



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 4

Update to the 2024-2025 Regulatory Agenda

**Stationary Source Committee
September 11, 2024**

**Victor Douglas
Director**

Rules and Strategic Policy
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Presentation Requested Action

- None; informational item.

Presentation Outcome

- Discussion of updates to the 2024-2025 Regulatory Agenda

Presentation Outline

- Current and Upcoming Commitments
- Recent Updates
 - Appliance Rules Changes for United States Environmental Protection Agency (US EPA) State Implementation Plan (SIP) Approval
 - Adopted Strategic Plan:
 - Fenceline and Community Monitoring
 - Minimizing Flaring
 - Permitting Efficiency
- Next Steps
- Discussion

Updating our Prioritization Process

Why update our prioritization process?

- Increase in committed and potential regulatory efforts



- Strategic Plan calls for regulatory efforts to
 - Protect the health of communities impacted by air pollution
 - Free up agency resources to focus on these communities

Updating our prioritization process to

- Consult with key stakeholders and communities
- Align with Strategic Plan and agency budget
- Ensure adequate resourcing

Regulatory Commitments

Rule	Type of Effort	Impetus
<i>In Progress Rules</i>		
Rule 6-4: Metal Shredding and Recycling	Rule Development	West Oakland Community Action Plan (WOCAP) Strategy 68; Path to Clean Air (PTCA) Measure Commercial and Industrial (C&I) 4.5
Rule 6-3: Wood Burning Devices	Rule Development	WOCAP Further Study Measure 5; PTCA Measure Public Health (PH) 2.5
Rules 9-4 and 9-6: Zero Nitrogen Oxides (NOx) Building Appliance Rules	Implementation	Health Protection; Particulate Matter Attainment

Regulatory Commitments (cont.)

Rule	Type of Effort	Impetus
<i>Not Started</i>		
Flaring	White Paper	Adopted Strategic Plan Strategy 1.3; PTCA Measure Fuel Refining (FR) 2.6
Nitrogen Oxide (NOx) Sources at Refineries	White Paper / Regulatory Evaluation	PTCA Measure FR 5.5
Autobody	White Paper	WOCAP Stationary Sources 71; PTCA Measure C&I 5.2
Commercial Cooking	White Paper	WOCAP Stationary Sources 87
Indirect Source Rule	Regulatory Evaluation	WOCAP Mobile Sources 67; PTCA Measure Mobile 1.4; Board Direction
Sulfur Oxide (SOx) Sources at Refineries	White Paper / Regulatory Evaluation	PTCA Measure FR 5.6
Backup Generators	White Paper	PTCA Measure C&I 5.1

Regulatory Commitments (cont.)

Rule	Type of Effort	Impetus
Rules Based On Particulate Matter (PM) Health Risk Methodology	New Rule(s)	PTCA Measure FR 5.3
Rule 11-18 (Stringency Improvements)	Rule Development	PTCA Measure FR 4.1
Source-specific Toxic Rules	New Rule(s)	Adopted Strategic Plan Strategy 1.2; PTCA Measure FR 4.5
Rule 2-5 Efficiencies	Rule Development	Engineering Audit Corrective Action Plan
Rule 12-15 Efficiencies	Rule Development	Engineering Audit Corrective Action Plan/Need for community-driven fence-line monitoring enhancements
Backup Generators (Permitting Efficiencies)	New Rule	Engineering Audit Corrective Action Plan
Best Available Control Technology (BACT) (Permitting Efficiencies)	New Rule	Engineering Audit Corrective Action Plan

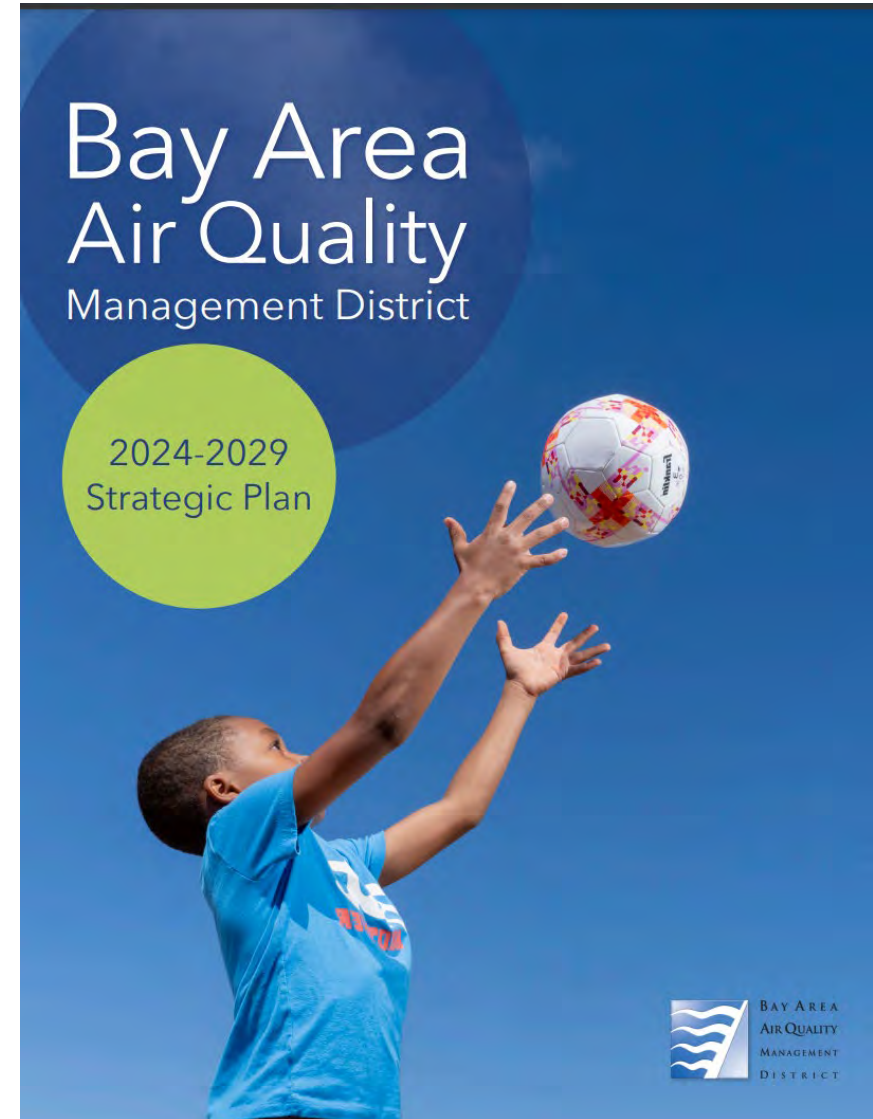
Recent Updates – Appliance Rules Changes for US EPA SIP Approval

- 2023 amendments to Rules 9-4 and 9-6 submitted to US EPA for SIP Approval
- US EPA requesting administrative changes to ensure enforceability, will issue **conditional approval** of amendments into the SIP
 - Letter of commitment to include these changes only
 - Expected rule proposal in Quarter 4 2025
- Discussion about timelines and additional factors to occur at December Board Meeting



Recent Updates – Strategic Plan Commitments for Fenceline and Community Monitoring

- Adopted Strategic Plan:
 - “Make Data Accessible (Strategy 2.3)
 - “Understand Local Air Pollution” (Strategy 2.7)
- Recent Legislation:
 - Senate Bill (SB) 674: Refinery Air Pollution Transparency & Reduction Act (vetoed)
 - AB 2851: Metal Shredding Facilities – Fenceline Monitoring (passed legislature)
- Stakeholder engagement to gather input on monitoring improvements
- Develop rule language and guidelines



Recent Updates – Strategic Plan Commitments to Minimizing Flaring

We Will...



“Explore ways to minimize flaring.”

“Increase public engagement on flaring.”

“Share timely, accessible information.”

“Increase inspections and air pollution monitoring where flaring occurs.”

Permitting Efficiencies (Strategy 4.1)

High Priority Efforts

- Rule 11-18: Toxic Risk Reduction at Existing Facilities
 - Process streamlining to speed requirements to install pollution controls and to reduce staff workload in order to address permit backlog
- Rule 12-15: Refinery Emissions Tracking
 - Improve efficiency of the development of emissions estimates for refineries
- Backup Engines Registration: Rule 2-1: Permitting General Requirements and Rule 9-8: Internal Combustion Engines
 - Simplify permitting of backup generators while ensuring protection of public health

Next Steps

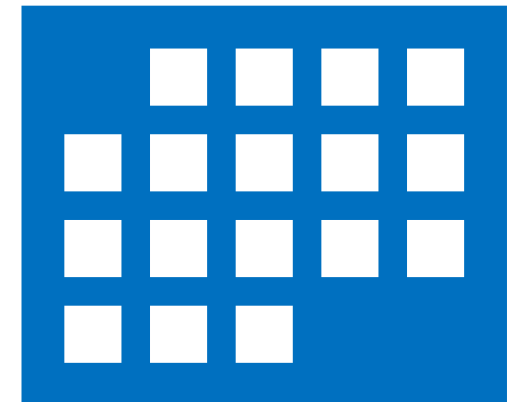
Appliance Rules 9-4 & 9-6:

- December Board update on implementation progress
- Submit Commitment Letter to US EPA
- Initiate limited rule revision

Fenceline and Community Monitoring

- Technical Analyses
- Public Engagement
- Initiate rule making

CALENDAR



Next Steps (cont.)

Minimizing Flaring Rules 12-11 & 12-12

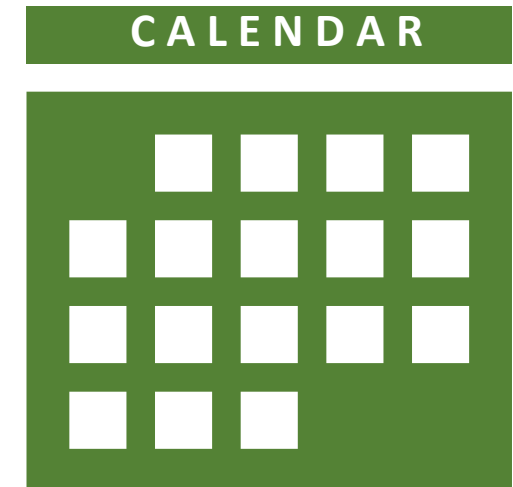
- Technical Analyses
- Public Engagement
- Initiate rule making

Permitting Efficiency

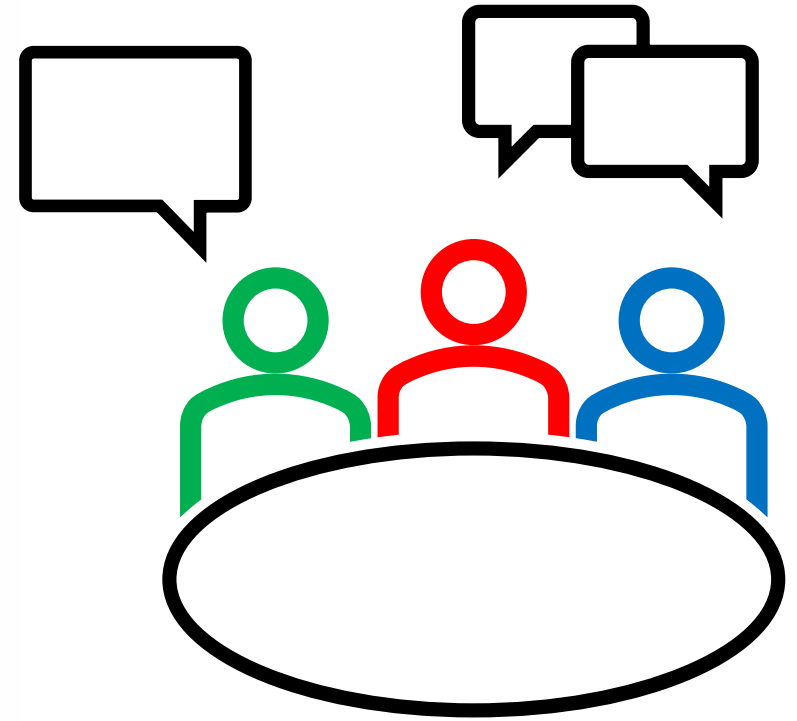
- Coordinate internally
- Draft plan of action

Engage Stakeholders and Board of Directors

- Prioritization of efforts
- Resource analyses



Discussion





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AGENDA: 5

Update on Indirect Sources

**Stationary Source Committee Meeting
September 11, 2024**

Laura Cackette
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Mark Tang
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Presentation Outcome

- Informational item
- Provide update on indirect sources, rule development opportunities, and other policy tools – and discuss next steps

Outline

- Recap of March Presentation, Background, Objective
- Regulatory Landscape
- Emissions Overview
- Rule Development as a Tool
- Local Action to Address Indirect Sources
- Next Steps Discussion

Recap of March Presentation

- **Presentation Contents**

- Overview of indirect emissions sources, growth, and current regulatory landscape
- Impacts on air quality, especially Assembly Bill (AB) 617 and overburdened communities
- Challenges related to existing and future indirect source efforts, including both legal and technical implementation challenges

- **Committee Discussion**

- Concern about warehouses as indirect sources
- Consult with South Coast Air Quality Management District (SCAQMD) on their Indirect Source Regulations (ISR) efforts
- Follow up with committee on potential approaches for addressing impacts from indirect sources

Recap of Background

- Clean Air Act: “Indirect source” means a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution
 - Trucks, Cargo Handling Equipment, Ships, Trains, Cars, etc.
- Existing Regulations
 - Existing statewide "direct" regulations for mobile sources
 - Additional federal/international "direct" regulations for some mobile sources
 - Regional and local rules, ordinances, and policies from air districts and local governments addressing indirect sources

Recap of Objective

- Conduct a Preliminary Analysis for a Bay Area Indirect Source Rule
 - Including assessment for warehouses
- Assessment covers
 - Regulatory Landscape
 - Emissions
 - Resource Needs
 - Other Tools

Regulatory Landscape – Air Districts

- Indirect Source Regulations from Other Air Districts
 - SCAQMD, San Joaquin Valley Air Pollution Control District (APCD), San Diego APCD (in development)
- SCAQMD
 - Rule 2305: Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program
 - Adopted and currently being implemented
 - Rule 2306: Freight Rail Yards
 - Adopted August 2, 2024
 - Proposed Rule 2304: Commercial Marine Ports – Container Terminals
 - Under development

Regulatory Landscape – Statewide [California Air Resources Board (CARB)]

- For warehouses, the predominant source of emissions is trucks
- CARB Regulations for Medium- and Heavy-Duty Trucks
 - Truck and Bus Rule – Port and Non-Port Trucks
 - Final deadline in the regulation was January 1, 2023: required upgrade of existing trucks to 2010 or newer model year engines
 - Advanced Clean Trucks
 - Requirement to sell zero-emission trucks as an increasing percentage of California sales from 2024 to 2035
 - Advanced Clean Fleets
 - Accelerating the deployment of zero-emission medium and heavy-duty trucks in order to achieve a zero-emission California truck and bus fleet by 2045
- State regulations are **expected to provide significant emissions reductions over the next 5-15 years, and beyond**

Regulatory Landscape – New Legislation

Assembly Bill (AB) 98 (Carillo) would require:

- Statewide warehouse design and building standards
- Truck routing plans
- Updates to City and County General Plan Circulation Elements
- SCAQMD:
 - Establish a process for receiving community input for WAIRE penalties
 - Deploy mobile air monitoring at warehouse developments, conduct air modeling analysis, and evaluate impact to sensitive receptors

Approved by State Legislature
For Governor's Approval and Signature

Emissions Data

Emissions context:

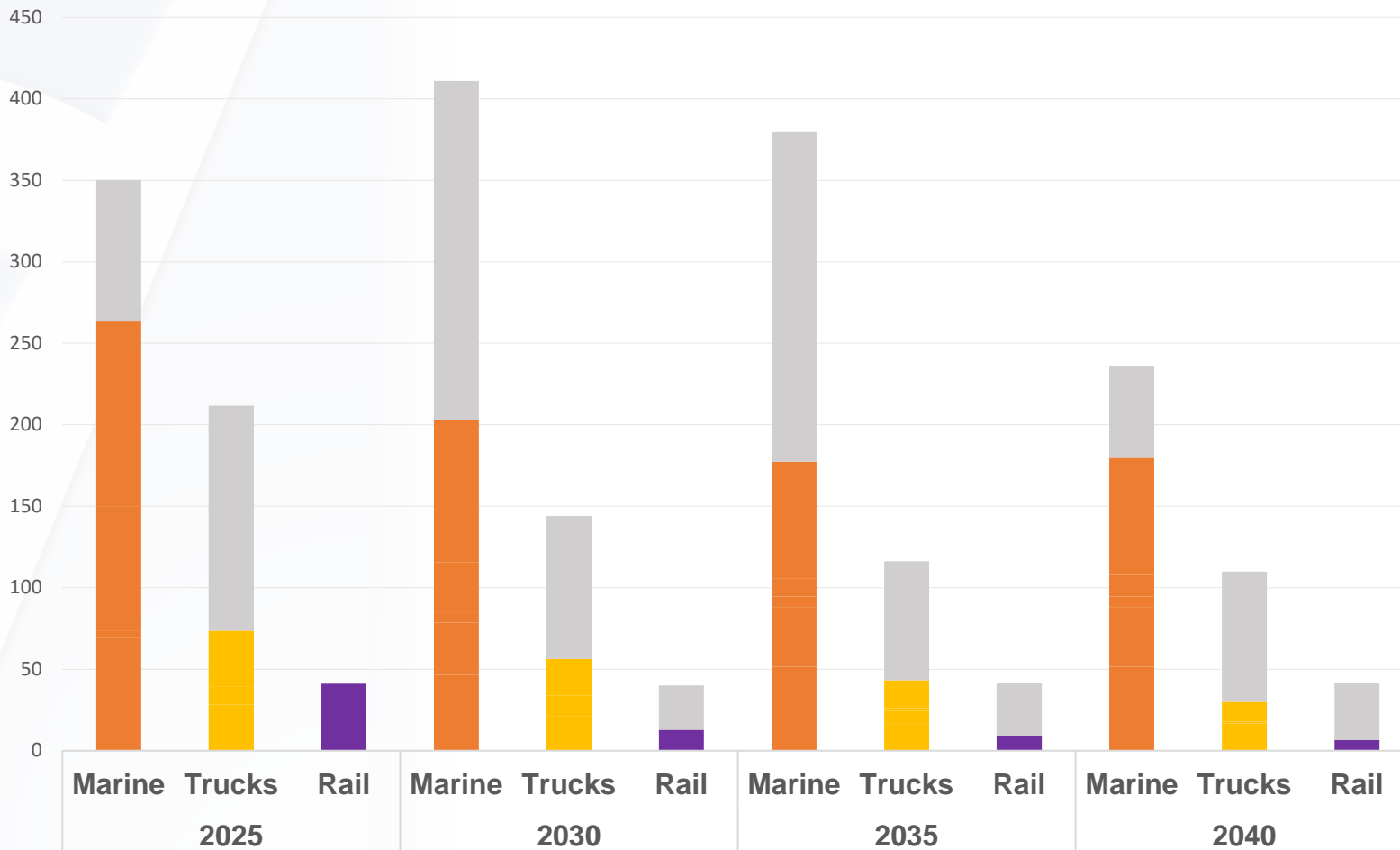
- Various types of equipment associated with indirect sources
- Trucks, Marine, Rail

Implementation &

Remaining Emissions:

- Gray = reductions from implementation of state regulations
- Colors = remaining emissions or the emissions left after implementation

Marine, Medium/Heavy Duty Trucks, and Rail
PM10 Emissions Over Time (Tons per Year)



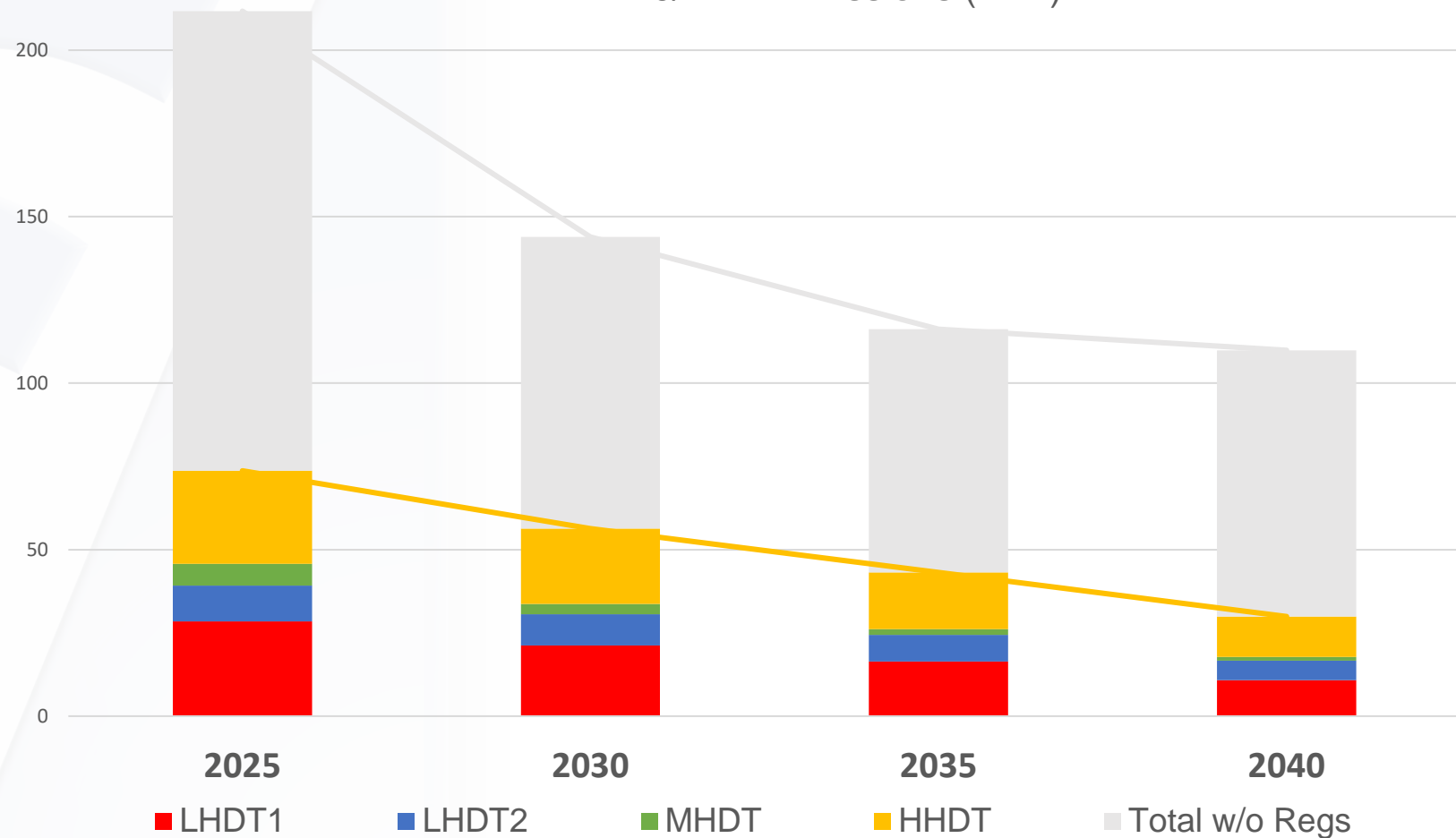
Gray= without emissions reductions from regulations; Color = emissions with regulations in place)

Emissions Data - Trucks

- Medium and Heavy-duty trucks
- Diesel Particulate Matter (PM₁₀ exhaust) Emissions
 - Reductions from normal fleet turnover
 - Reductions from CARB rules
- Q: Are additional reductions feasible given stringency of CARB rules?

With and Without CARB Regulations

Medium + Heavy Duty Trucks
PM10/DPM Emissions (TPY)



*LHDT = Light Heavy-Duty Truck; MHDT = Medium Heavy-Duty Truck; HHDT = Heavy Heavy-Duty Truck



Resources Needed for Rule Development and Implementation

For a rule similar to South Coast AQMD Rule 2305: WAIRE Rule:

- 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 and program details
 - Ongoing plan/reporting review and enforcement
 - South Coast AQMD estimated 5 FTE for ~3,000 facilities
 - Technology Infrastructure needs

Local Action to Address Indirect Sources

Benefit of local action:

- Local governments have direct land use authority
- Local governments can address community concerns beyond air quality
- Local action can be customized to address specific concerns

Local approaches the Air District can support:

- Proactive long-range planning and ordinance development
- Local land use decisions

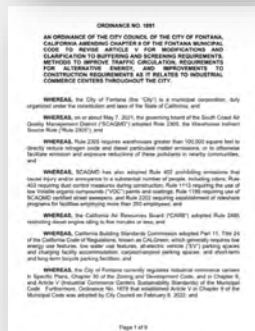
Proactive Long-Range Planning



General Plan policies to guide local planning and infrastructure decisions ([Draft Contra Costa County 2045 General Plan](#))



Good Neighbor Guideline recommendations for air quality, noise and neighborhood character ([Western Riverside Council of Governments](#))



Local Ordinance requirements related to construction and operations ([City of Fontana Industrial Commerce Center Sustainability Standards](#))

Example: Draft Contra Costa County 2045 General Plan

Health and Safety Policy (HS-P)1.8

Require new or expanded commercial and industrial projects exceeding 25,000 square feet of gross floor area to be near zero-emissions (NZE) operations, including the facilities themselves and the associated fleets. Require all necessary measures, such as the following, to achieve NZE:

- (a) Reduce on-site energy consumption and increase on-site energy generation and energy storage.*
- (b) Provide adequate on-site ZE vehicle-capable parking for all anticipated truck traffic to prevent idling and off-site queuing.*
- (c) Provide electrified loading docks with receptacles allowing plug-in of refrigerated trailers.*
- (d) Use heavy-duty trucks that are model year 2014 or later and expedite a transition to ZE trucks by establishing a clear timeline for electrification of trucks as they become commercially available. Ensure contracts with motor carriers include air quality incentives or requirements, such as providing incentives to fleets that meet United States Environmental Protection Agency (US EPA) SmartWay standards or requiring use of ZE or NZE trucks.*
- (e) Use a “clean fleet” of delivery vehicles as they become commercially available, but no later than 2025.*
- (f) Use ZE yard equipment, such as forklifts, pallet trucks and jacks, and stackers.*
- (g) Implement practices to control and remove fugitive dust and other contaminants from paved areas.*
- (h) Uses with fewer than five vehicles domiciled on-site are exempt from this policy.*

Local Land Use Decisions

Local land use decisions can consider:

- > **Spatial Distribution**
- > **Design**
- > **Operations**

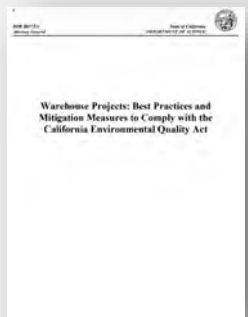
MECHANISMS	Zoning
	Overlay Zones or Special Districts
	Conditional Use Permits
	Conditions of Approval
	Site Development Standards

Local Land Use Decisions (cont.)

In complying with **California Environmental Quality Act (CEQA)**, lead agencies can follow best practices for evaluating air quality and greenhouse gas impacts and adopt feasible, enforceable and effective mitigation measures.



The Air District's [2022 CEQA Guidelines](#) includes guidance on analysis and mitigation of air quality and climate impacts, and includes a chapter with best practices for centering Environmental Justice, health, and equity in the siting, design, and development of land use projects



The California Attorney General's Bureau of Environmental Justice's [Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act](#) includes guidance on the analysis and mitigation of air quality, greenhouse gas, noise, traffic and other significant environmental impacts

Example Best Practices for Indirect Sources

- ✓ Require a buffer zone between indirect sources and sensitive receptors (e.g., 1,000 ft)
- ✓ Locate loading docks, truck entries, and truck drive aisles away from sensitive receptors
- ✓ Provide screening and buffering using trees, ground landscaping and solid decorative walls between indirect sources and sensitive receptors
- ✓ Design, clearly mark and enforce truck routes to keep trucks out of residential neighborhoods
- ✓ Provide adequate on-site electric vehicle (EV) capable parking for anticipated truck and passenger vehicles



*Electric vehicle charging stations.
Bay Area Air Quality Management District.*

Example Best Practices for Indirect Sources (cont.)



*Truck equipped with zero-emission transportation refrigeration unit.
Courtesy Mark Tang.*

- ✓ Electrify loading docks and required plug-in of refrigerated and other trailers
- ✓ Require “clean fleets” of delivery vehicles
- ✓ Use only zero-emission yard equipment, such as forklifts, pallet trucks and jacks, and stackers
- ✓ Ensure contracts with motor carriers include air quality incentives or requirements for using zero-emission (ZE) or near zero-emission (NZE) trucks

Next Steps Discussion

CONSIDERATIONS

What indirect source sectors and types should be prioritized with respect to emissions benefit opportunities?

What policy tool(s), including rulemaking and additional support to local jurisdictions, provide the best opportunity to address indirect source impacts, particularly in overburdened communities?

What are the resource implications of our approach relative to other priorities?

Other thoughts?

Extra Slide: Detailed Emissions

Marine, Heavy Duty Truck, and Rail PM10 Emissions Over Time (Tons per Year)
(with and w/o emissions reductions from regulations)

