



Proposed Rule 2304 Indirect Source Rule for Commercial Marine Ports

Working Group Meeting #1

Join Zoom Webinar Meeting
- from PC or Laptop
<https://scaqmd.zoom.us/j/98170661356>
Zoom Webinar ID: 981 7066 1356
Teleconference Dial In +1 669 900 6833

February 25, 2022, 1:00 PM

Agenda



Housekeeping Announcement and Staff Introductions



Background and Purpose of Ports ISR



Rulemaking Process



Rule Considerations and Some Preliminary Concepts



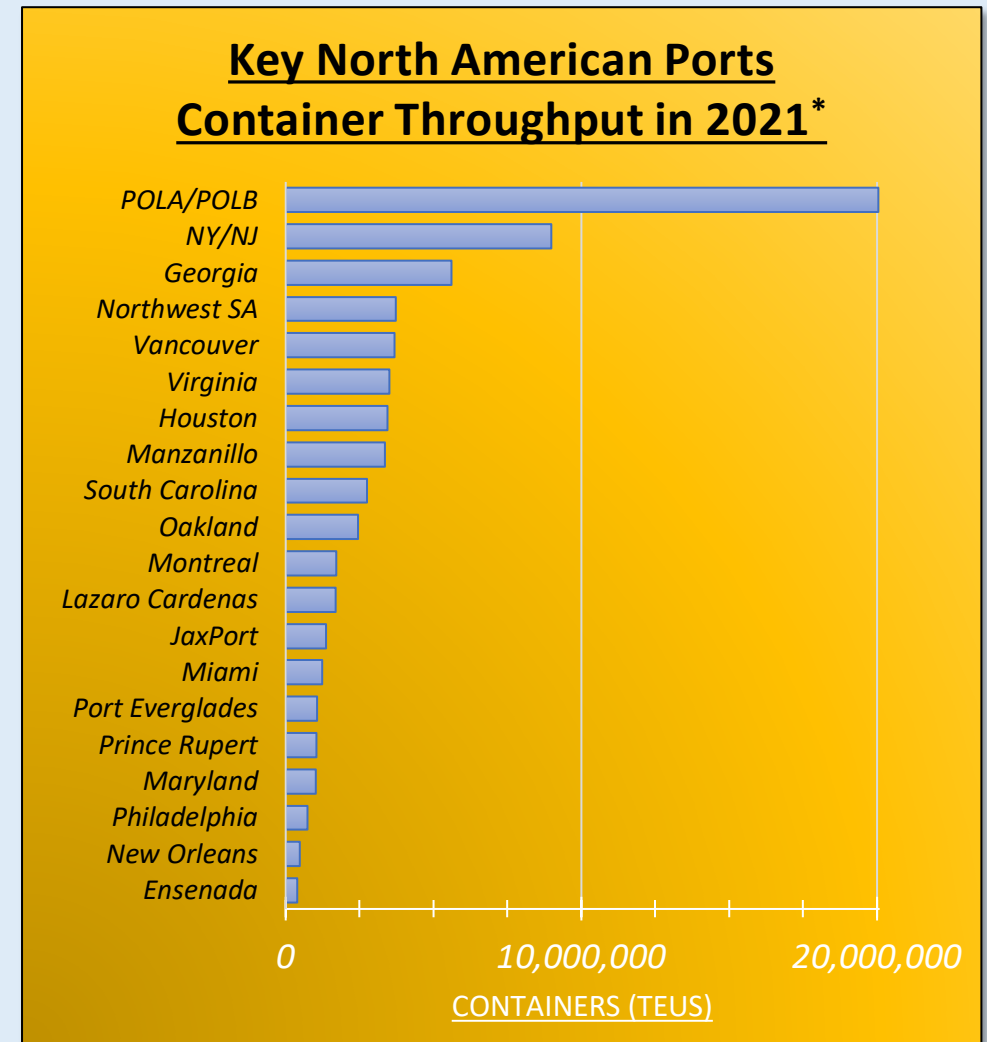
Next Steps and Contacts



Open Discussion

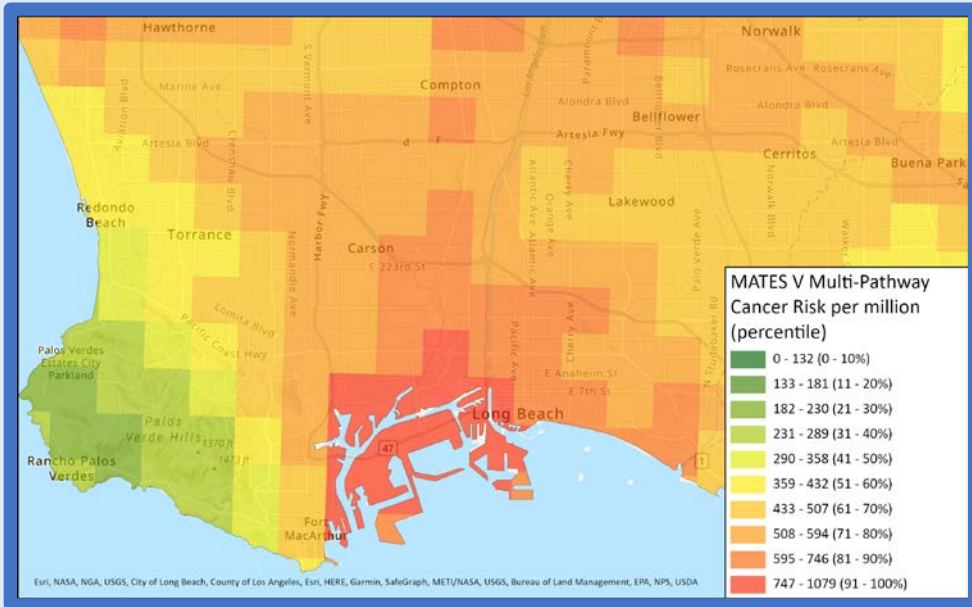
San Pedro Bay Ports (SPBP) Complex

- ❖ Includes Port of Los Angeles (POLA) and Port of Long Beach (POLB)
 - Largest in North America for container throughput
 - Collectively the single largest fixed source of air pollution in the South Coast Air Basin
 - SPBP emissions at least double the next largest port (NY/NJ)

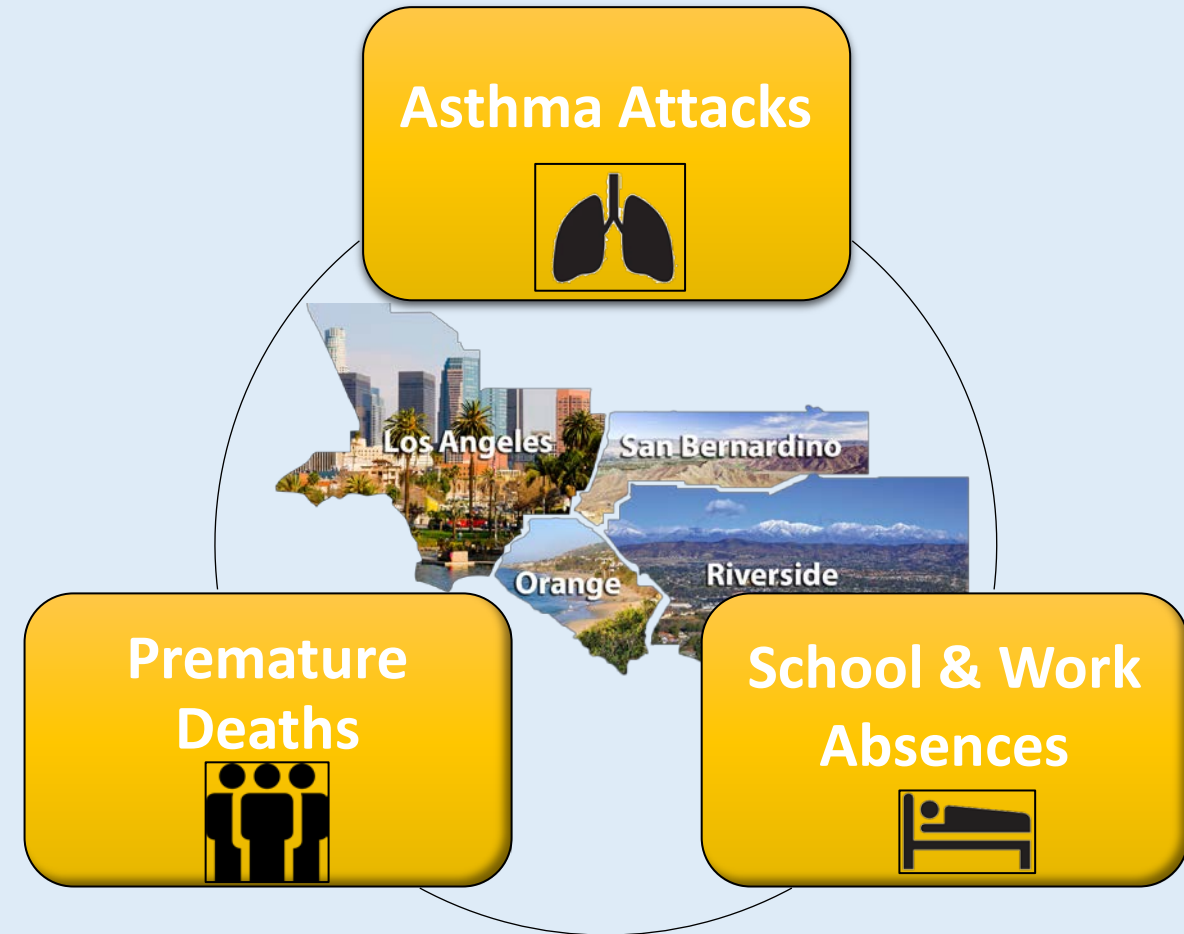


* www.pmsaship.com, www.seatrade-maritime.com

Port Emissions and Adverse Health Impacts

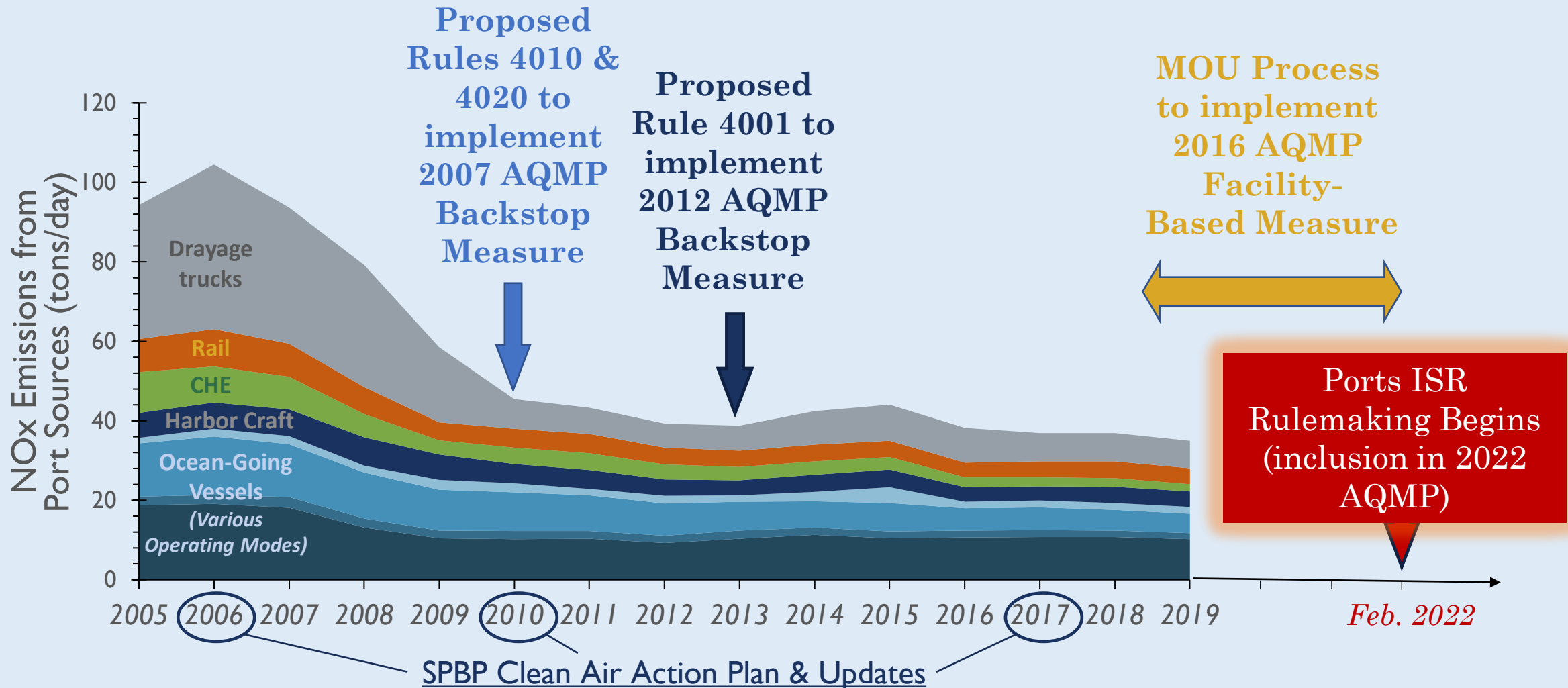


- **Local Impacts***: Communities adjacent to the ports are in the 96th percentile for air toxics cancer risk in SCAQMD, and have higher asthma rates
- **Regional Impacts****: Ports account for ~10% of total Basin NOx emissions. Ozone and PM from this NOx affect public health throughout the region



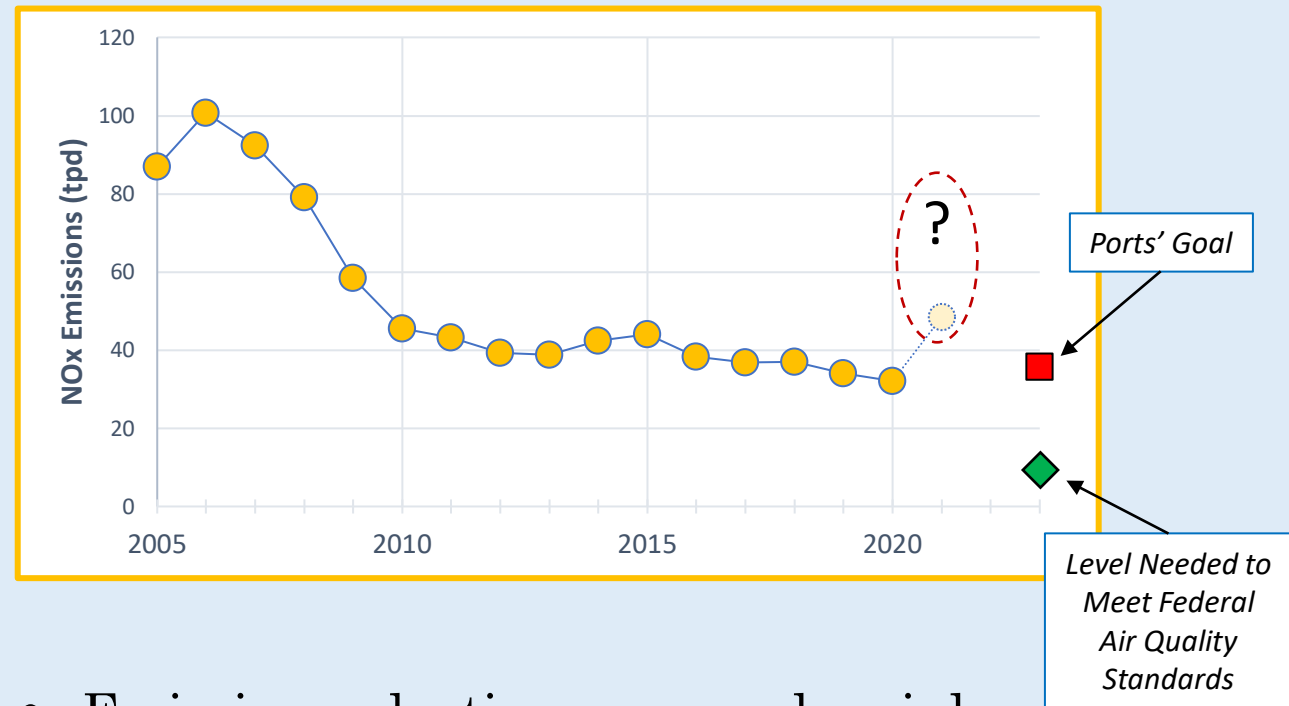
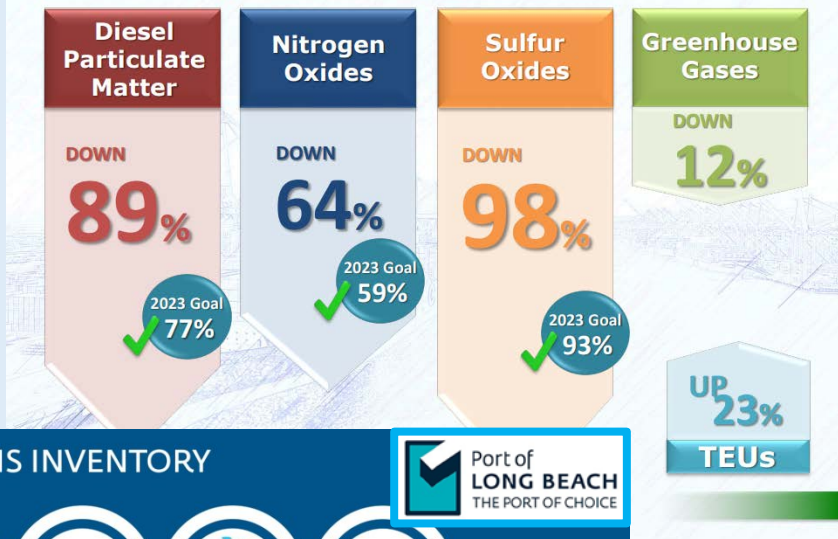
* MATES V, WCWL AB 617 CERP
** 2016 AQMP

Continued Regional Efforts to Reduce Port Emissions

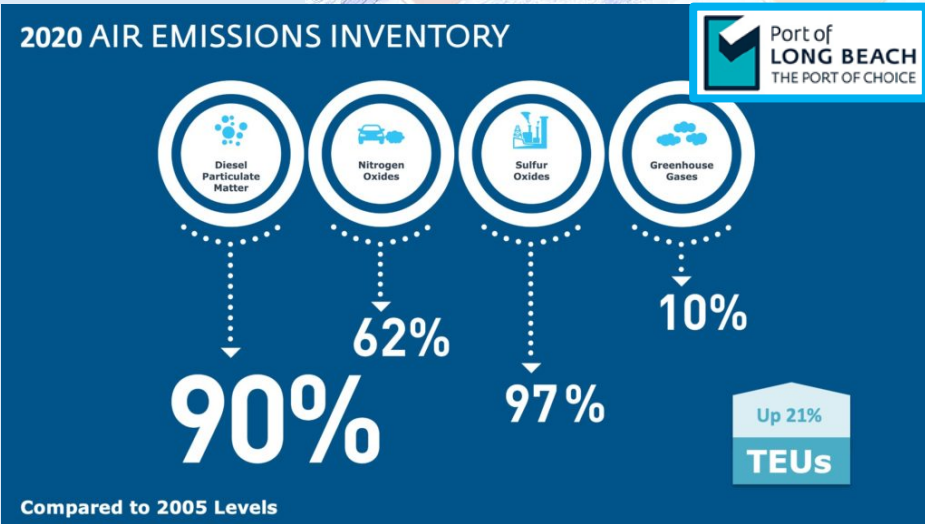


Ports ISR (PR 2304): Secure Further Emission Reductions from Port Sources

THE PORT OF LOS ANGELES Emissions Reductions (2005-2020)

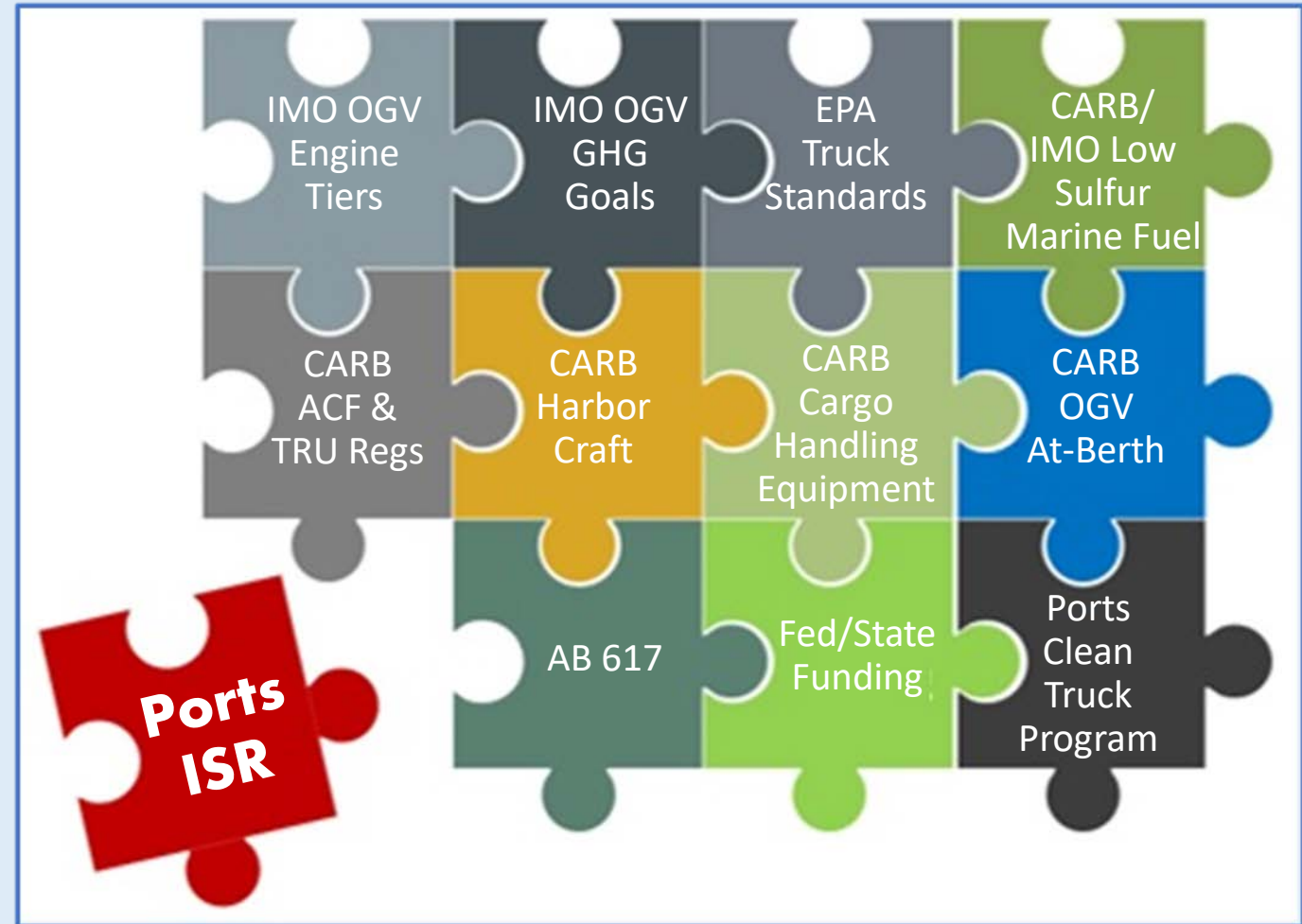


- Emission reductions occurred mainly between 2005-2010 for most pollutants
- Record cargo throughput and port congestion in 2021 increased emissions



Role of Ports ISR

- Reduce emissions from port sources to assist in meeting federal and state air quality standards throughout the region
- Reduce air quality impacts to near port communities



Other Preceding or Parallel Efforts to Reduce Port Related Emissions

**Regional
Air Quality
Management Plans
2007 / 2012 / 2016
& *Upcoming 2022***

*Unsuccessful Ports
MOU Process (2016-22)*

**Ports Clean Air
Action Plans
2006 / 2010 / 2017**

**State Regulations
for Trucks, Terminal
Equipment, Harbor
Craft, Marine Fuel,
and Shore Power**

*Lack of Significant Federal
Action in Past Decade (e.g.,
Updating Engine Standards)*

Warehouse ISR

*Limited Near-Term
Effectiveness of International
Measures, (e.g., IMO
Regulations for Ships)*

**ISR Rulemaking for
New/Existing
Railyards**

Overview of Rule Development Process

Stakeholder Input



Information Gathering and Analysis



Rule Development Concepts

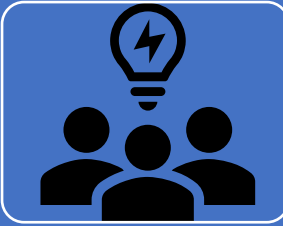


Draft Proposed Rule Language and Staff Report

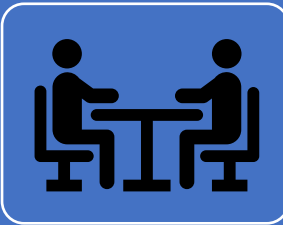


Governing Board Committee Review and Public Hearing

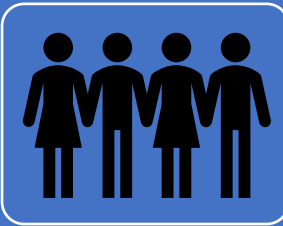
Stakeholder Input Process



South Coast AQMD's rule development process designed to be collaborative



Work through key issues



Early and regular participation by all stakeholders highly encouraged



Working group and other periodic meetings

Opportunities for Public Engagement

For more information, visit:
www.aqmd.gov/fbmsm
(click into “Commercial
Marine Ports”)



Working Group, Technical Working Group,
and Community Consultation Meetings



Individual Facility Meetings/ Site Visits



Meetings with Stakeholder Groups:
*Industry, Environmental, Labor, Community,
Other Public Agencies, etc.*



Public Comment at Public Workshop(s) and
Public Hearing



Comment Letters: PortsISR@aqmd.gov

PR 2304 Rulemaking Process

Ongoing Public Engagement

Mobile Source Committee meetings quarterly

Working Group meetings ~every two months

Feb
2022

Nov 2022 -
May 2023

Jan - Jul
2023

Feb - Aug
2023

Begin
Rulemaking

*Release
preliminary draft
rule language
and staff report*

*Release draft rule
language, staff report,
environmental and
socioeconomic
assessments*

Public
Hearing

Key Considerations for Developing Port ISR Rule Concepts



Key Public Feedback Received Prior to Ports ISR Rulemaking*

Businesses and Maritime Industry

- Concerns that ISR could potentially:
 - Discourage voluntary emission reductions
 - Disrupt supply chain
 - Hurt jobs and economy
- Authority questions
- ZE technologies not ready for at-scale deployment

Labor

- Concerns that ISR will reduce port jobs via accelerated terminal automation and/or reduced port throughput
- ZE infrastructure development can create jobs
- Up-front funding needed for trucks, especially independent drivers

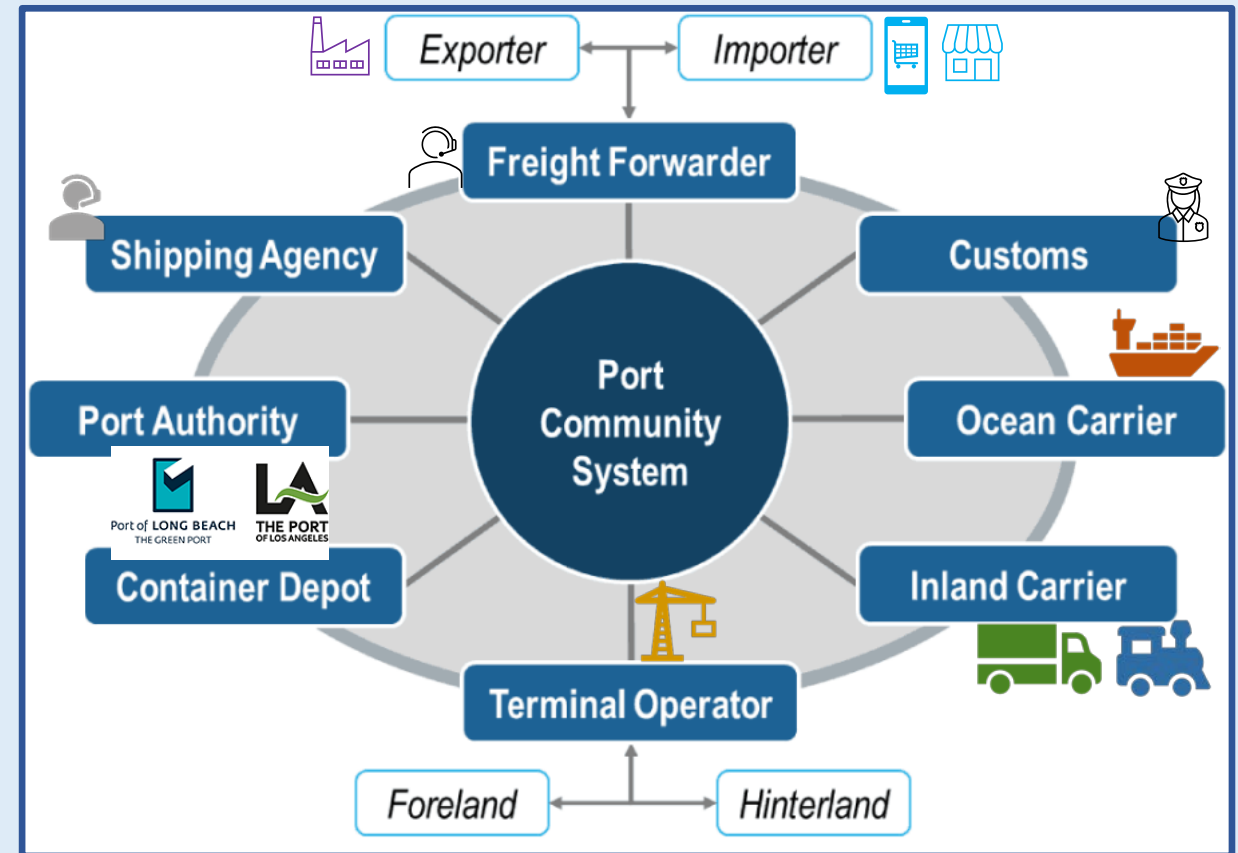
Environmental Groups and Local Community

- Public health impacts of port emissions need to be urgently addressed
- Reduce emissions from all port sources
- Ports ISR needed to complement Warehouse ISR and other clean freight regulations
- Mandate ZE technologies
- Engage more with public

*There is diversity in viewpoints among individuals within each group shown here.

Port Operations - Industry Business Model

- Many entities involved in port operations
 - Port authority/landlord
 - POLA & POLB
 - Terminal operator/tenant
 - Independent
 - Affiliated with carriers
 - e.g., container terminals
 - Affiliated with importers
 - e.g., tanker terminals
 - Carriers: ships, rail, trucks
 - Beneficial Cargo Owners (BCO)
 - Intermediaries



Source of underlying chart: Theo Notteboom, Athanasios Pallis and Jean-Paul Rodrigue (2022) *Port Economics, Management and Policy*.



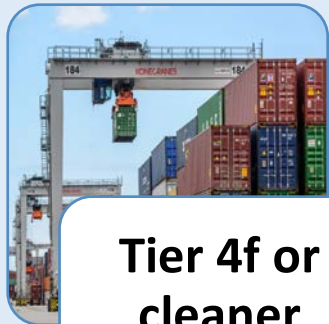
Potential Jobs Impact

- Outreach to labor organizations for input on rule design
- Outreach to researchers on jobs impact of automation, energy transition, etc.
- Socioeconomic impact assessment for proposed rule will evaluate potential job impacts

Source of images: Los Angeles Times.

Existing Low NOx Technologies Have Not Been Widely Implemented by Industry/Ports

Nonroad Cargo Handling Equipment



Tier 4f or cleaner

Effective 2014-2015

~34%*

Harbor Craft



Tier 4

Phased in 2014-2017

<1%

Rail Locomotives



Tier 4

Effective 2015

~5%

Ocean-going Vessels



Tier III

Effective 2016

~2%

Heavy-Duty Trucks



Optional Low NOx or cleaner

Available in 2018

~3%**

Percent of vehicle/equipment use at ports of LA/LB as reported in their 2020 emission inventories

* Based on equipment counts; including diesel 4f (~22%) and zero-emission electric equipment (~12%).

** Based on gate move counts; including CNG (~3%) and zero-emission battery electric and hydrogen fuel cell trucks (~0.15%)

Rapid But Uneven Technological Advancement Towards Zero Emissions

ZE Charging/Fueling/Bunkering Infrastructure Development

Rail Locomotives



Heavy-Duty Trucks



Varying by route length



Varying by operation

Varying by duty cycle



Harbor Craft



Cargo Handling Equipment



Ocean-going Vessels



Some Preliminary Rule Concepts Discussed in the Past on Ports ISR

Backstop Measure

- Backstop for all 2017 CAAP measures
- Trigger for backstop: lack of action, delayed timing, insufficient emission reduction potential, etc.
- Must comply/take action if rule is triggered

Point System

- Similar to Warehouse ISR: obligations could be fulfilled by earning points
- Compliance options could be different than Warehouse ISR (e.g., Points could be earned by technology demonstration – implementation required if successful, etc.)

Emissions Efficiency

- Emissions per TEU, barrel, etc.
- Port-wide average emissions target to be achieved by each operator
- Less compliance actions required for cleaner/more efficient operators

Mitigation fee may be added to any of these concepts

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Revenue must be invested to reduce port emissions

Other Options Also Possible

Next Steps



Continue Rule Concept Development



Site Visits and Information Gathering



Stakeholder Group Meetings and
Other Public Engagement Activities



March 18 South Coast AQMD Mobile
Source Committee Meeting

Staff Contacts

Proposed Rule 2304

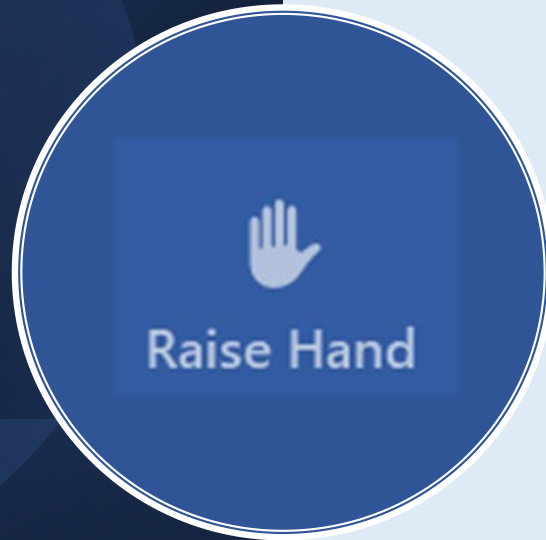
William Senga
Air Quality Specialist
909-396-3094
Wsenga@aqmd.gov

Elaine Shen
Planning and Rules Manager
909-396-2715
Eshen@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 2304”)
Email us at: PortsISR@aqmd.gov. For more information, visit: www.aqmd.gov/fbmsm (click into “Commercial Marine Ports”)

Open Discussion



ZOOM:

- Click on the “Raise Hand” button at the bottom of your screen.

TELECONFERENCE:

- Dial *9 to “raise your hand”

Your name will be called when it is your turn to speak and the meeting host will unmute your line.