

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)



1

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

2

2

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

3

3

OVERVIEW AND KEY AIR QUALITY CHALLENGES

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4

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Cleaning The Air That We Breathe...

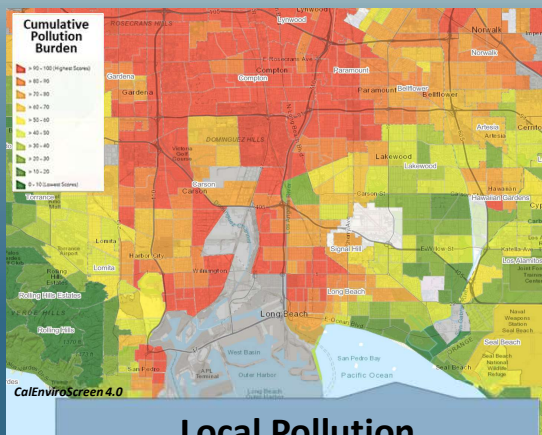
- Local air pollution control agency
 - 17 million residents (>40% of CA)
- Governed by a Board of local elected and appointed officials
- Key Responsibilities
 - Regulate emissions from >28,000 stationary sources
 - Ex. Power plants, manufacturing plants, refineries
 - Monitor air quality and comply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



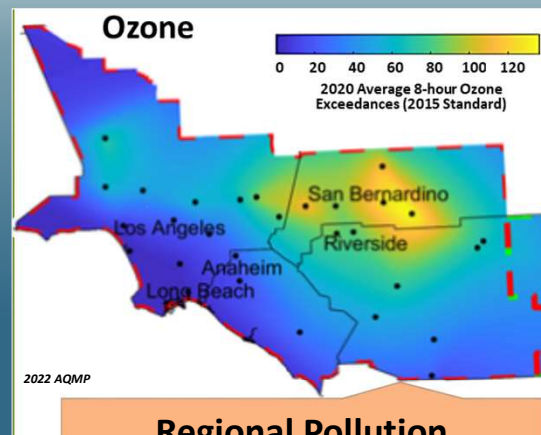
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KEY AIR QUALITY CONCERNS



Local Pollution
(e.g., Diesel Particulate Matter, Cumulative Impacts)



Regional Pollution
(e.g., Ozone, Fine Particulate Matter)

6

6

Particulate Matter & Nitrogen Oxides (NOx) & Volatile Organic Compounds (VOCs)

Diesel-powered vehicles used for goods movement are responsible for about half of air pollution in our region

7

REGIONAL AIR QUALITY MANAGEMENT OF MOBILE SOURCES: HOW IT WORKS

United States Environmental Protection Agency (US EPA)

- Establishes air quality standards
- Imposes sanctions if states fail to meet national standards
- Primary authority for developing regulations for many sources (e.g., ships, locomotives, aircraft)

California Air Resources Board (CARB)

- Primary authority to develop mobile source regulations in the state

South Coast AQMD

- Develops and implements plans to meet air quality standards
- Limited authority on mobile sources
 - **“Indirect sources” = facilities that attract mobile sources**

8

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

9

9

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



10

10

HEALTH EFFECTS

Dr. Nichole Quick, MD, MPH

11

11

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

12

12

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 (<0.1 μm): not regulated but known health effects
- Diesel particulate matter is a powerful cancer-causing air pollutant

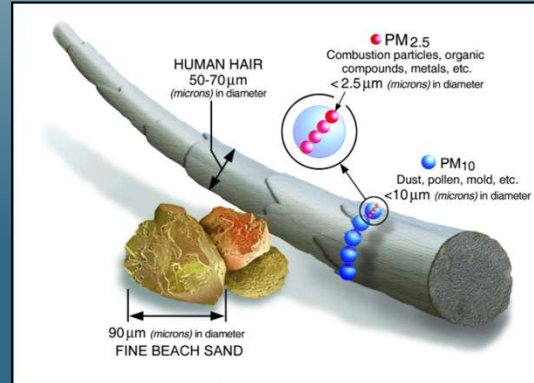


Image: www.epa.gov/pm-pollution/particulate-matter-pm-basics

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

BACKGROUND FOR THE RAIL YARD AND PORT INDIRECT SOURCE RULES

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BACKGROUND OF THE RAIL YARD AND PORT INDIRECT SOURCE RULES



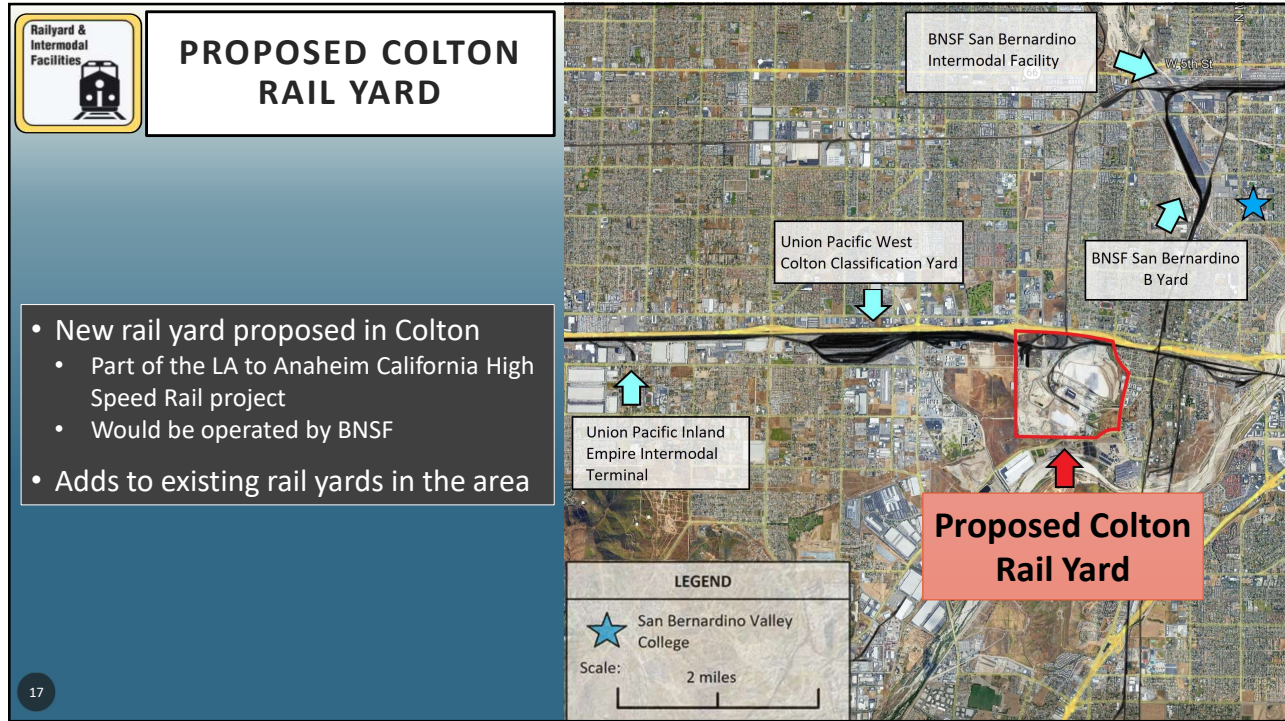
- Proposed Rule (PR) 2306 → *new rail yards*
- PR 2306.1 → *existing rail yards (and expansions of rail yards)*
 - PR 2306.1 rulemaking will begin after Board considers PR 2306



- 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

16


16



17




18



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

*2021 Ports' emissions inventory reports



19

AFFECTED COMMUNITIES

20

20

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



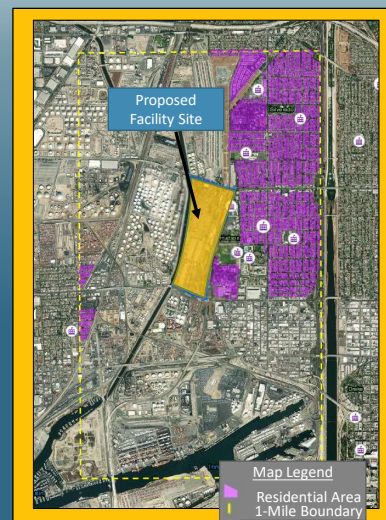
*CalEnviroScreen 4.0

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21

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

22

22

VEHICLES AND ZERO EMISSION TECHNOLOGY

23

23

APPLICABLE EMISSION SOURCES LOCATED AT PORTS AND RAIL YARDS



Locomotives

Cargo Handling
Equipment

Drayage Trucks


Ocean Going
VesselsCommercial
Harbor CraftTransport
Refrigeration
Units

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

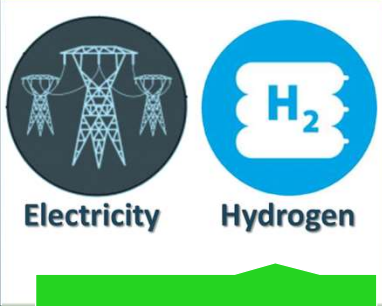
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THREE KEY FACTORS TO DEVELOP AND DEPLOY ZERO EMISSIONS TECHNOLOGY



Vehicles



Fuel



Fueling/Charging Infrastructure

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

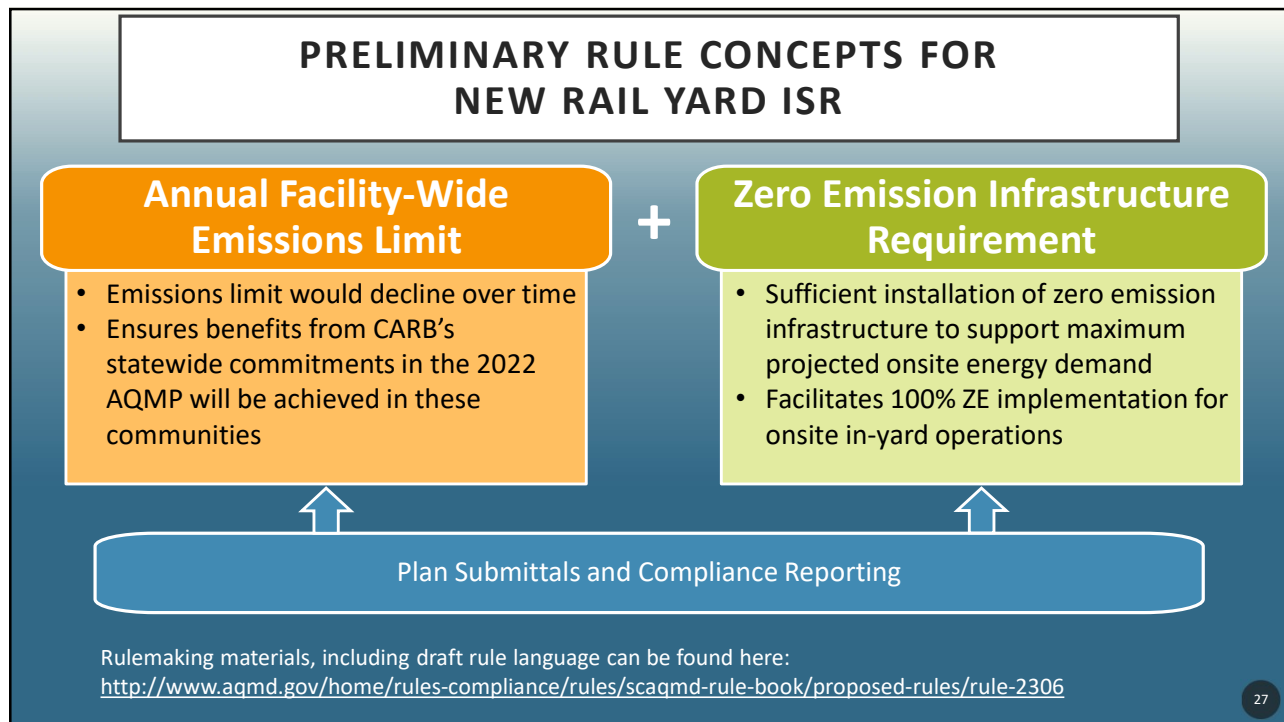
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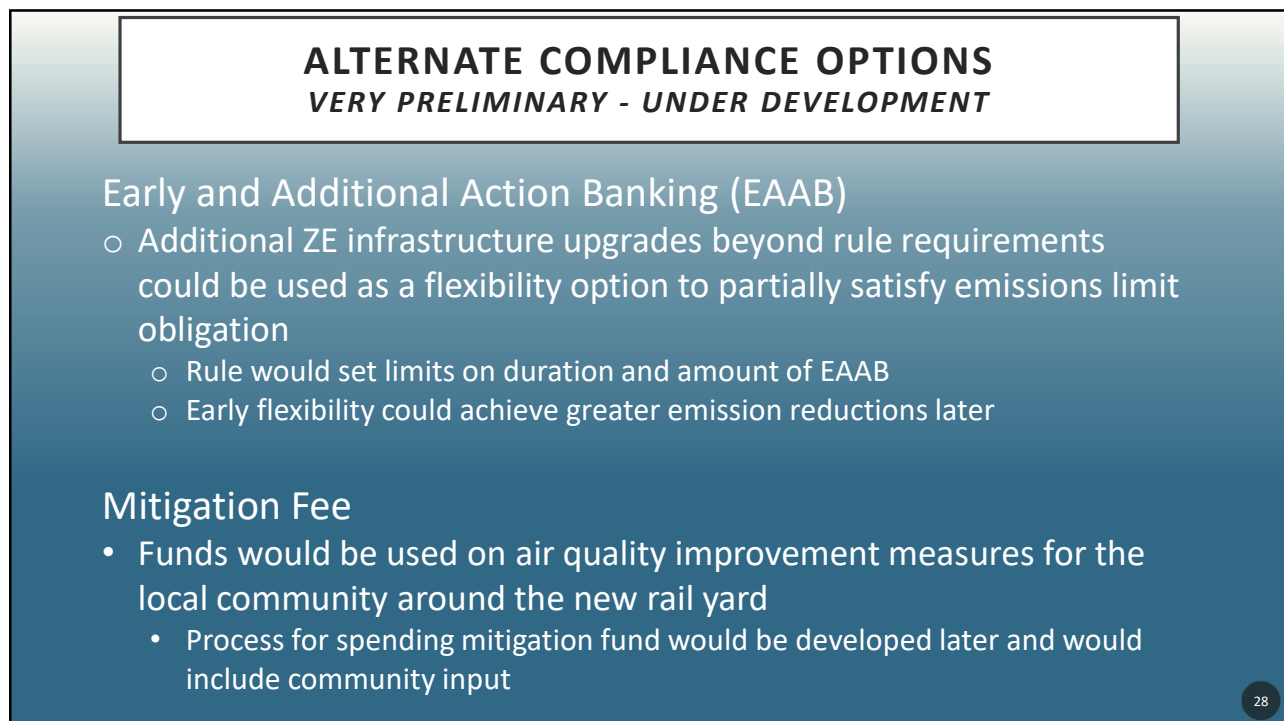
PROPOSED RULE 2306 – ISR FOR NEW INTERMODAL RAIL YARDS

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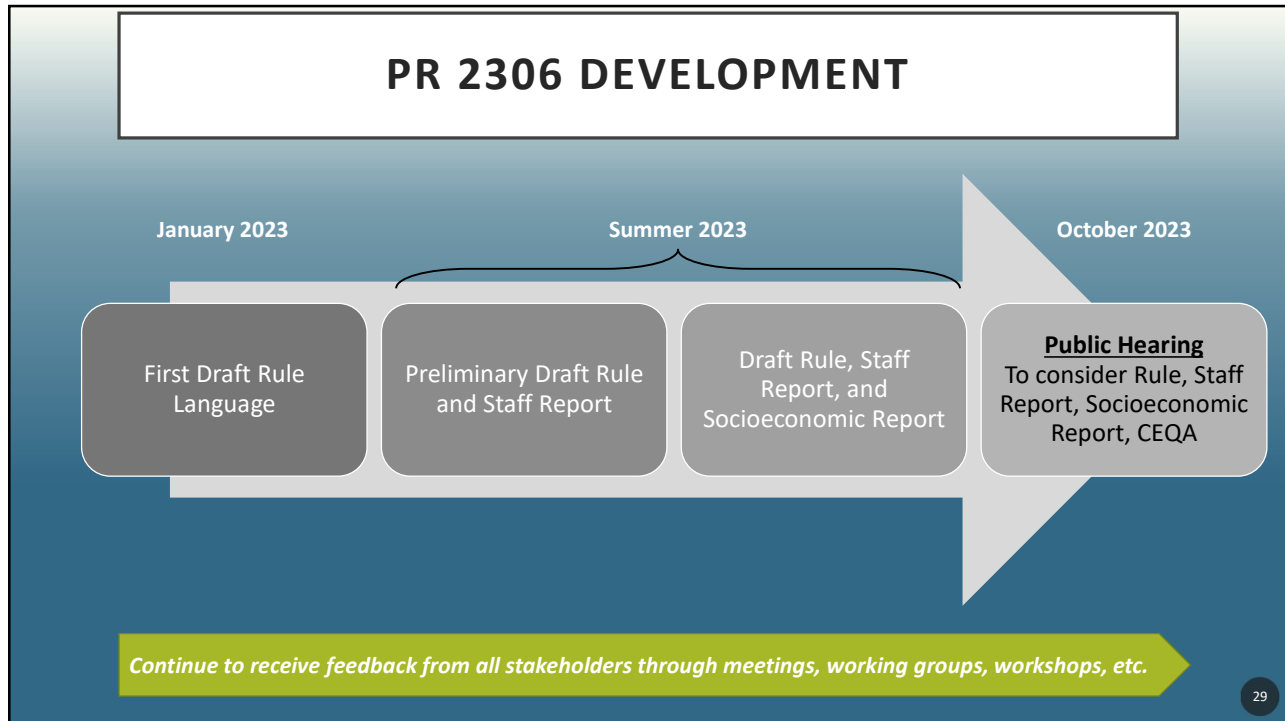
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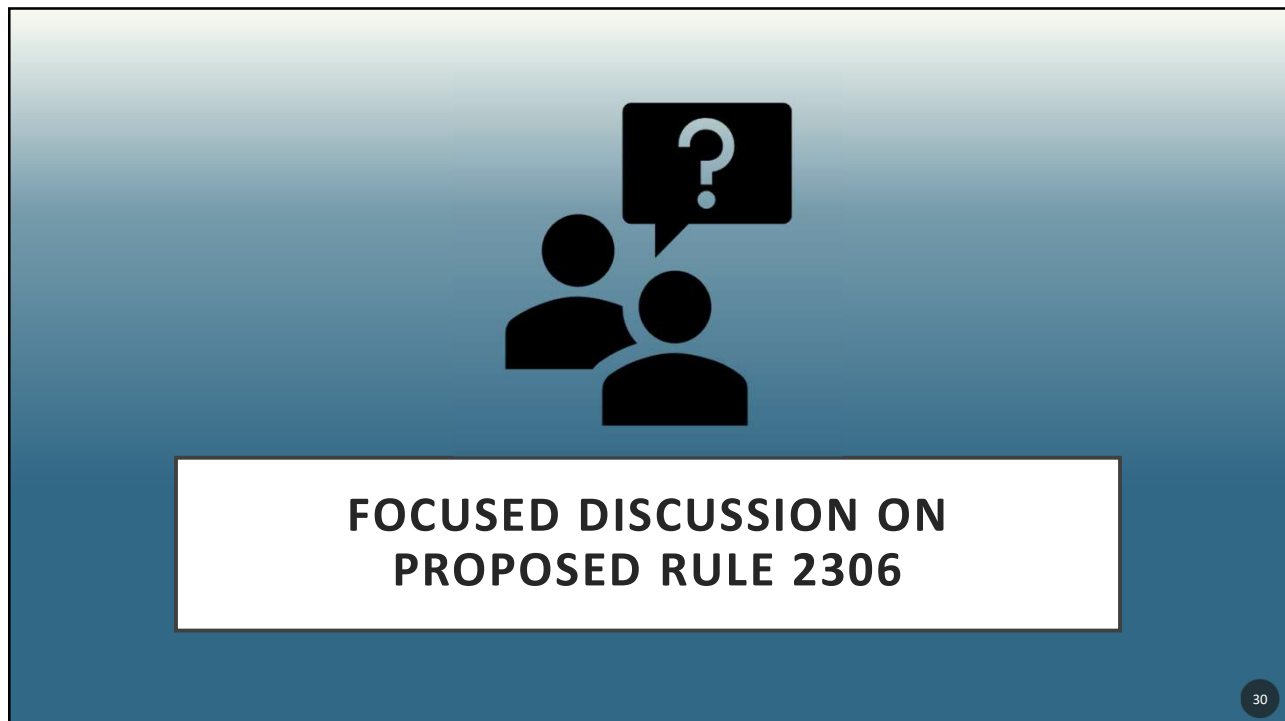
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28



29



30

COMMUNITY ISSUES

SOME QUESTIONS TO GET DISCUSSION STARTED:

- South Coast AQMD has the authority to establish rules for a facility like a Port or rail yard that attracts and/or uses equipment that are sources of air pollution. What air quality issues would you like the rule to focus on?
- If the rule has a mitigation fee, would you want the funds to focus exclusively on the transition to cleaner technologies at the Ports and/or rail yards, or also include other strategies to mitigate air quality impacts in community?
- Is there any other information you would like to share to help develop these rules to reduce air pollution from Ports and rail yards?

31

31

STAFF CONTACTS

Railyard and Ports Indirect Source Rules (ISR)

PR 2306

Dylan Plautz
Air Quality Specialist
909-396-2108
Dplautz@aqmd.gov

PR 2306

Shawn Wang
Program Supervisor
909-396-3319
Swang@aqmd.gov

Elaine Shen
Planning and Rules Manager
909-396-2715
Eshen@aqmd.gov

PR 2304

Charlene Nguyen
Program Supervisor
909-396-2648
Cnguyen@aqmd.gov

Ian MacMillan
Assistant Deputy Executive Officer
909-396-3244
Imacmillan@aqmd.gov

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")

32

32