

Warehouse Indirect Source Rule Considerations

Stationary Source Committee

March 12, 2025

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Presentation Outline

- Background
- Warehouses and Distribution Centers in the Bay Area
- Potential Indirect Source Rule (ISR) Impacts and Considerations
- Updates on Relevant Regulatory Activity
- Possible Timeline and Options for Future Actions



Background

What is an Indirect Source?

Any Facility that attracts mobile sources of emissions...defined by United States Environmental Protection Agency (US EPA) within the Clean Air Act as "... a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution."
 42 U.S.C. § 7410(a)(5)(C)



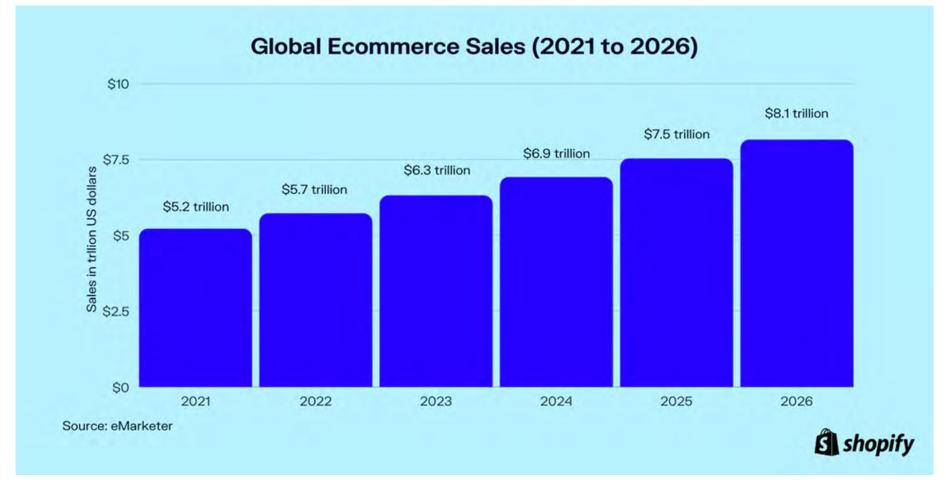
Background: Goods Movement



LAO, "Overview of California's Ports, August 23, 2022



Background: Growth in e-commerce

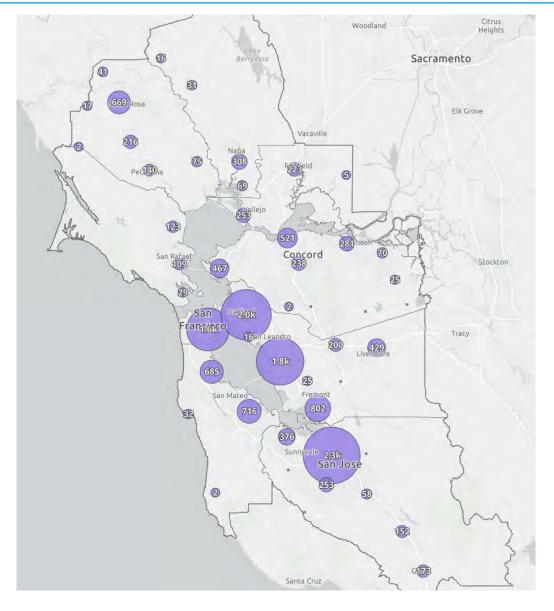


Annual Meeting and Mobile Ecommerce Trends Transforming The Industry In 2023



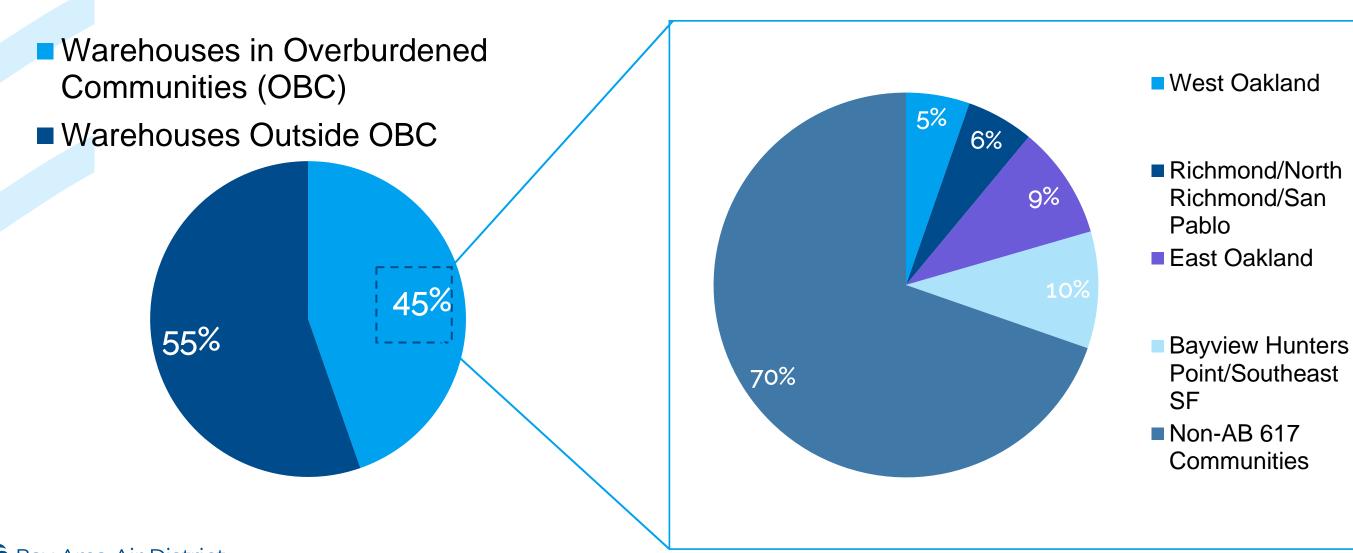
Warehouses in the Bay Area

- ~16,000 total warehouses
- Individual sites range from less than 1000 square feet to more than 1 million (M) square feet





Warehouses in the Bay Area



Indirect Source Rules in Other Air Districts

- San Joaquin Valley Air Pollution Control District
 - Rule 9510: Indirect Source Review
- San Diego Air Pollution Control District
 - Warehouse Indirect Source Rule under evaluation
- South Coast Air Quality Management District (South Coast AQMD)
 - Rule 2305 Warehouse Indirect Source Rule Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program
 - Annual WAIRE points (or mitigation fee) compliance obligation
 - Only applies to warehouses >100,000 square feet (sq. ft.)



Warehouses Greater Than 100,000 Sq Ft

Bay Area

1,000 sites

~200 Million Sq Ft South Coast

3,320 sites

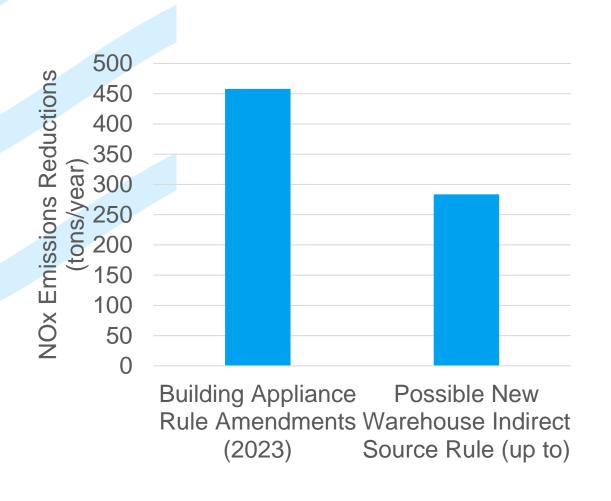
~800 Million Sq Ft San Diego

243 sites

~50 Million Sq Ft



Potential Nitrogen Oxides (NOx) Reductions in the Bay Area

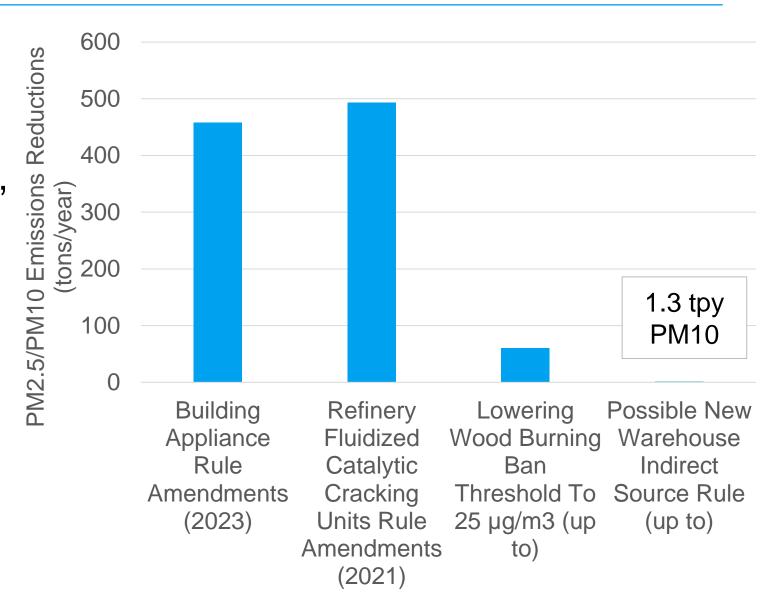


- Screening-level assessment assuming a similar approach as WAIRE
- WAIRE is a NOx-focused rule supporting efforts to attain ozone and fine particulate matter (PM_{2.5}) National Ambient Air Quality Standards



Potential Particulate Matter (PM) Reductions in the Bay Area

- California Air Resources Board (CARB) Truck & Bus, Advanced Clean Trucks, Low NOx Omnibus, and Heavy-Duty Inspection and Maintenance Regulations impact baseline emissions from heavy duty trucks
- Primarily diesel particulate matter reductions





Relevant Regulatory Activities

Advanced Clean Fleets waiver request withdrawn by CARB on 1/13/25

- Advanced Clean Trucks (supply side) program still in effect
- Implementation of additional CARB programs, including incentives in disadvantaged communities, can function to fill the gap
- Requirements for state and local public fleets will continue to move forward
- Emissions estimates assume no Advanced Clean Fleets implementation



Considerations for Next Steps

- Rule Development Process
 - 3 Full Time Equivalent (FTE) staff (~one-third of rulemaking team), plus significant Legal support
 - Approximately 3 years
- Rule and Program Implementation
 - Dependent on rule/program design
 - South Coast AQMD estimated 5 FTE plus technology/data infrastructure needs
- Rule Development Prioritization



Questions/Feedback

For more information:

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Strategic Plan Rule Development Schedule

Stationary Source Committee

March 12, 2025

Victor Douglas
Director
Rules and Strategic Policy



Presentation Outline

- Background
- Current and Planned Rule Development
- Considered Rule Development
- Prioritization Criteria
- Next Steps
- Questions / Discussion

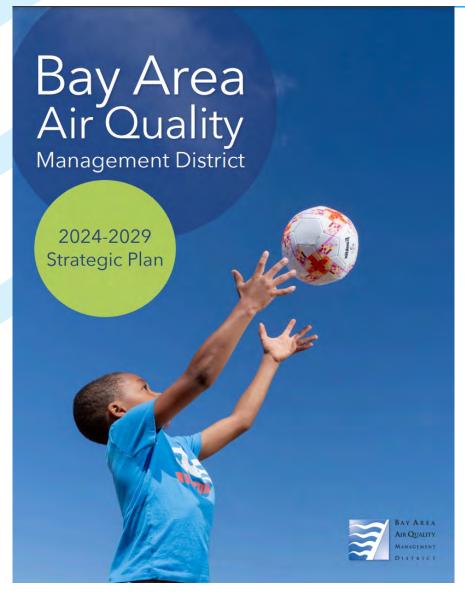


Background

- This is an overview of potential rule development efforts associated with the Strategic Plan including:
 - Efforts presented in the recent updates to this Committee
 - Additional efforts stemming from the Strategic Plan including:
 - Board Direction
 - Community Emissions Reduction Plans (CERPs)
 - Statutory Mandates
 - Staff Recommendations



Strategic Plan Goals



Four Primary Goals:

- Achieve Impact
- Advance Environmental Justice
- Foster Cohesion and Inclusion
- Maintain an Effective, Accountable, and Customer-Oriented Organization



Strategic Plan Goals and Strategies

Effective rules are critical to achieving Goals 1 and 2

Our rules and regulatory development efforts are powerful tools that will help achieve beneficial impacts and further address environmental justice concerns





Current and Planned Rule Development

Project	Impetus / Source
Fugitive Dust (Rules 6-1 & 6-6)	 SP 1.1, 1.2; WOCAP; PTCA; Advisory Council (see note below)
Metal Recycling and Shredding Operations (Rule 6-4)	• SP 1.1, 1.2; WOCAP; PTCA
Toxic Risk at Existing Facilities Phase I (Rule 11-18)	• SP 1.1, 1.2; PTCA
Appliance Rules Flexibility (Rules 9-4 & 9-6)	 SP 1.1, 1.2; Health Protection; Particulate Matter Attainment
Woodburning Devices (Rule 6-3) and Open Burning (Reg 5)	• SP 1.1, 1.2; WOCAP; PTCA

- Strategic Plan (SP) 1.1: Change Approach to Air Quality
- SP 1.2: Stronger Regulations

- WOCAP: West Oakland Community Action Plan
- PTCA: Path to Clean Air



Current and Planned Rule Development (cont.)

Project	Impetus / Source
Indirect Source Rule (Reg 11 or 12)	• SP 2.1, BOD, WOCAP, PTCA
Refinery Fenceline Monitoring (Rule 12-15)	 SP 2.2, 4.4, PTCA, Staff
Refinery Emissions Inventory (Rule 12-15)	• SP 2.1, 2.2, 4.1, PTCA, Staff
Backup Generators (Rules 2-1& 2-5)	PTCA, Staff
State Implementation Plan (SIP) - (Federal Clean Air Act Requirements) Amendment Package	• RACT/RACM

- **SP 2.1:** Community Partnership
- SP 2.2: Collect Community Data
- **SP 4.1:** Timely Permits
- SP 4.4: Improve Air Monitoring

- RACT: Reasonably Available Control Technology
- RACM: Reasonably Available Control Measure
- BOD: Board of Directors



Considered Rule Development

Project	Impetus / Source
Minimize Flaring (Rules 12-11 & 12-12)	• SP 1.3, PTCA
Permitting Efficiencies / BACT (Rules 2-1 & 2-2)	• SP 4.1, 4.2, 4.3, 4.7
Backup Generators / Data Centers (new)	• SP 2.1, PTCA
Toxic Risk at Existing Facilities Phase II (Rule 11-18)	• SP 2.1, PTCA
Refinery Nitrogen Oxides (NOx) Emissions (new)	• SP 2.1, PTCA
Refinery Sulfur Oxides (SOx) Emissions (new)	• SP 2.1, PTCA

- **BACT:** Best Available Control Technology
- **SP 1.3:** Minimizing Flaring
- SP 2.1: Community Partnership
- **SP 4.1:** Timely Permits

- **SP 4.2:** Transparent Permit Process
- **SP 4.3:** Consistent Permits
- SP 4.7: Customer Service



Considered Rule Development (cont.)

Project	Impetus / Source
Refinery-Specific Toxic Rules (new)	• SP 2.1, PTCA
Health-Based PM Rules (new)	• SP 1.1, 1.2; PTCA; Staff
Toxic New Source Review / Cumulative Impacts (Rule 2-5)	• SP 1.1, 1.2; PTCA; Staff
Organics Materials Handling and Composting Operations	• SP 4.1, 4.2, 4.3; Staff
Organic Storage Tanks (Rule 8-5)	• SP 1.1, 1.2; Staff
Industrial Boilers, Steam Generators, Process Heaters (Rule 9-7)	• SP 1.1, 1.2; Staff
Autobody Operations (Rule 8-45)	WOCAP, PTCA

- PM: Particulate Matter
- **SP 1.1:** Change Approach to Air Quality
- **SP 1.2:** Stronger Regulations

- **SP 4.1**: Timely Permits
- **SP 4.2:** Transparent Permit Process
- **SP 4.3:** Consistent Permits



Other Potential Rule Development Efforts

Project	Impetus / Source
Landfill Gas (Rule 8-34)	Milpitas Odor Study / SP 1.7 / Staff
Soil Vapor Extraction Permitting Efficiency (Rule 8-47)	• SP 4.1, 4.2, 4.3; Staff
Research Operations Permitting Efficiency (new)	• SP 4.1, 4.2, 4.3, 4.7; Staff
Metal Foundries and Forging Evaluation (Rule 12-13)	• WOCAP
Periodic Review of Controls and Impacts at Permit Renewal	• SP 4.1, 4.2, 4.3, 4.7; Staff
Asbestos Demolition MOP Update (Rule 11-2)	• SP 4.1, 4.2, Staff

Note:

• SP 1.7: New Climate Solutions

• **SP 4.1:** Timely Permits

• **SP 4.2:** Transparent Permit Process

• **SP 4.3:** Consistent Permits

SP 4.7: Customer Service



Prioritization Criteria

- Board Direction
- Air Quality Benefits & Impacts
- Air Quality Mandates (e.g., SIP, legislation)
- Community Emissions Reduction Plans
- Strategic Plan Alignment
- Air District Resource Constraints





Next Steps

- Further review and prioritize rules list and create 5-year schedule
- Socialize with Air District stakeholders:
 - Community Partners: Community Steering Committees, Community Advisory Council
 - Regulated Industry Representatives & Associations
- Report to the Stationary Source Committee
- Revise rules list as appropriate



Questions?

For more information:

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