

Update on Facility Based Mobile Source Measures

Governing Board Meeting

March 1, 2019

**Commercial
Airports**



**Commercial
Marine Ports**



**New or
Redevelopment
Projects**



**Warehouse
Distribution
Centers**



**Railyard &
Intermodal
Facilities**



Summary of May 2018 Board Direction

Sector	Direction
Airports	Pursue MOUs to implement airport clean air action plans
Ports	Pursue MOUs to implement specific CAAP measures; pursue introduction of cleaner vessels
New/Redevelopment	Continue to work with stakeholders to develop rule concepts and preliminary costs/benefits
Warehouses	Develop rule concept; conduct economic impacts study to inform rule concept
Rail yards	Pursue rulemaking; explore potential for new agreements/MOUs beyond the 1998 and 2005 agreements

Airports

LAX

SNA

BUR

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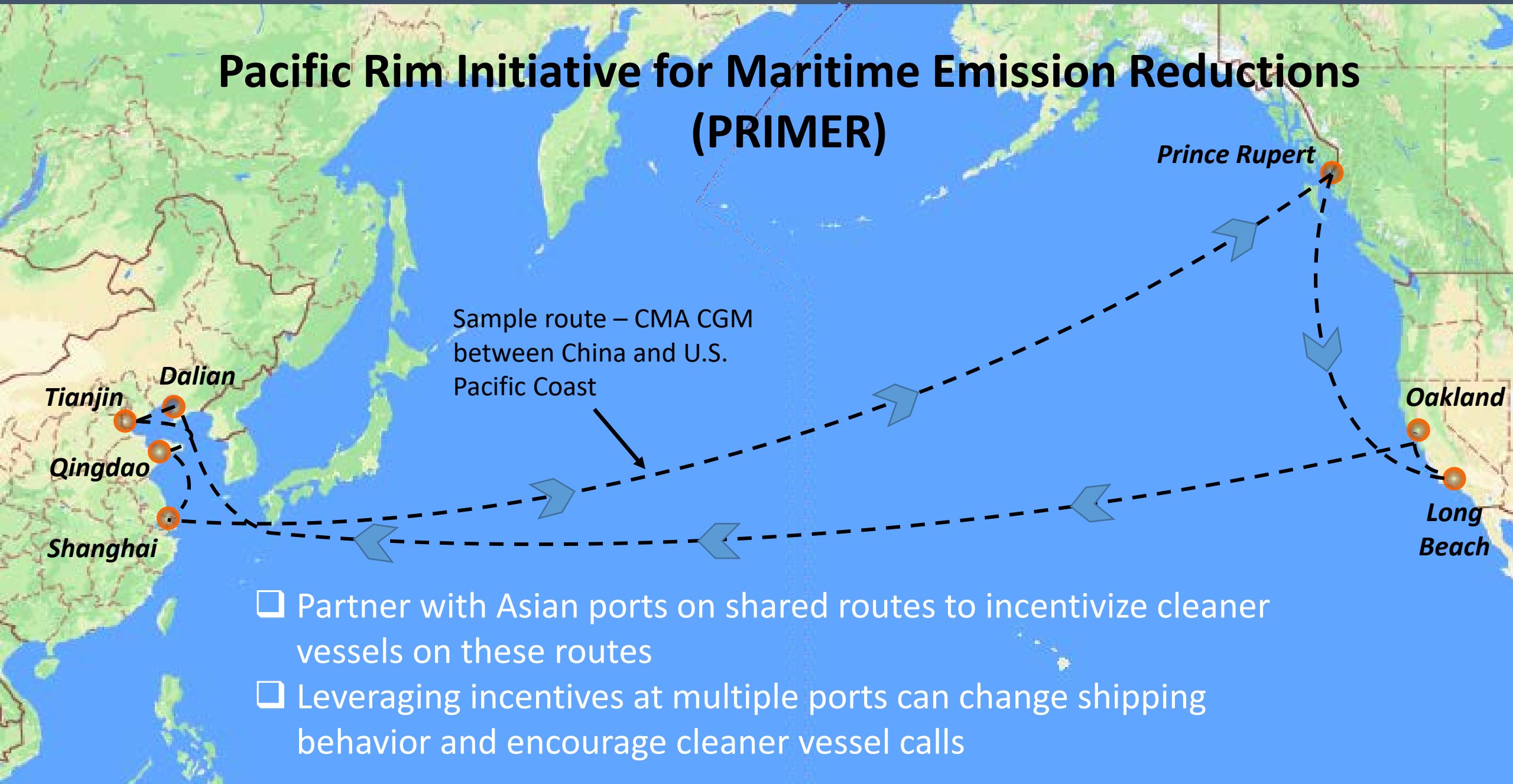
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- Airports are developing respective Air Quality Improvement Plans (AQIPs) and committed to MOU approach
- Staff working with airport consultants to develop emissions inventory methodology
- Working Group meetings planned over the next 7-8 months
- AQIP and MOU adoption by each airport expected by Sep 2019
- Board MOU adoption expected in Nov 2019

Ports

- Ongoing discussions with the Ports on MOU process and framework including meetings between Executive Officers
 - High level agreement on MOU development
 - Still need to develop and agree to specific commitments
 - Established Technical Working Group (TWG) to develop methodologies to quantify emission reductions from CAAP measures
 - Membership from Ports, CARB, EPA, Pacific Merchant Shipping Association, California Trucking Association, and Coalition for Clean Air
- Working group meetings planned next 7-8 months
- MOU adoption by POLA/POLB expected by Sep 2019
- Board adoption expected Nov 2019

Pacific Rim Initiative for Maritime Emission Reductions (PRIMER)



PRIMER Status



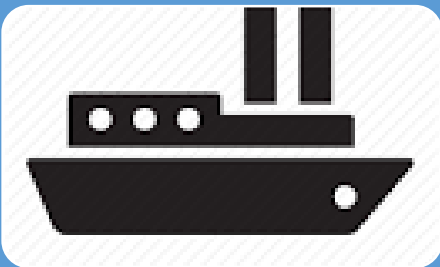
Engagement with China

- August 2018: met with officials from the central government in Beijing and local officials in Hong Kong and Shanghai
- January 2019: met with officials in Shenzhen and presented at International MoVE 2019 Workshop in Chengdu, China



Technical analysis to support the concept

- Data analysis to understand shipping patterns
- Hired consultant for cost-optimization work



Held Technology Forum for OGV retrofits

- Convened engine manufacturers, shipping lines, ports and other stakeholders to discuss retrofit technology
- Secured commitment for a technology demonstration project

New Development and Redevelopment

➤ The Board expressed key concerns about:

- Types of projects affected (e.g. affordable housing projects)
- Effects on real-estate prices
- Job and economic impacts

➤ Based on Board direction, staff:

- Held additional Working Group meetings
- Surveyed the Working Group on investigative approaches to identify emission reduction costs
- Is pursuing an RFP to study the feasibility of emission reductions from construction
 - Planning on releasing draft RFP to the Working Group and holding a Working Group meeting to discuss emission reduction approaches 2nd quarter 2019

New Development and Redevelopment

- Promising emission reduction strategies are being pursued by projects to mitigate CEQA-related air quality impacts
- As an early action, staff is considering voluntary CEQA mitigation programs, for example

CEQA Air Quality Mitigation Fund

Project proponents could voluntarily contribute to a SCAQMD fund that would be used to implement emission reduction projects to reduce a project's regional and/or local impacts.

Update SCAQMD CEQA Mitigation Guidelines

Encourage net-zero developments, clean construction policies, installation of charging/fueling infrastructure, etc.

Warehouse ISR

- Staff exploring potential Indirect Source Rule options
 - Structure of proposed rule
 - Stringency of proposed rule



Menu of Potential ISR Compliance Options

Board-directed economic impact study recently initiated

Research into potential air quality benefits underway

Facility Caps	<ul style="list-style-type: none">• XX% below baseline emissions (<i>SJVAPCD approach</i>)• <XX pounds of emissions per day per facility• <XX pounds of emissions per goods throughput unit or sq. ft.
SOON Program Approach	<ul style="list-style-type: none">• Indirect sources must apply for incentive funds and use them if available (e.g., warehouse operators that own fleets must apply for funding to replace trucks and use it if awarded)
Local Govt. Measure	<ul style="list-style-type: none">• Local govt. programs/ordinances can be put directly into SIP (e.g., ordinance requiring new warehouses install alt. fueling infrastructure)• Similar approach available in Rule 2202
Fleet Crediting Program	<ul style="list-style-type: none">• Clean fleets generate credits managed through a bank and ISR facilities must obtain and retire credit• Potential for localized overlay
Voluntary Fleet Certification Program	<ul style="list-style-type: none">• Fleet owners may certify that fleets are cleaner than required by CARB regulation• Facility owners required to use XX level of certified fleets
Onsite Best Management Practices	<ul style="list-style-type: none">• Utilize ZE/NZE equipment onsite• ZE/NZE fueling/charging infrastructure• Solar/energy storage
Mitigation Fee	<ul style="list-style-type: none">• Pay a mitigation fee if other compliance options not chosen• Collected funds are used to incentivize ZE/NZE equipment

Warehouse ISR – Key Constraints

*“We want a strong ISR,
with zero emissions.”*



Truck Emissions
Must Be Reduced

*“Warehouses don’t
control trucks.”*



Air District Does Not Have
Authority To Directly
Regulate Private Trucks

Warehouse Business Models

- Warehouse operators have variable control over truck fleets coming to their facility
 - Warehouse operator-owned fleet – complete control
 - Warehouse operator-contracted fleets – some control
 - Fleets contracted by cargo owner (not warehouse operator) – minimal control
 - Warehouses do have contractual relationship with cargo owners
- Relationship between warehouse owners, operators, and cargo owners is variable
 - Cargo owners often do not own or operate warehouses holding their goods
 - Warehouse operators often do not own warehouses

ISR Considerations Regarding Warehouse Business Models

- Regulatory options that require warehouse operators to control trucks at their facility may not be implementable, or at the very least, cause significant disruption to industry business model
- Remaining ISR options that don't necessarily require warehouse operators to control trucks:
 - SOON Program Approach
 - Local Government Measures
 - Onsite BMPs
 - **Fleet Crediting Program**
 - **Mitigation Fee**

Likely highest potential for achieving emission reductions from trucks given the diversity of business models

Recent Key Governmental Activities Affecting Heavy Duty Vehicles

Agency	Regulatory Action	Current Proposed Concept/Implemented Requirement	Turns Over Existing Fleet?
EPA	Cleaner Truck Initiative	➤ Rulemaking by 2020?, Implementation by 2024?	No
California	Low NOx Engines	➤ New engines XX% cleaner than 2010 standard ➤ Rule Implementation by 2023	No
	Advanced Clean Trucks	➤ ZEV Mandate for Heavy Duty Trucks ➤ 15% sales by 2030	No
	Innovative Clean Transit	➤ All new bus purchases must be ZE, phased in by 2040	No
	ZE Drayage Trucks	➤ Phase-in transition to ZE drayage at ports ➤ Rule Implementation beginning 2026-2028	Yes
	Financial Incentives	➤ \$100's of millions allocated statewide for early turnover in recent years	Yes
Ports of LA/LB	Clean Truck Program	➤ New rate structure for non-NZE/ZE drayage trucks in 2020, non-ZE in 2035	Yes
Global Examples	Shenzhen, China	➤ Financial incentives provided to convert all 16,000 transit buses to electric	Yes
	London, Milan, Paris	➤ City cordon pricing tied to emissions levels	Yes

ISR IS NOT THE ONLY POTENTIAL DRIVER FOR EXISTING FLEET TURNOVER, BUT IT IS ONE OF THE ONLY PROPOSED NEAR TERM MEASURES THAT COULD AFFECT EXISTING FLEETS

Rail Yards

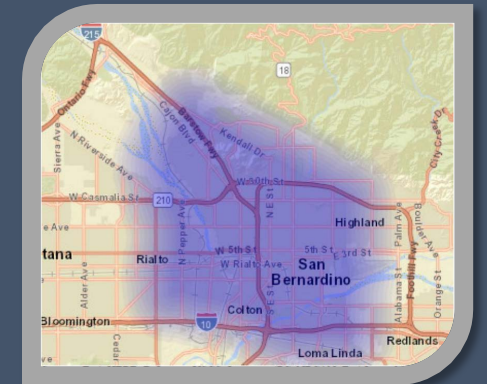
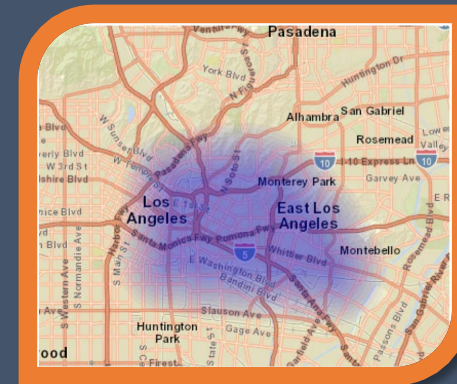
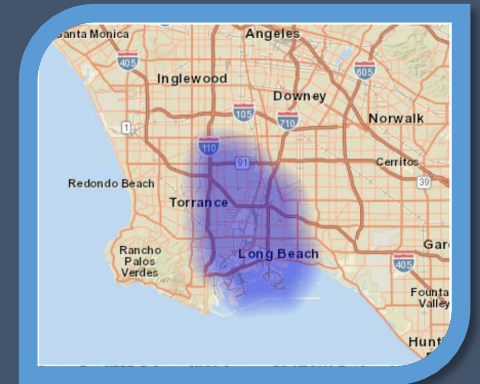
- Staff continuing to research potential indirect source rule and voluntary approaches
- Staff in discussion with both Class 1 railroads to update rail yard-specific emissions inventories
 - Last detailed rail yard inventories prepared using data from 2005
 - Detailed inventories helpful to understand potential opportunities to reduce emissions
- Railroads facilitated staff site visits to four rail yards to understand unique operations at each facility

Intersection Between AB 617 & FBMSM

Indirect sources have been identified as a concern in AB 617 meetings



Warehouses,
rail yards, and
ports all located
in 'Year 1'
AB 617
Communities



Key Elements of AB 617

Summary

AB 617 Overlap



Developing Air Quality Improvement Plans
MOU adoption targeted for November 2019



Agreement regarding MOU framework; still need specific commitments
Established TWG to help quantify expected CAAP emission reductions;
MOU adoption targeted for November 2019
Explore collaboration for cleaner ships in the Pacific Rim



Pursuing RFP to feasibility of emission reduction measure from construction associated with new/redevelopment
Exploring voluntary CEQA air quality mitigation fund concept and updates to CEQA mitigation guidelines



Developed menu of options for ISR; economic impact study underway
Better understanding of warehouse business models and how this could impact various regulatory options
Awareness of other activities also impacting trucks



Staff in discussions with railroads to update emission inventories
Railroads facilitated staff site visits to better understand facility operations