

A poster for public workshops regarding a draft rule. The background is a photograph of the Golden Gate Bridge. In the top left corner is the Bay Area Air Quality Management District logo, which consists of a blue square with white wavy lines. The title "Draft Petroleum Refining Emissions Tracking Rule" is in large, bold, black serif font. Below it, "Public Workshops" is in a smaller, bold, black serif font and is underlined. Three dates and locations are listed: "April 22, 2013 Martinez", "April 24, 2013 Richmond", and "April 26, 2013 San Francisco (webcast)". In the bottom right corner, the name "Brian Bateman" and title "Health & Science Officer" are listed.

**BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT**

Draft Petroleum Refining Emissions Tracking Rule

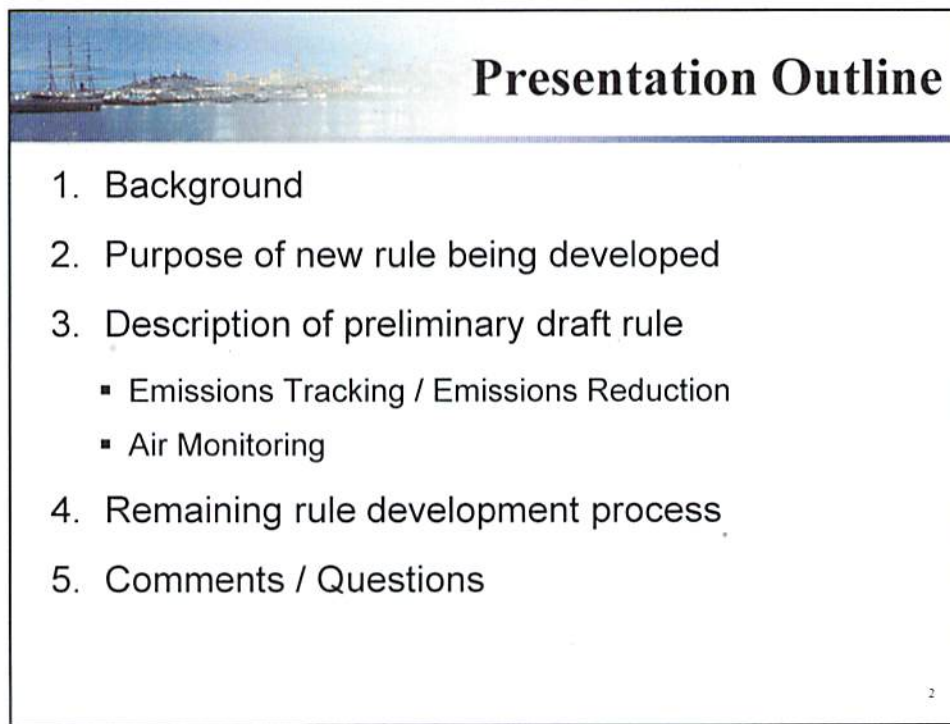
Public Workshops

**April 22, 2013
Martinez**

**April 24, 2013
Richmond**

**April 26, 2013
San Francisco
(webcast)**


**Brian Bateman
Health & Science Officer**

A slide titled "Presentation Outline" with a background image of a harbor with ships. The title is in a large, bold, black serif font. Below the title is a numbered list of five items. The third item has two sub-items marked with square bullets. A small number "2" is in the bottom right corner.

Presentation Outline

1. Background
2. Purpose of new rule being developed
3. Description of preliminary draft rule
 - Emissions Tracking / Emissions Reduction
 - Air Monitoring
4. Remaining rule development process
5. Comments / Questions


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Background

- The Air District regulates “stationary sources” of air pollution
- Bay Area refineries are subject to over 20 separate air quality rules
 - Accidental Release Prevention Programs are carried out by local Administering Agencies
- Significant air emission reductions have been achieved in the Bay Area
- Bay Area air quality has greatly improved, but additional improvements are needed

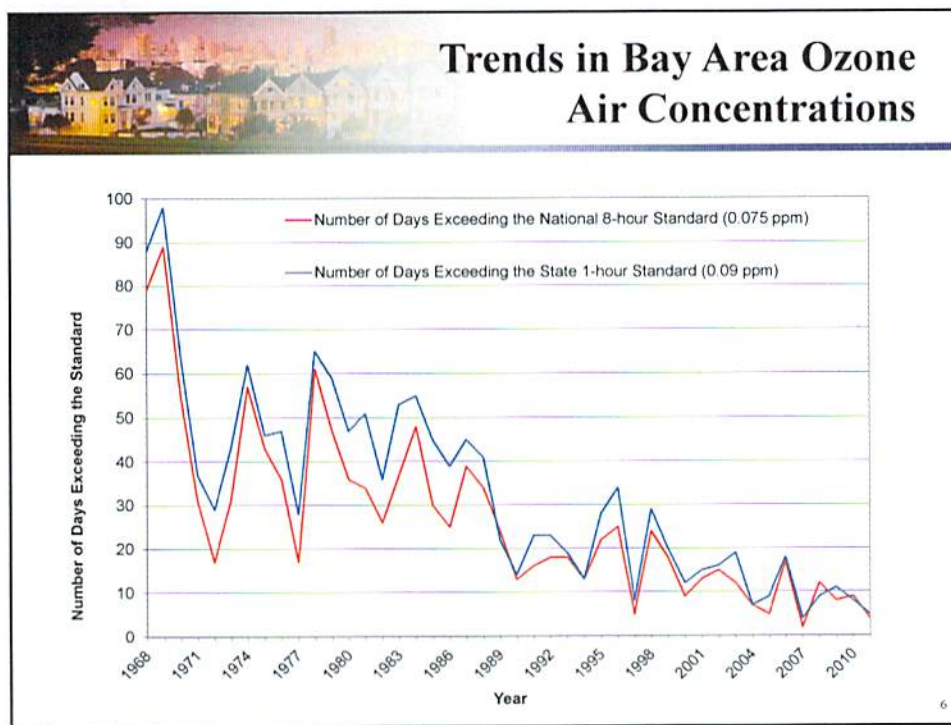
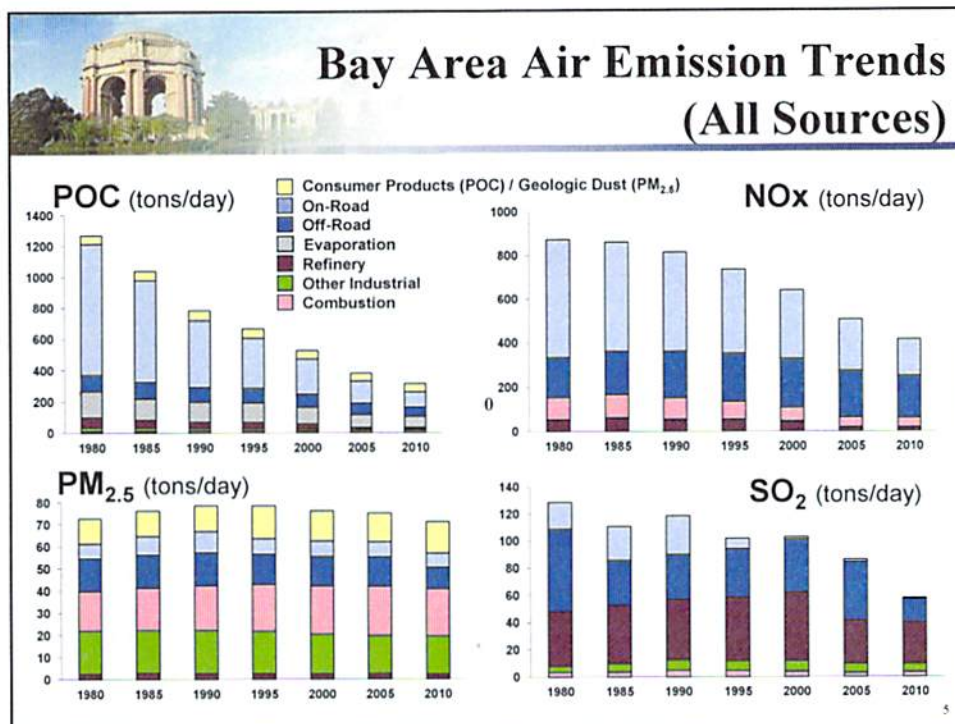
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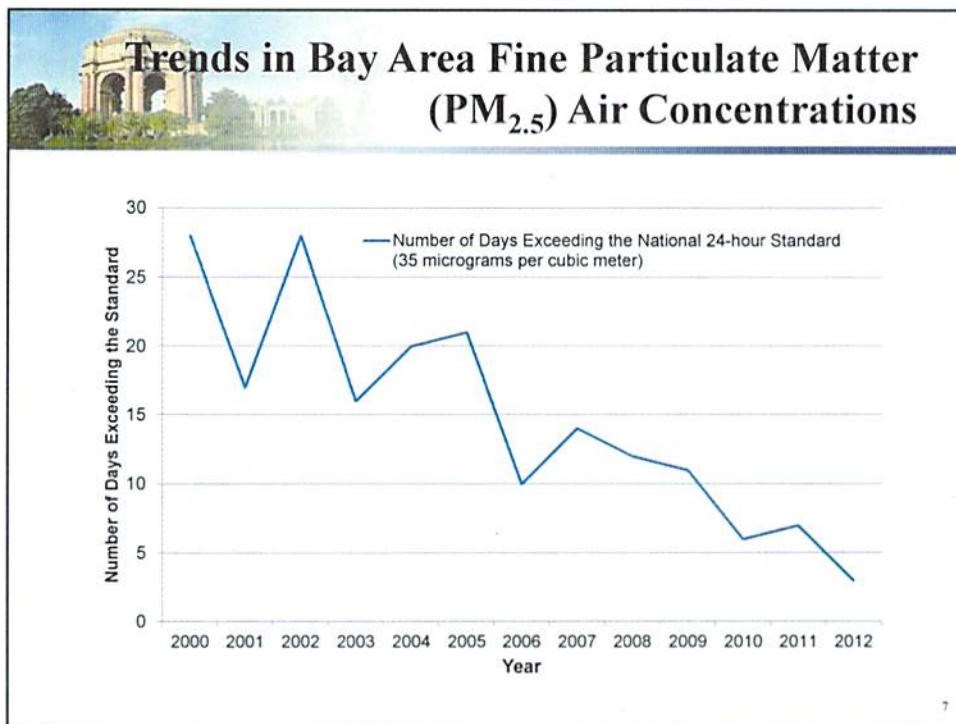


Air Pollutants


- “Primary” versus “secondary” air pollutants
- Criteria pollutants
 - Ozone – the primary component of summer-time smog, is formed in the atmosphere from precursor organic compounds (POC) and nitrogen oxides (NO_x)
 - Particulate Matter (PM) – e.g., PM_{2.5} (“fine” particulate matter)
 - Sulfur dioxide (SO₂)
 - Carbon monoxide (CO)
- Toxic Air Contaminants (TACs)
 - e.g., Benzene, polycyclic hydrocarbons, metals
- Greenhouse Gases (GHGs)
 - e.g., Carbon dioxide (CO₂), methane (CH₄)

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- ### Air District Rule Development Process
1. Develop regulatory concept
 2. Prepare draft rule
 3. Seek public comment
 4. Brief and seek input from Board of Directors
 5. Revise as appropriate into proposed rule
 6. Compile information needed for rule adoption
 - Address socioeconomic and environmental impacts
 7. Board of Directors hold public hearing and consider rule adoption
 8. Implement and enforce adopted rule
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Purpose of Petroleum Refinery Emissions Tracking Rule

- Five petroleum refineries in Bay Area
- Changing crude oil slates (or other factors) may lead to increased air emissions at refineries over time
 - More energy is needed to refine heavier crudes
 - Sulfur or other contaminants, if not removed, could be emitted
 - Increased corrosion could lead to accidental releases
- Approach
 - Similar to that used in Air District Reg. 12-12: Flares at Petroleum Refineries
 - Track air emissions and community air quality over time, and make information available to the public
 - If annual emissions from a refinery increase by more than a small amount:
 1. Require that the cause be analyzed and disclosed
 2. Require that feasible measures be taken to reduce emissions expeditiously


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Description of Draft Rule: Emissions Tracking

- Refinery Emissions Inventory Reports
 - Include emissions of criteria, toxics, and greenhouse gas pollutants from stationary sources
 - Include all types of emissions (i.e., routine / predictable and accidental)
 - Methodology for determining emissions must be consistent with Refinery Emissions Inventory Guidelines (being developed)
 - EPA "Emissions Estimation Protocol for Petroleum Refineries" (2011)
 - Report must document methodology for each source of emissions / pollutant
- Process
 - Each refinery must submit reports to the Air District
 - Air District staff conducts preliminary review – return for revisions if needed
 - Public review
 - Air District staff conducts final review – return for revisions if needed
 - Air District approves or disapproves report


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Baseline and On-going Emissions Inventories

- **Baseline Emissions Inventory**
 - Select calendar year period based on 10 year look-back (2004 – 2013)
 - Exclude non-complying emissions, emissions from reportable accidents
 - Adjust for current emission limits
- **On-going Emissions Inventories**
 - Prepare for each calendar year starting with 2014
 - Revise Baseline Emissions Inventory as needed to maintain consistent methodology
 - Determine if emissions increase from baseline is above "trigger-levels"
 - Emissions based trigger-levels
 - "Impact" based trigger-levels
 - Incremental impacts
 - Cumulative impacts


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Emission Reduction Plans

- **Emission Reduction Plans**
 - Required if emissions from refinery increase above trigger-levels
 - Causal analysis
 - Identify air emission reduction measures to be implemented
 - Measures sufficient to reduce emissions below trigger-levels within 2 years, or
 - All feasible measures based on results of refinery-wide emission reduction audit
 - Measures must be implemented on an expeditious schedule
 - Plans must be updated annually, until emissions are reduced below trigger-levels, to consider additional feasible measures based on changes in technology (or other factors)
- **Process**
 - Refinery must submit plans to the Air District within 90 days of approval of on-going emissions inventory report with increase above trigger-levels
 - Air District staff conducts preliminary review – return for revisions if needed
 - Public review
 - Air District staff conducts final review – return for revisions if needed
 - Air District approves or disapproves plan


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Air Monitoring Plans

- **Air Monitoring Plans**
 - Must include fence-line and community air monitoring systems
 - System design must be consistent with Air Monitoring Guidelines (being developed)
 - Desert Research Institute report (underway)
 - Recommendations from Expert Panel (convene this summer)
- **Process**
 - Each refinery must submit plan to the Air District by Dec. 31, 2014
 - Air District staff conducts preliminary review – return for revisions if needed
 - Public review
 - Air District staff conducts final review – return for revisions if needed
 - Air District approves or disapproves plan
 - Monitoring systems must be operational within 1-year of plan approval
 - Plans need to be revised if guidelines are updated

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Remaining Rule Development Process

- Written comments on preliminary draft rule requested to be submitted by May 31, 2013
- Technical Working Group to be formed
 - Discuss issues and rule language in detail
 - Review Emissions Inventory and Air Monitoring Guidelines
 - Anyone may participate (let us know, will poll workshop attendees)
- May have additional public workshops
- Periodic briefings for Board of Directors (Stationary Source Committee)
- Complete CEQA analysis
- Rule adoption not expected to be considered until first half of 2014

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Comments / Questions

- Information on the development of the new Petroleum Refining Emissions Tracking rule will be provided on the Air District website at:

<http://www.baaqmd.gov/Divisions/Planning-and-Research/Rule-Development/Rule-Workshops.aspx>

- Workshop attendees, commenters, and any other interested individuals will be notified when new documents are posted
- Direct comments and questions to:

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