



Warehouse Indirect Source Rule: Overview, Concept Paper, and Next Steps

Stationary Source Committee

June 10, 2026

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Presentation Outline

- Background
- Regulatory Context
- Rule Concepts
- Stakeholder Engagement and Public Workshops

Background

Warehouses as indirect/magnet sources

Warehouses attract activity from sources like heavy-duty trucks and cargo handling equipment, thereby *indirectly* causing emissions. An indirect source rule (ISR) would require warehouse operators to reduce emissions.



Background: Goods Movement



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

Recap of Committee Presentations

March 2024

- Background on indirect sources; regulatory landscape; Assembly Bill (AB) 617 impacts

September 2024

- Emissions data; considerations for managing indirect sources

November 2024

- Marine emissions; emissions inventory; AB 617 community assessments

March 2025

- Potential warehouse ISR emission reductions; regulatory update

Regulatory Context: Federal and State

Clean Air Act – 42 U.S.C. § 7410(a)(5)

(A)

(i) Any State may include in a State implementation plan, but the Administrator may not require as a condition of approval of such a plan under this section, any **indirect source review program**...

(C) For purposes of this paragraph, the term “**indirect source**” means a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution.

California Health and Safety Code § 40716

(a) In carrying out its responsibilities pursuant to this division with respect to the attainment of state ambient air quality standards, a district **may adopt and implement regulations** to accomplish both of the following:

(1) Reduce or mitigate emissions from **indirect** and areawide sources of air pollution.

(2) Encourage or require the use of measures which reduce the number or length of vehicle trips.

Regulatory Context: Federal and State (cont.)

- Advanced Clean Fleets (ACF) was expected to drive significant heavy-duty emission reductions
- California Air Resources Board (CARB) withdrew its waiver request for ACF, In-Use Locomotive Regulation, Commercial Harbor Craft
- Other CA regulations affected by federal action: Advanced Clean Trucks, Heavy Duty Low Nitrogen Oxides (NOx) (“Omnibus”), Clean Truck Check (Heavy Duty Inspection/Maintenance)
- More impetus for local agency action, e.g. ISRs

Regulatory Context: Other Air District ISRs

- 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 (SCAQMD)
 - Rule 2304: Commercial Marine Ports
 - *Initially a Ports ISR but changed to a cooperative agreement on zero-emission infrastructure planning*
 - Rule 2305: Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program
 - Rule 2306: Freight Rail Yards Indirect Source Rule

SCAQMD WAIRE

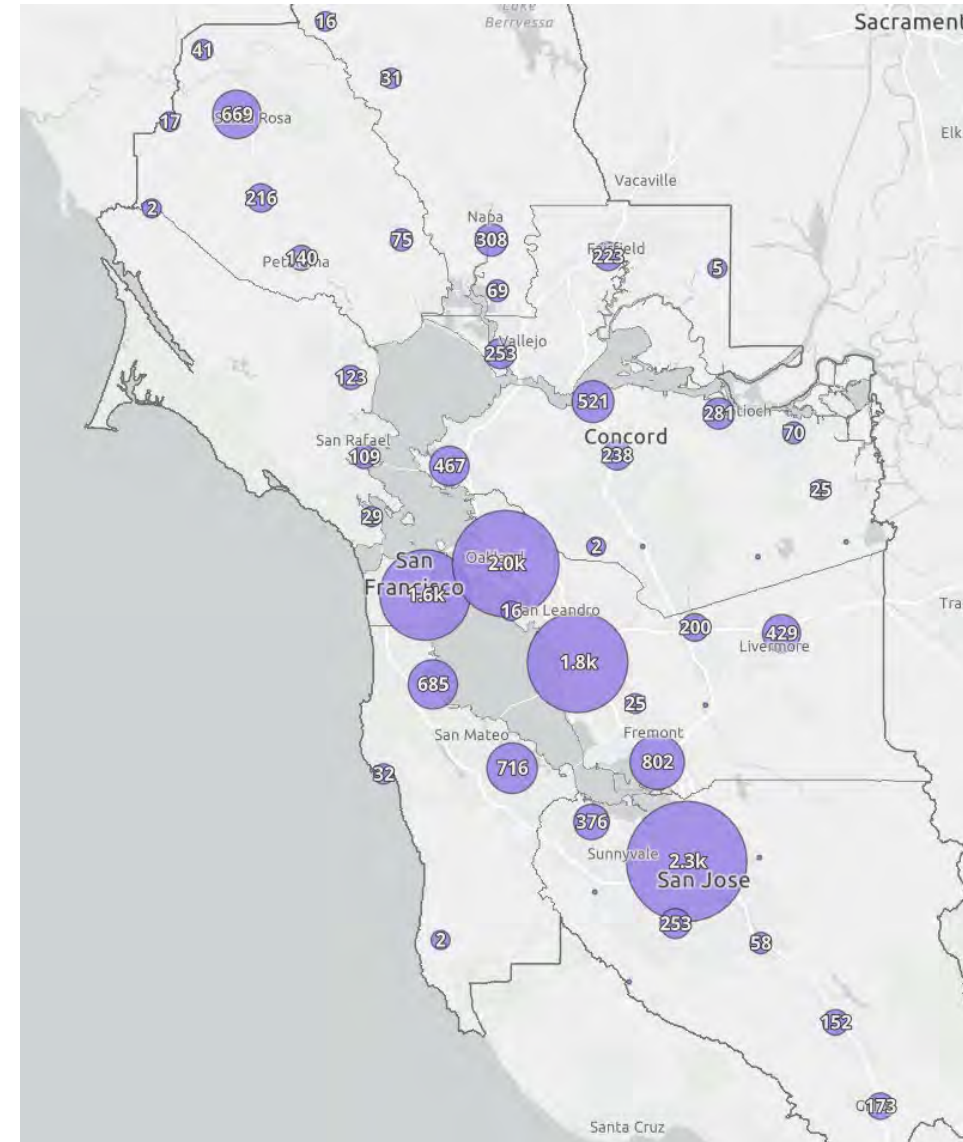
Key Elements of WAIRE

- Applicability: warehouses >100,000 square feet (sq. ft.)
- Requirement: earn required WAIRE points annually, based on site activity
- Compliance options: select actions from a menu, submit custom WAIRE plan, or pay mitigation fee
- Implementation: three-phase implementation based on warehouse size with ramp up to full stringency (*% stringency values below*)

Warehouse Size	2022	2023	2024	2025	2026 onwards
≥ 250,000 sqft.	33%	67%	100%	100%	100%
≥ 150,000 to < 250,000 sqft.	0%	33%	67%	100%	100%
≥ 100,000 to < 150,000 sqft.	0%	0%	33%	67%	100%

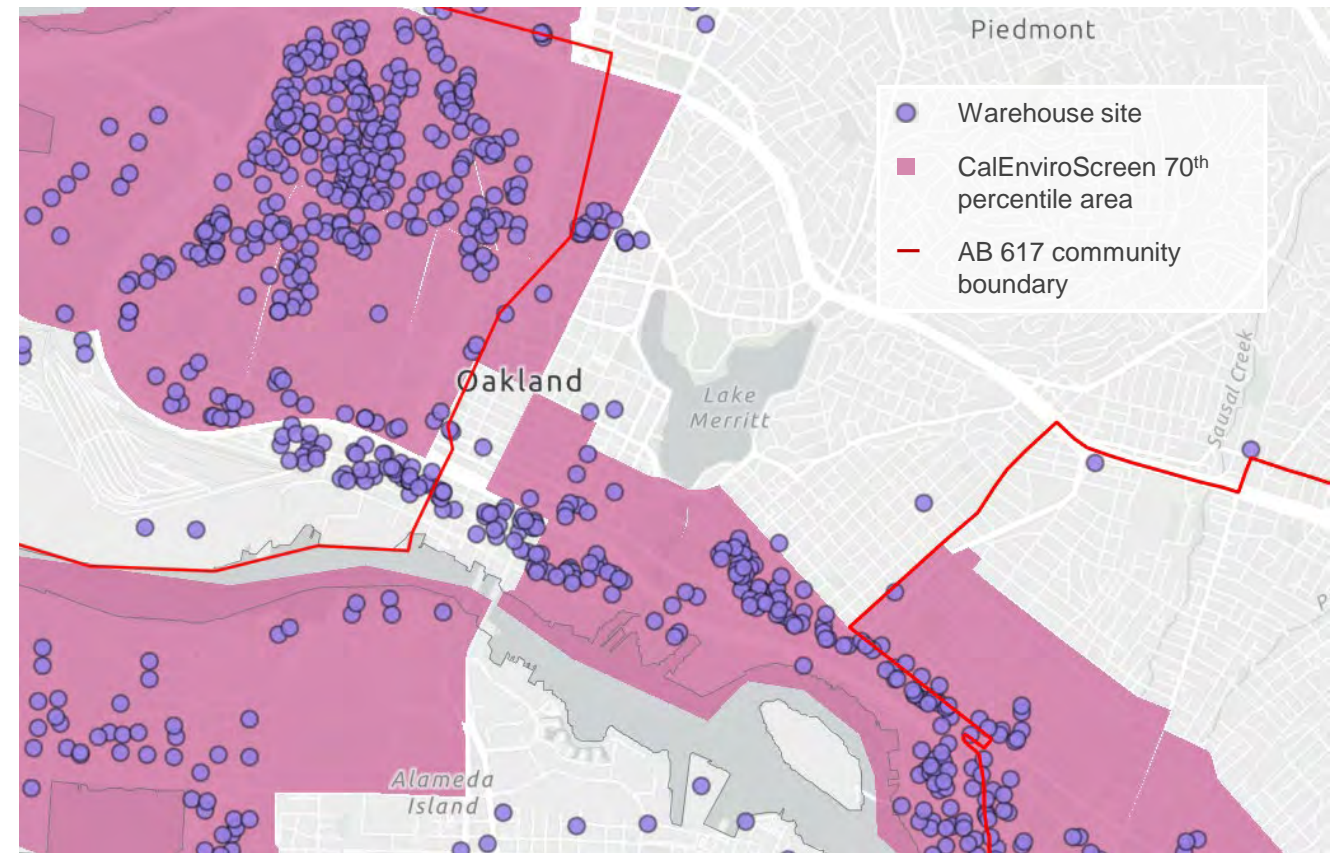
Warehouses in the Bay Area

- ~16,000 total warehouses across 9 counties
- Individual sites range from less than 1000 square feet to over 1 million square feet



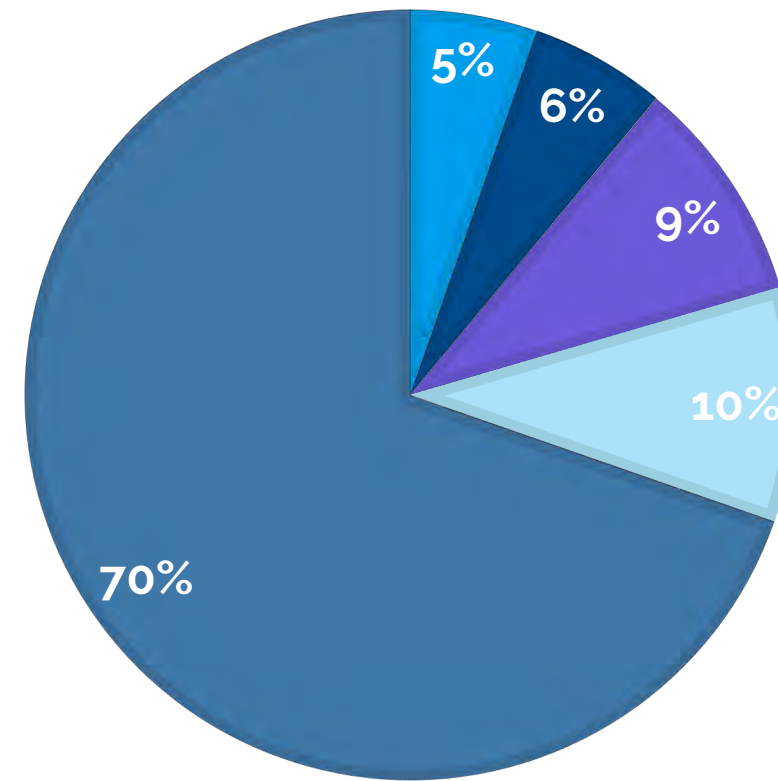
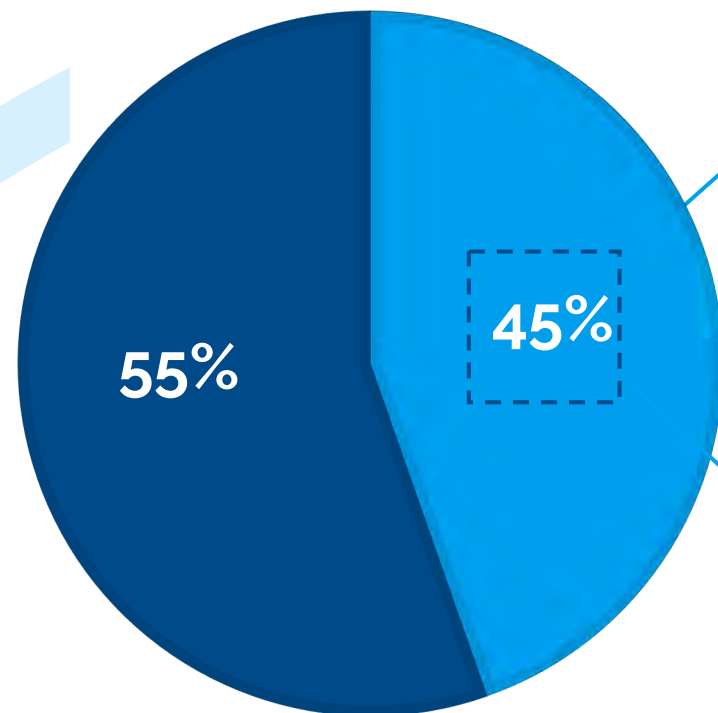
Warehouses in the Bay Area (cont.)

- Many warehouses are in impacted communities
- There is a wide range in warehouse sizes and activity levels which creates a cumulative impact on air quality



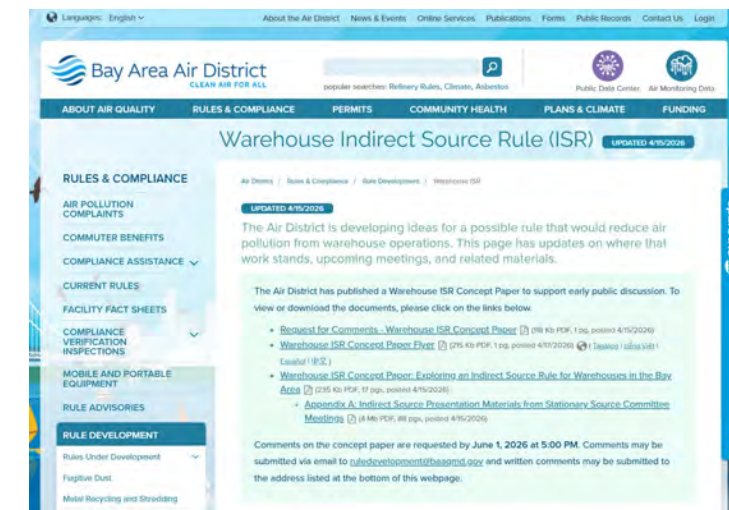
Warehouses in the Bay Area (cont.)

- Warehouses in Overburdened Communities (OBC)
- Warehouses Outside OBC



Warehouse ISR Concept Paper

- Published a concept paper on April 16 outlining initial regulatory concepts
- Public comment period closed June 1
- Launched alongside an ISR landing page, new mailing list, and plain-language flyer



Concepts: Applicability

Warehouse Floor Area Category (square feet)	Number of Warehouses	Total Floor Area (square feet)	Number of Warehouses in Overburdened Communities (OBCs)	Percent of Total Warehousing Floor Area	Percent Floor Area in OBCs
450k+	50	38,865,787	15	8%	30%
350k–450k	36	14,167,491	12	3%	33%
250k–350k	121	34,819,276	46	7%	38%
150k–250k	297	57,399,770	119	12%	40%
100k–150k	521	62,061,949	194	13%	37%
50k–100k	1,268	88,539,393	442	18%	35%

- Considering an applicability threshold of 100,000 square feet
- Potential lower threshold for warehouses in impacted communities

Concepts: Implementation

Phase 1

- Establish reporting requirements and flexible compliance menu
- Collect fleet and operational data



Phase 2

- More targeted requirements, focused on local exposure and health risk

Concepts: Compliance Options

Activity-based allocation

- Set Bay Area emission reduction goals
- Allocate compliance obligation based on truck activity

Reduction from baseline

- Establish baseline emissions per facility
- Percentage reduction requirement

Screening-based approach

- Screening assessment determines obligation based on warehouse size, location, other factors

Two-stage obligation

- Set initial emission reduction target
- Refine target with additional data or health risk assessment

Concepts: PM Reductions, Reporting and Emissions Benefits

- Focus on particulate matter reductions, potentially assigning greater weight to Particulate Matter (PM)-reducing actions
- One time Warehouse Operations Notification and Initial Site Information Report, followed by annual compliance reporting
- Screening-level analysis shows reductions of 280 tons per year of NO_x and 1.3 tons per year of PM₁₀
- Important Co-Benefit of health risk impact reductions correlated with PM₁₀ reductions in overburdened communities

Stakeholder Engagement

- Direct outreach to stakeholders
- Public comment on the concept paper closed on June 1
- Public workshops in Quarter (Q)3 2026

Public Comments

Summary of Public Comments

- Number of Comments
- Stakeholders Commenting
- General Themes

Questions & Discussion

For more information:

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Mid-Year Review of the 2026-2027 Regulatory Agenda

Stationary Source Committee

June 10, 2026

David Joe
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Regulatory Development Division



Abbreviations

AB: Assembly Bill

CAC: Community Advisory Council

CEQA: California Environmental Quality Act

PM: Particulate Matter

PTCA: Path to Clean Air

RACT/RACM: Reasonably available control technology/control measure

SIP: State Implementation Plan

SSC: Stationary Source Committee

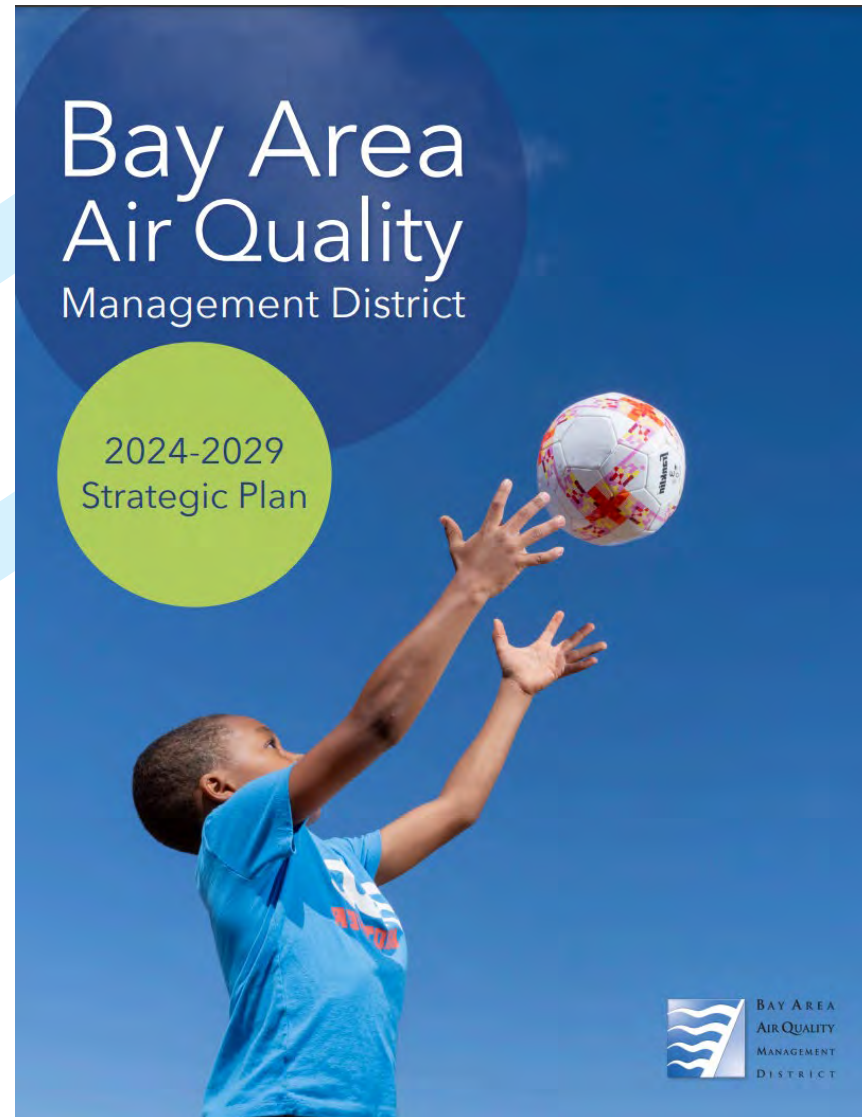
TAC: Toxic Air Contaminant

WOCAP: West Oakland Community Action Plan

Overview

- Rule Development Plan Background
- How Do We Prioritize Rule Projects?
- Current and Planned Rule Development
- Other Considered Rule Development
- Next Steps

Strategic Plan Goals



Four Primary Goals:

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

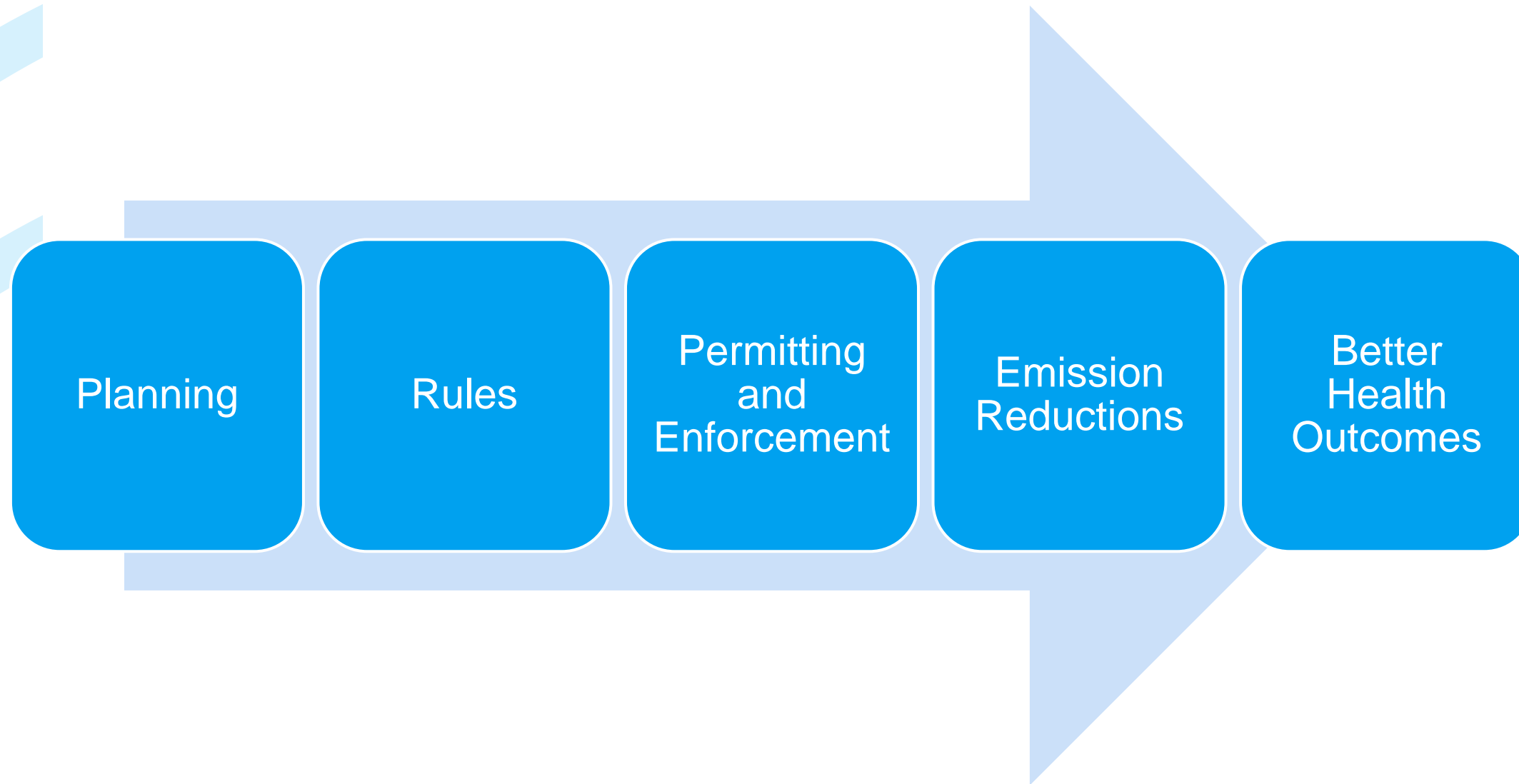
Strategic Plan Goals and Strategies

Effective rules are critical to achieving every Goal in the Air District's Strategic Plan

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



How Rules Fit In



Prioritization Criteria

- Board Direction
- Air Quality Benefits & Impacts
- Identification of Unregulated Sources of Air Pollution
- Air Quality Mandates (e.g., SIP, legislation)
- Community Concerns / Stakeholder Input
- Community Emissions Reduction Plans
- Strategic Plan Alignment
- Air District Resource Constraints



Rule Development Impetus Sources

- Right to Breathe: East Oakland Community Air Quality Justice Plan
 - East Oakland Community Steering Committee
 - Communities for a Better Environment
- Path to Clean Air (PTCA)
 - Richmond-North Richmond-San Pablo Community Steering Committee
- West Oakland Community Action Plan (WOCAP)
 - WOCAP Steering Committee
 - West Oakland Environmental Indicators Project
- Community Advisory Council
- Air District staff input

Current & Planned Rule Development

Project	Milestone / Timing
Toxic Risk at Existing Facilities (Rule 11-18) Phase I – Efficiency and Implementation Improvements	Public Hearing / June 2026
Minimize Flaring (Rules 12-11 & 12-12) & “Flaring 101”	RTWG Meeting / July 2026
Rulemaking Socioeconomic Impact Analysis Policy	SSC Presentation / July 2026
Refinery Fenceline Air Monitoring and Emissions Tracking Programs (Rule 12-15 & 12-17)	SSC Presentation / July 2026
Building Appliance Rules – Flexibility and Affordability Amendments for Water Heaters (Rule 9-6)	Public Hearing / November 2026
Building Appliance Rules – Amendments for Furnaces (Rule 9-4)	IWG Report / December 2026

Note:

- **Draft:** Draft Rule Language for Public Comment
- **RTWG:** Refinery Technical Working Group
- **IWG:** Implementation Working Group

Rule 9-6 Board Hearing

- Updated staff recommendation for **November 2026** Board Hearing to allow additional time to:
 - Incorporate recent Board discussion and comments received from stakeholders including affordable housing providers
 - Release draft regulatory language in June 2026 and fully consider and address public comments
 - Complete analysis of socioeconomic impacts and ensure CEQA requirements are met

Current & Planned Rule Development (cont.)

Project	Milestone / Timing
Metal Recycling and Shredding Operations (Rule 6-4)	Publish Draft / Q3 2026
Fugitive Dust (Rules 6-1 & 6-6)	Publish Draft / Q3 2026
Toxic Risk at Existing Facilities (Rule 11-18) Phase II – Stringency Improvements	Initiate Rule Development / Q3 2026
Indirect Source Rule (new)	Public Workshops / Q3 2026
Backup Generators (new)	Publish Concept Paper / Q4 2026
Permitting Efficiencies (Rules 2-1, 2-2, 2-5)	Regulatory Concepts / Q4 2026
Rule Updates for Federal Air Quality Planning Requirements	Complete RACT/RACM Analysis / Q1 2027

Note: Draft: Draft Rule Language for Public Comment

Considered Rule Development

Project by Priority	Impetus / Source
Toxic New Source Review / Cumulative Impacts (Rule 2-5)	Community Concerns / Staff Recommendation / CAC Priority
Refinery-Specific Toxic Rules (new)	Community Concerns
Health-Based PM Rules (new)	Community Concerns / Staff Recommendation / CAC Priority
Permitting Upgrades (Rules 2-1, 2-2, & 2-5)	Community Concerns / Staff Recommendation

Considered Rule Development (cont.)

Project	Impetus / Source
Refinery Sulfur Oxides (SOx) Emissions (new)	Community Concerns
Refinery Nitrogen Oxides (NOx) Emissions	Community Concerns
Organics Materials Handling and Composting Operations	Community Concerns / Staff Recommendation
Organic Storage Tanks (Rule 8-5)	Community Concerns / Staff Recommendation
Industrial Boilers, Steam Generators, Process Heaters (Rule 9-7)	Community Concerns
Autobody Operations (Rule 8-45)	Community Concerns

Next Steps

New Clean Air Plan

- Help meet Air District Strategic Plan commitments and address state and federal planning requirements
- Propose control measures to meet regional air quality standards and minimize disproportionate exposure to PM and TACs
- Upcoming work
 - Conduct stakeholder engagement
 - Complete technical analyses
 - Develop and select control measures

Next Steps (cont.)

- Frequently evaluate resource needs to stay on track
- Evaluate any new and changing mandates
- Continually consult with communities
 - AB 617 Community Meetings
 - Refinery Corridor Bimonthly
 - Refinery Technical Working Group
 - Community Advisory Council
 - Responding to Community Complaints and Concerns
- Routinely report to the Committee and Board of Directors

Questions & Discussion

For more information:

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