



INDIRECT SOURCE RULES COMMUNITY WORKSHOP

Indirect Source Rules (ISR) for Rail Yards and Commercial Marine Ports

March 25, 2023 @San Bernardino Valley College
April 11, 2023 @Wilmington Senior Citizen Center
April 12, 2023 @Zoom (ID# 939 3379 5178)



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INTERACTIVE POLL

Which of these Items do you have the most experience with?

- A) Rail Yard Operations
- B) Ports Operations
- C) Lived Experience Near Ports or Rail Yards
- D) Air Quality
- E) Government and/or the Law
- F) Vehicle Technologies and/or Fueling
- G) Other

Participation Instructions:

Step 1: Go to www.menti.com with your internet enabled smart phone*

Step 2: Use code (To be determined)

Step 3: Submit Answer



SCAN ME

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GOALS FOR THIS MEETING

- South Coast AQMD staff will share data and issues related to the development of the new regulations on rail yards and ports
- We are here today to gather information from the community to inform the development of the new rail yard and port regulations
- We want to hear your perspectives

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AGENDA



Overview and Key Air Quality Challenges



Health Effects



Background for the Rail Yard and Port Indirect Source Rules



Affected Communities



Vehicles and Zero Emission Technology



Proposed Rule 2306 – ISR for New Intermodal Rail Yards



Focused Discussion on Proposed Rule 2306

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OVERVIEW AND KEY AIR QUALITY CHALLENGES

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

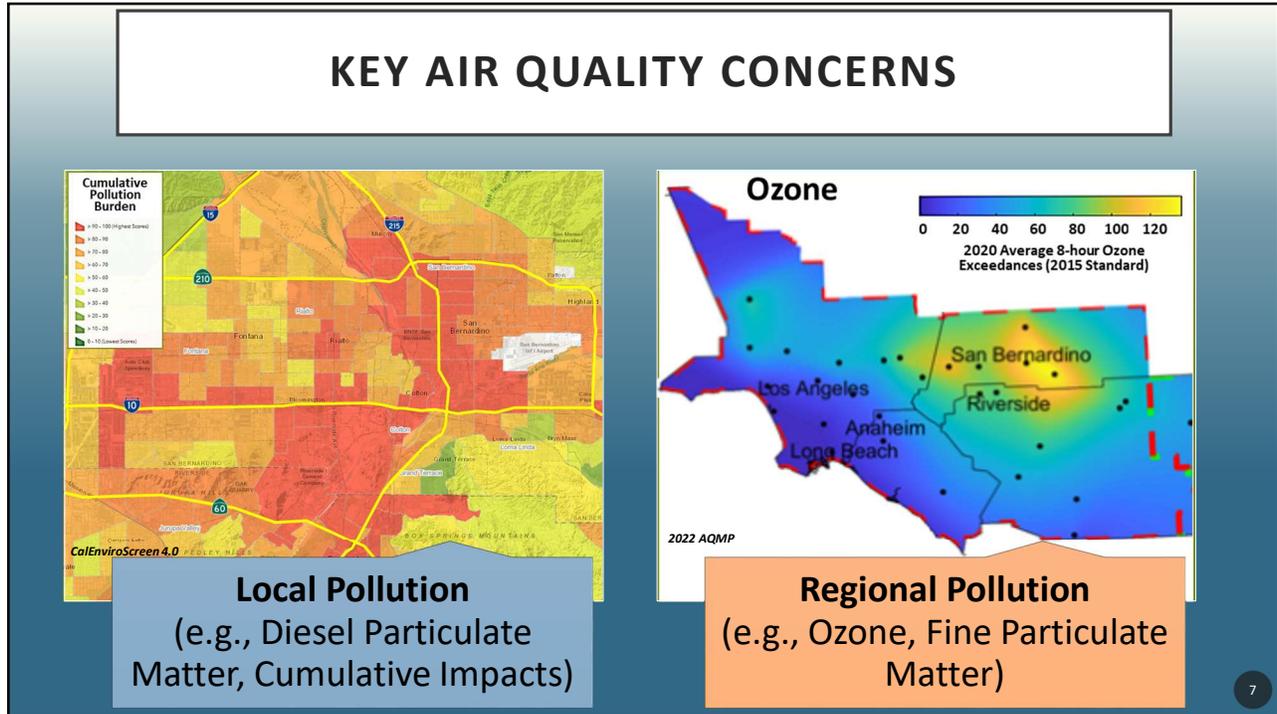
Cleaning The Air That We Breathe...

- Local air pollution control agency
 - 17 million residents (>40% of CA)
- Governed by a Board of local elected and appointed officials
- Key Responsibilities
 - Regulate emissions from >28,000 stationary sources
 - Ex. Power plants, manufacturing plants, refineries
 - Monitor air quality and comply with federal and state air quality standards
 - Provide incentive funding for clean air technologies



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REGIONAL AIR QUALITY MANAGEMENT OF MOBILE SOURCES: HOW IT WORKS



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AIR QUALITY PLANS ADDRESS REGIONAL AIR QUALITY CHALLENGES

South Coast AQMD Air Quality Management Plans

- Blueprints for meeting federal/state air quality standards
 - Accounts for all CARB/EPA proposed regulations* on fleets and vehicle manufacturers
- AQMPs identified that additional controls are still needed
 - Including facility-based measures called Indirect Source Rules (ISR's)



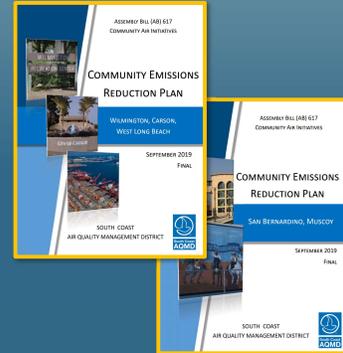
*Key Upcoming CARB rules include: Advanced Clean Fleets, In-Use Locomotives, ZE Cargo Handling Equipment, ZE TRUs

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AB 617 COMMUNITY EMISSION REDUCTION PLANS ADDRESS ENVIRONMENTAL JUSTICE CONCERNS

- AB 617 established a process for designated disadvantaged communities throughout California to shape emission reduction actions in their communities
- **Community Emission Reduction Plans (CERP's)**
- Port and Railyard ISRs are included in several CERPs, due to concerns over local impacts of diesel particulate matter



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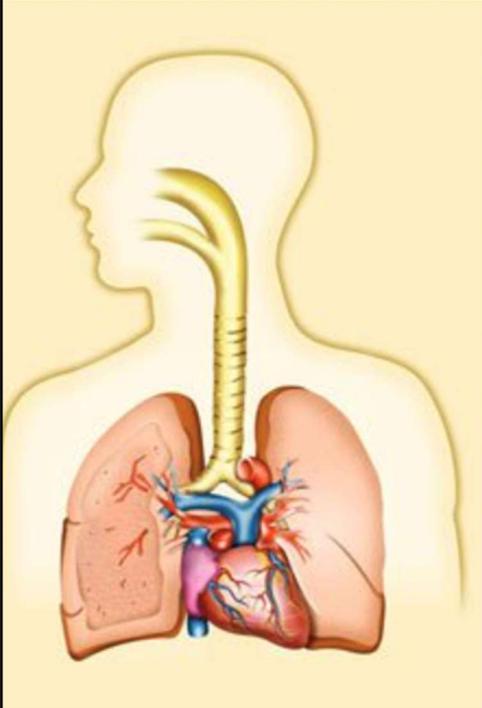
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HEALTH EFFECTS

Dr. Nichole Quick, MD, MPH

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HEALTH EFFECTS OF OZONE (REGIONAL POLLUTANT)

- Inflames and damages the airways
- Coughing, sore throat
- Makes lungs more susceptible to infection
- Aggravates lung diseases such as asthma, emphysema, and chronic bronchitis
- Increases the frequency of asthma attacks

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HEALTH EFFECTS OF PM (REGIONAL AND LOCAL POLLUTANT)

- Premature death in people with heart or lung disease
- Heart attacks, irregular heartbeat
- Aggravated asthma, decreased lung function
- Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing
- Ultrafine (<math><0.1\ \mu\text{m}</math>): not regulated but known health effects
- Diesel particulate matter is a powerful cancer-causing air pollutant

● **PM_{2.5}**
 Combustion particles, organic compounds, metals, etc.
 <math><2.5\ \mu\text{m}</math> (microns) in diameter

● **PM₁₀**
 Dust, pollen, mold, etc.
 <math><10\ \mu\text{m}</math> (microns) in diameter

HUMAN HAIR
 50-70 μm (microns) in diameter

90 μm (microns) in diameter
 FINE BEACH SAND

Image: www.epa.gov/pm-pollution/particulate-matter-pm-basics

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HEALTH BENEFITS OF MEETING AIR QUALITY STANDARDS



~1,450 fewer annual emergency room visits



~8,700 fewer annual hospitalizations



~163,000 fewer annual days of work and school absences



An annual average of 1,500 premature deaths avoided

Public health benefits estimated to be \$134.3 billion cumulatively (2025-2037)

Source: 2022 AQMP Socioeconomic Report

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BACKGROUND FOR THE RAIL YARD AND PORT INDIRECT SOURCE RULES

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BACKGROUND OF THE RAIL YARD AND PORT INDIRECT SOURCE RULES

Railyard & Intermodal Facilities

- Proposed Rule (PR) 2306 → *new rail yards*
- PR 2306.1 → *existing rail yards (and expansions of rail yards)*
 - PR 2306.1 rulemaking will begin after Board considers PR 2306

Commercial Marine Ports

- PR 2304 → *Ports of Los Angeles/Long Beach*
 - PR 2304 will focus on containerized cargo terminals first, with subsequent rulemaking to address non-container terminals

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Railyard & Intermodal Facilities

PROPOSED COLTON RAIL YARD

- New rail yard proposed in Colton
- Part of the LA to Anaheim California High Speed Rail project
- Would be operated by BNSF
- Adds to existing rail yards in the area

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LEGEND

★ San Bernardino Valley College

Scale: 2 miles

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Railyard & Intermodal Facilities



SOUTHERN CALIFORNIA INTERNATIONAL GATEWAY (SCIG)



- New rail yard proposed near the Ports
 - Would be operated by BNSF
 - Land mostly owned by City of LA
- Adds to existing rail yards in the area

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Commercial Marine Ports



SAN PEDRO BAY PORT (SPBP) COMPLEX



- SPBP consists of Ports of LA and LB, collectively the largest container port in the western hemisphere
 - 13 container terminals
 - Account for about 75% of total port emissions*
 - 33 non-container terminals
- Single largest source of air pollution in the region

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*2021 Ports' emissions inventory reports

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AFFECTED COMMUNITIES

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COMMUNITIES SURROUNDING PROPOSED COLTON INTERMODAL FACILITY

- Several surrounding areas next to the facility score in the top 95th percentile for total pollution burden*
- About 46,000 residents, one hospital, and ten schools are within a one-mile radius



*CalEnviroScreen 4.0

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COMMUNITIES SURROUNDING PROPOSED SCIG SITE

- Several surrounding areas next to the facility score in the top 95th percentile for total pollution burden*
- About 50,000 residents, seven schools and a Veteran Housing Facility are within a one-mile radius



*CalEnviroScreen 4.0

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VEHICLES AND ZERO EMISSION TECHNOLOGY

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APPLICABLE EMISSION SOURCES LOCATED AT PORTS AND RAIL YARDS



Locomotives



Cargo Handling Equipment



Drayage Trucks



Ocean Going Vessels



Commercial Harbor Craft



Transport Refrigeration Units

Vast majority of vehicles/equipment operate using diesel, typically with engines that don't meet cleanest available emission standard

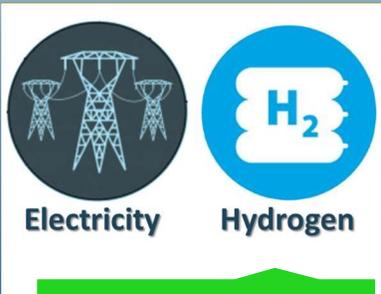
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THREE KEY FACTORS TO DEVELOP AND DEPLOY ZERO EMISSIONS TECHNOLOGY



Vehicles



Fuel



Fueling/Charging Infrastructure

Developing and deploying each of these at scale will take many years to decades

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PROPOSED RULE 2306 – ISR FOR NEW INTERMODAL RAIL YARDS

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PRELIMINARY RULE CONCEPTS FOR NEW RAIL YARD ISR

Annual Facility-Wide Emissions Limit

- Emissions limit would decline over time
- Ensures benefits from CARB's statewide commitments in the 2022 AQMP will be achieved in these communities

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Zero Emission Infrastructure Requirement

- Sufficient installation of zero emission infrastructure to support maximum projected onsite energy demand
- Facilitates 100% ZE implementation for onsite in-yard operations

Plan Submittals and Compliance Reporting

Rulemaking materials, including draft rule language can be found here:
<http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/rule-2306>

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ALTERNATE COMPLIANCE OPTIONS

VERY PRELIMINARY - UNDER DEVELOPMENT

Early and Additional Action Banking (EAAB)

- Additional ZE infrastructure upgrades beyond rule requirements could be used as a flexibility option to partially satisfy emissions limit obligation
 - Rule would set limits on duration and amount of EAAB
 - Early flexibility could achieve greater emission reductions later

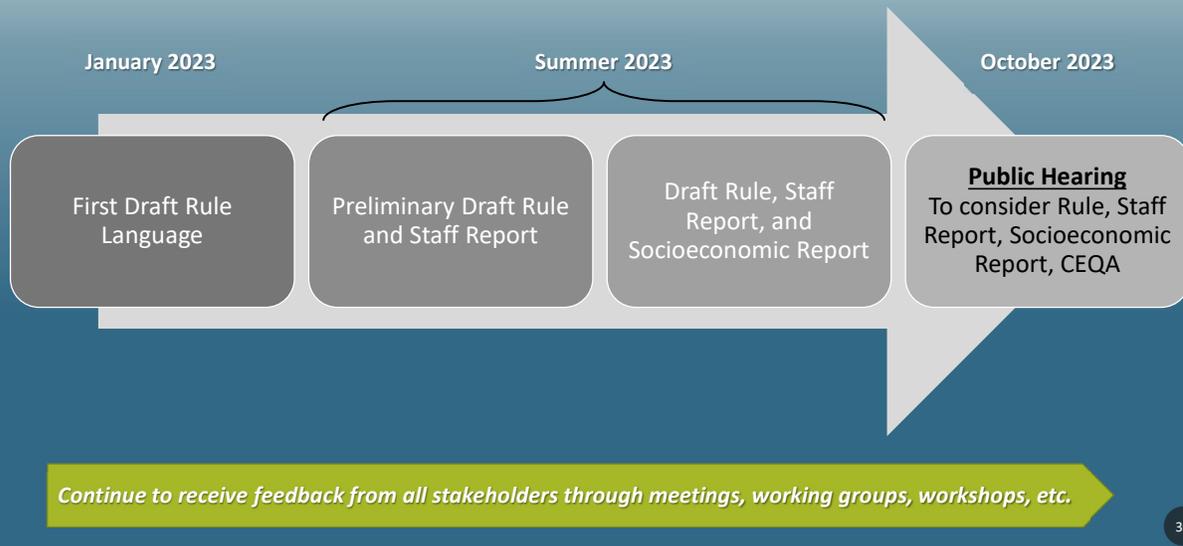
Mitigation Fee

- Funds would be used on air quality improvement measures for the local community around the new rail yard
 - Process for spending mitigation fund would be developed later and would include community input

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PR 2306 DEVELOPMENT



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WORDCLOUD

Which city are you joining the meeting from?

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**FOCUSED DISCUSSION ON
PROPOSED RULE 2306**

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COMMUNITY ISSUES

SOME QUESTIONS TO GET DISCUSSION STARTED:

- A rail yard is located in a specific community and is connected to the larger goods movement network. Are you most concerned about the local rail yard and/or the broader goods movement such as warehouses, ports, network of train tracks and trucking routes, etc.?
- Are there air pollution issues you see in your community that could be potentially addressed by the proposed rule on new rail yards?
- Is there specific air quality information that is important for you to see reported if this rule is adopted?
- What do you see as strengths and weaknesses in the proposed rule concepts?
- What are your thoughts regarding alternative compliance options?
- Other issues related to rail yards that we should consider?

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Sign up for the mailing list at: <https://www.aqmd.gov/sign-up> (select "Proposed Rule 2306" or "Proposed Rule 2304")

Email us at: PortsISR@aqmd.gov or RailYardISR@aqmd.gov

For more information, visit: www.aqmd.gov/fbmsm
(click into "Commercial Marine Ports" or "Rail Yard and Intermodal Facilities")

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