Ports MOU Working Group Meeting #2

July 24, 2019





- 1. Introductions
- 2. Update on Ports MOU Development
- 3. Ports Update on CAAP Implementation
- 4. Next Steps



Background

South Coast AQMD Board approved MOU approach for the marine ports Facility Based Mobile Source Measure (FBMSM) in May 2019

 Based on emission reductions from implementation of 2017 CAAP Update measures





2017 CAAP Update - Key Measures

Drayage Trucks

- Clean Trucks Program
- Transition to zero emissions by 2035

Cargo Handling Equipment

- 10-year procurement plans
- Transition to zero emissions by 2030

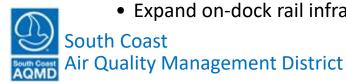
Ocean-Going Vessels

- Expand Vessel Speed Reduction program
- Develop incentive programs for Tier 3 vessels and retrofit technologies

Harbor Crafts

• Repower to Tier 3 and Tier 4 through incentive measures

Locomotives



• Expand on-dock rail infrastructure to move 35% of containerized cargo by rail South Coast





Draft MOU Development Update

- On-going meetings/conference calls between AQMD and Ports staff (every 3 weeks)
- Continuing communications at the executive management level
- High level agreement on key MOU concepts
- Draft MOU language being developed but pending potential emission benefits projections for CAAP measures





Draft MOU

Purpose

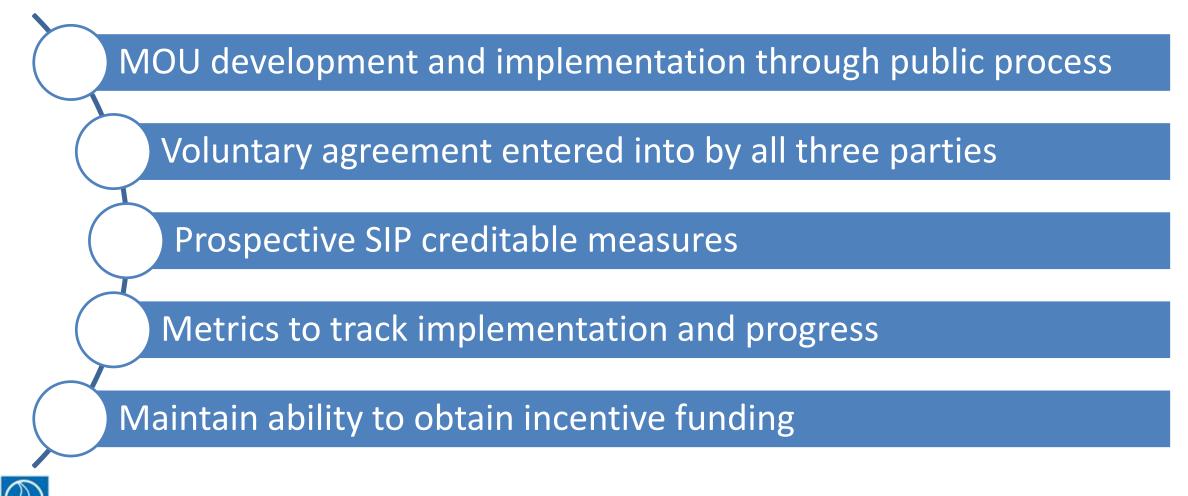
• Quantify emission reduction benefits and SIP credits anticipated through implementation of the 2017 CAAP Update strategies

Structure

- General agreements regarding purpose, process and approach in the main body of MOU
- Specific agreements on CAAP measures (e.g., milestones, targets, implementation and reporting requirements)



Key Considerations



South Coast Air Quality Management District

Roles and Responsibilities

Ports

- Implement and track 2017 CAAP Update measures with emission reduction benefits
- Provide all related studies and reports to South Coast AQMD (e.g., truck rate study, feasibility studies, annual emissions inventories)
- Participate as a member in Technical Working Group (TWG) and MOU Working Group
- Track and report on implementation of CAAP measures
- Seek grant funding and implement incentive programs

South Coast AQMD

- Establish and lead Technical Working Group
- Establish and lead the MOU public process and MOU Working Group
- Provide technical analyses for potential SIP emission credits from CAAP measures
- Enforceable commitments for SIP credits; address potential shortfall through a collaborative process
- Monitor and assess implementation of CAAP measures and provide annual reporting to EPA
- Support Ports' efforts to seek grant funding to implement CAAP measures



Ports MOU Technical Working Group (TWG)

- Membership
 - South Coast AQMD, Ports of LA & LB, US EPA, CARB, Coalition for Clean Air, Sierra Club, Pacific Merchant Shipping Association, California Trucking Association
- Process
 - Bi-weekly meetings since February 2019 to develop methodologies and determine:
 - Baseline (business as usual) emission forecasts (2023 & 2031)
 - Emission benefits for CAAP measures
 - SIP creditable emission reductions



TWG Update Port Trucks Baseline Emissions Forecast

	VMT (mi/day)	NOx (tpd)	PM2.5 (tpd)
2017 ¹	1,249,616	8.71	0.05
2023 ^{2,3}	1,591,711	6.06	0.04
2031 ^{2,3}	2,120,133	7.84	0.05

- 1. Based on 2017 emissions inventories for POLA/POLB
- 2. EMFAC 2017 Custom Activity Module-based forecast
- 3. VMT growth projections based on San Pedro Bay Long-Term Unconstrained Cargo Forecast, 2016 Mercator



TWG Update

Cargo Handling Equipment Baseline Population Forecast

	2017 ¹ Population	Activity (Hours)	2023 ³ Population	Activity ² (Hours)
Yard Tractors	1,642	2,724,659	2,063	3,508,274
RTGs	187	348,982	210	449,350
Top Handlers ⁴	452	961,401	565	1,237,902
Side Picks	34	27,161	44	34,973
Forklifts	738	441,865	753	468,504
Others	172	121,670	171	129,005
Total ⁵	3,225	4,625,738	3,806	5,828,008

- 1. Based on 2017 emissions inventories for POLA/POLB (ICTF not included)
- 2. 2023 activity growth rates based on San Pedro Bay Long-Term Uncontrolled Cargo Forecast, 2016 Mercator
- 3. 2023 forecast based on modified CARB's methodology with updated purchasing curve
- 4. Straddle carriers are included under top handlers
- 5. Excluding all-electric cargo handling equipment

Next Steps

- Track development of CAAP measures
- Ports MOU TWG
 - Complete baseline emissions forecasts
 - Estimate emission benefits from CAAP measures upon availability of sufficient information and data to make projections
- Develop draft MOU language
- Next MOU Working Group meeting in September/October 2019
 - Update on TWG activities and products
 - Updates from Ports on CAAP implementation
 - Draft MOU language

