monitoring at Petroleum Refineries

AMENDED Definition of Petroleum Refinery (excerpt):

- **12-11-205 Petroleum Refinery:** *“...a Petroleum Refinery is an establishment that is located on one or more contiguous or adjacent properties that processes 10,000 BPD or more of crude oil, renewable material, or any other feedstock to produce products such as...”*

List of Rules



Regulation	Rule	Rule Count
Reg. 1: General Provisions	-	1
Reg. 2: Permits	2-1, 2-4	2
Reg. 3: Fees	-	1
Reg. 6: Particulate Matter	6-1, 6-5	2
Reg. 8: Organic Compounds	8-1, 8-2, 8-5, 8-6, 8-7, 8-8, 8-9, 8-10, 8-15, 8-18, 8-22, 8-28, 8-33, 8-39, 8-40, 8-44, 8-53	17

List of Rules (cont.)



Regulation	Rule	Rule Count
Reg. 9: Inorganic Compounds	9-1, 9-7, 9-8, 9-9, 9-10, 9-14	6
Reg. 11: Hazardous Pollutants	11-10, 11-18	2
Reg. 12: Misc. Standards of Performance	12-11, 12-12, 12-15	3
Total # of Rules to be Amended		34

Things to Consider



- Unintended consequences.
- Bringing in new facilities into the regulations.
- Failing to address every necessary definition and section.
- Triggering CEQA or socioeconomic burdens to compliance

Rule Development Schedule



- Quarter 3, 2021 – Draft Rules, requests for public comments
- Quarter 4, 2021 – Staff Report, finalize rules, Board approval

Questions



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