

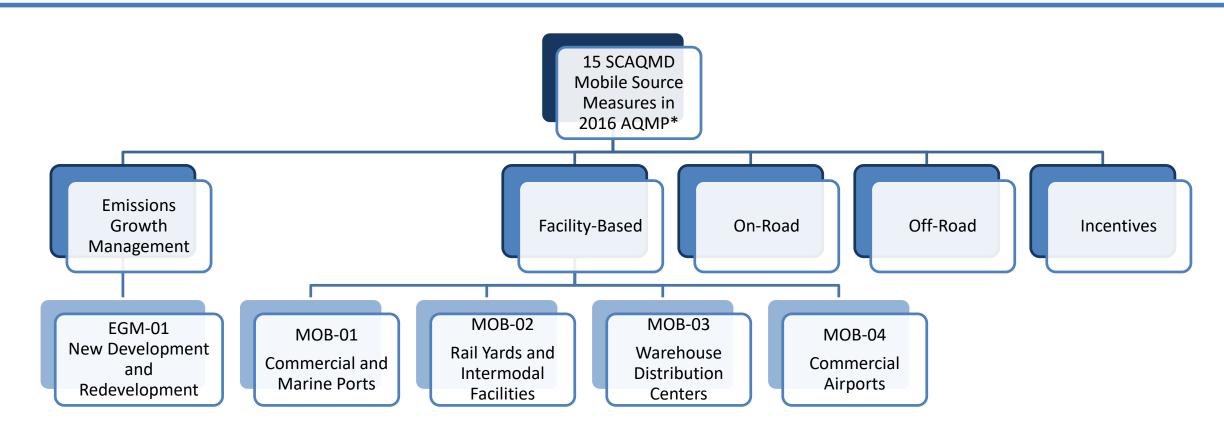


Today's Agenda

- 1. Introductions
- 2. SCAQMD's Update on Ports MOU Development
- 3. Ports Update on CAAP Implementation
- 4. Next Meeting April 25, 2019



Facility Based Mobile Source Measures (FBMSM)



^{* 2016} Air Quality Management Plan was adopted in March 2017



SCAQMD Governing Board's Direction (May 2018)

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



Memorandum of Understating (MOU)

 Voluntary agreement between SCAQMD and the Ports of Los Angeles and Long Beach to achieve emission reductions

 MOU reductions form the basis for SCAQMD making emission reduction commitments to EPA





SCAQMD-Ports MOU Approach

- The Ports have developed Clean Air Action Plan (CAAP)
- CAAP includes strategies to reduce emissions from port sources

CAAP

MOU

- AQMD develops an agreement with the Ports to reduce emissions
- MOU is based on CAAP measures
- Public process

- AQMD works with EPA to get SIP credits for MOU emission reductions
- If emission reductions not fully achieved, AQMD is responsible for shortfalls

SIP Credits

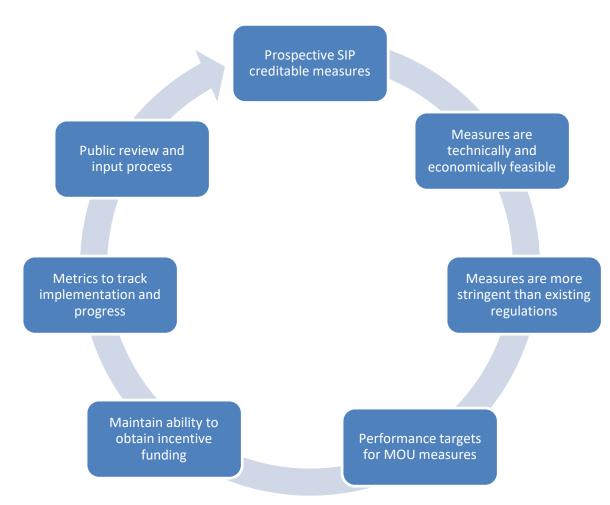


SCAQMD – Ports MOU Process

- MOU development through SCAQMD public process
 - Small Technical Working Group (TWG) to establish methodologies and quantify emission benefits for CAAP measures and SIP credits
 - Working Group meetings (TWG products, MOU development)
 - Updates to SCAQMD's Mobile Source Committee/Governing Board
 - Public workshop/consultation meeting
- Ports public process for CAAP implementation
- MOU subject to approval by POLA and POLB Boards and SCAQMD Governing Board



MOU Key Principles





SIP Creditable Emission Reductions

- Significant emission reductions needed for attainment demonstration of federal Ozone and PM2.5 standards
- MOU reductions to be "SIP" creditable toward attainment demonstration must satisfy EPA's requirements
 - Integrity elements
 - Permanent, quantifiable, surplus, and enforceable
 - Enforceable commitment (to ensure reductions are achieved)
 - Technical analysis
 - Tracking/reporting requirements
 - Public involvement



MOU Framework: Commitments

Ports



- Implementing and enforcing CAAP/MOU measures
- Performance targets for CAAP/MOU measures
- Tracking/Monitoring progress of CAAP implementation
- Reporting requirements

SCAQMD



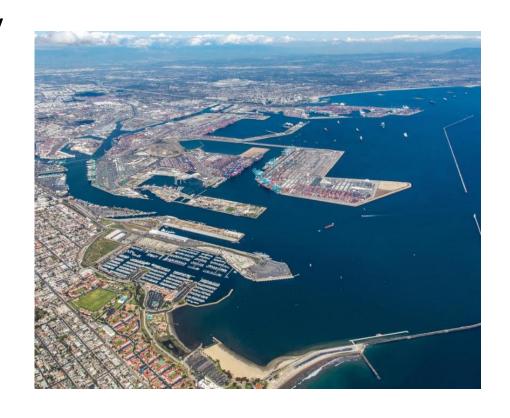
- Quantify emission reductions for CAAP measures and SIP credits (2023, 2031)
- Enforceable commitments for reductions (address any potential shortfalls through collaborative process)
- Establish metrics to track implementation progress
- Public access and disclosure



San Pedro Bay Ports Clean Air Action Plan

- Adopted initially in 2006 to provide overall strategy for reducing emissions from port-related cargo movement
- 2017 CAAP Update (with new strategies)
- Emission reductions achieved vs targets (from 2005 levels)

	NOx	DPM	SOx
2023 Targets	59%	77%	93%
Achieved - 2017	58%	87%	97%





2017 CAAP Update - Key Strategies

- Heavy-duty trucks
 - Clean Truck Fund Rate (Rate study underway)
 - Transition to near-zero emissions in early years and ultimately to zero emissions by 2035
- Cargo handling equipment
 - Transition to zero emissions by 2030
 - Procurement plans for new purchases of zero emissions or near-zero if feasible, or cleanest available
- Ocean-going vessels
 - Expand Vessel Speed Reduction Program to maximize participation
 - Develop incentive programs to transition the oldest, most polluting ships out of the fleet
- Harbor craft
 - Repowers to Tier 3 and Tier 4 through incentive measures



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SCAQMD's Ports Emission Reduction Program

- SCAQMD's resolution and supporting documents (staff report) for submittal to EPA through CARB
- Based on Ports MOU
 - SIP creditable CAAP measures incorporated in the MOU
- Include necessary documentation to satisfy EPA's requirements
 - Quantification of SIP credits in 2023 and 2031
 - Integrity Elements
 - SCAQMD's enforceable commitment
 - Implementation tracking process
 - Public disclosure mechanism



Upcoming CARB Regulations Related to Ports

Sector	Proposed Requirement	Board Date
Ocean Going Vessels	Shore power or alternative control for 100% of vessel visits (container, reefer, cruise); additional vessel types to be regulated (liquid bulk & tankers, auto carrier/Ro-Ro)	2019
Commercial Harbor Craft	More stringent in-use requirements including additional vessel categories	2020
Cargo Handling Equipment	Transition to zero emissions	2022
Drayage Trucks	Transition to zero emission operation	2022
Heavy Duty Trucks	Lower NOx emission standard; revised in-use testing procedure; and more stringent warranty requirement	2020
Advanced Clean Trucks	ZEV mandate for heavy duty trucks 15% of sales by 2030	2019



Status Update

- On-going discussions with the Ports on MOU process and framework
 - High level agreement on MOU development
 - Draft MOU and comments on AQMD's proposed process submitted by ports
 - Still need to develop and agree to specific commitments by the ports that will achieve SIP creditable emission reductions within the CAAP
- Technical Working Group (TWG) established
 - Led by AQMD with membership from Ports, CARB, EPA, Pacific Merchant Shipping Association, California Trucking Association, and Coalition for Clean Air
 - Develop methodologies to quantify baseline emissions forecast and reduction benefits for CAAP measures
 - Ports committed to support TWG process
- Held Ocean Going Vessel Retrofit Technology Forum in December 2018
 - Convened engine manufacturers, shipping lines, ports and other stakeholders to discuss retrofit technology
 - Secured commitment for a technology demonstration project

South Coast

Overall Timeline

Data	2019											
Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
May 2018 - Nov 2019												
Feb 2019 - Oct 2019 (Biweekly)												
Q1/Q2 2019												
February 15, 2019												
March 6, 2019												
Q2 2019												
April 25, 2019												
June 21, 2019												
June 27, 2019												
July 2019												
August 15, 2019												
September 26, 2019												
October 4, 2019												
October 18, 2019												
October 2019												
November 1, 2019							:					
December 2019									! !			
	Feb 2019 - Oct 2019 (Biweekly) Q1/Q2 2019 February 15, 2019 March 6, 2019 Q2 2019 April 25, 2019 June 21, 2019 June 27, 2019 July 2019 August 15, 2019 September 26, 2019 October 4, 2019 October 18, 2019 October 2019 November 1, 2019	May 2018 - Nov 2019 Feb 2019 - Oct 2019 (Biweekly) Q1/Q2 2019 February 15, 2019 March 6, 2019 Q2 2019 April 25, 2019 June 21, 2019 June 27, 2019 July 2019 August 15, 2019 September 26, 2019 October 4, 2019 October 18, 2019 October 2019 November 1, 2019	May 2018 - Nov 2019	Date Jan Feb Mar Apr May Jun	Date Jan Feb Mar Apr May Jun Jul	May 2018 - Nov 2019	Date Jan Feb Mar Apr May Jun Jul Aug Sep May 2018 - Nov 2019 Image: Control of the properties of the proper	May 2018 - Nov 2019	May 2018 - Nov 2019 May 2019			

^{*} with draft MOUs attached.



Next Steps

- Technical Working Group to continue meeting bi-weekly to develop baseline emissions forecasts (2023, 2031)
 - Initial focus on drayage trucks and CHEs
- Draft MOU language being developed
- Next Working Group meeting on April 25, 2019
 - Baseline emissions forecast for drayage trucks and CHE
 - Updates from Ports on CAAP implementation
 - Draft MOU language

