

Facility-Based Mobile Source Measures Railyard and Intermodal Facilities (MOB-02)



1st Working Group Meeting
June 1, 2017

FBMSM

Agenda

- Background
- Working Group Process and Metrics
- Emission Sources
- Measures Improving Air Quality
- SIP Credit and Emission Reductions
- Next Steps

Background



- Final 2016 AQMP approved by SCAQMD and ARB in March 2017
- Control Measure: Facility-Based Mobile Source Measure MOB-02 for Emission Reductions at Rail Yards and Intermodal Facilities [NO_x, PM]



- Introductory Working Group Meeting held May 8, 2017
- More than one-hundred stakeholders participated
- Stakeholders represented industry, government, and environmental and community groups

Background *(Continued)*

Number	Title	Adoption	Implementation Period	Implementing Agency	Emission Reductions
<i>Facility-Based Mobile Source Measures</i>					
MOB-02	Emission Reductions at Rail Yards and Intermodal Facilities [NOx, PM]	2018	2019-2031	SCAQMD	TBD

- The goal of this measure is to assess and identify potential actions to further reduce emissions associated with mobile sources operating in and out of rail and intermodal yards

Working Group Process - Metrics

- Near term objective introduced at Introductory Working Group meeting
- Metrics will be used to determine progress of Working Group
- Seeking stakeholder input on draft metrics

Proposed Near Term Objectives of Working Groups

- Work with stakeholders to identify strategies to implement EGM-01, and MOB-01 through MOB-04
- Identify voluntary measures that can achieve cost-effective emission reductions
- Consider how other AQMP measures (incentives, CARB regs, etc.) interact with facility-based measures
- Identify metrics for progress that staff should consider when making recommendation to Board in March 2018
- Develop mechanisms to ensure any voluntary emission reductions are real, enforceable, quantifiable, surplus, and creditable towards the State Implementation Plan

Draft Metrics to Evaluate Progress of Working Group

FBMSM Development

- Background
- Strategies
- Implementation

FRAMEWORK

Stakeholder Outreach

- Meetings
- Web
- Other media

Schedule

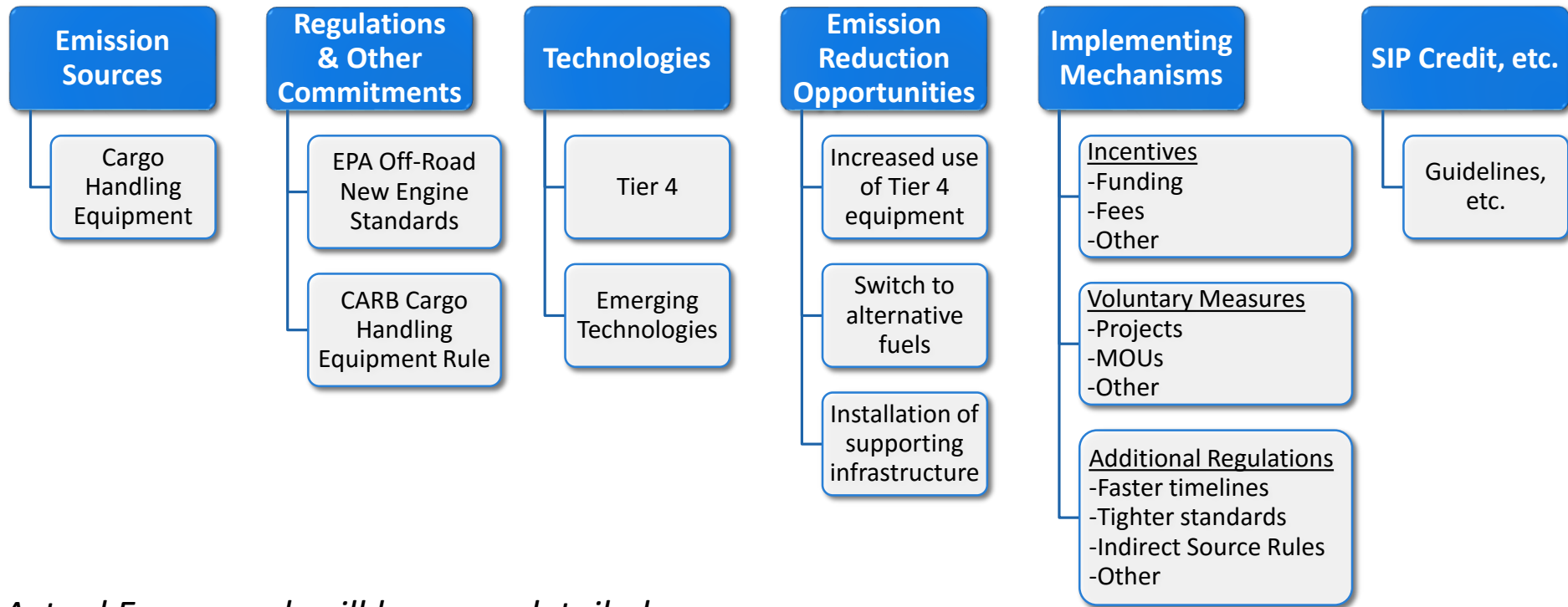
- Sharing Information
- Data Analysis
- Developing Recommendations for SCAQMD Board

FBMSM Development Framework

<u>Background Information</u>			<u>Strategies</u> (Discussion Topics for Working Groups)		<u>Implementation</u> (Discussion Topics for Working Groups)	
<i>Emission Sources</i>	<i>Regulations & Other Commitments</i>	<i>Technologies</i>	<i>Emission Reduction Opportunities</i>	<i>Financial and Other Incentives*</i>	<i>Implementing Mechanisms</i>	<i>SIP Credit</i>
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-	-	-	-	-	-	-
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*Incentive Funding being pursued through separate public process

FBMSM Development Framework Example



Actual Framework will be more detailed

FBMSM Development Framework

- Framework will be a living document and posted online
- Staff will provide update to Framework prior to next working group
- Staff is requesting stakeholders to provide input by June 30
 - Additional criteria to consider (e.g., more or refined columns)
 - Initial focus on Emission Reduction Opportunities
- Next working group meeting will review data collected to date, and focus discussion on opportunities and potential implementing mechanisms

Emission Sources

- Emission Sources from Railyards and Intermodal Facilities:
 - Locomotives
 - Auxiliary Engines
 - On-Road Heavy-Duty Trucks
 - Cargo-Handling Equipment
 - Transportation Refrigerator Units (TRUs)
 - Maintenance activity
- Pollutants will vary from each source
 - NO_x is focus, but opportunities for other pollutants will be considered

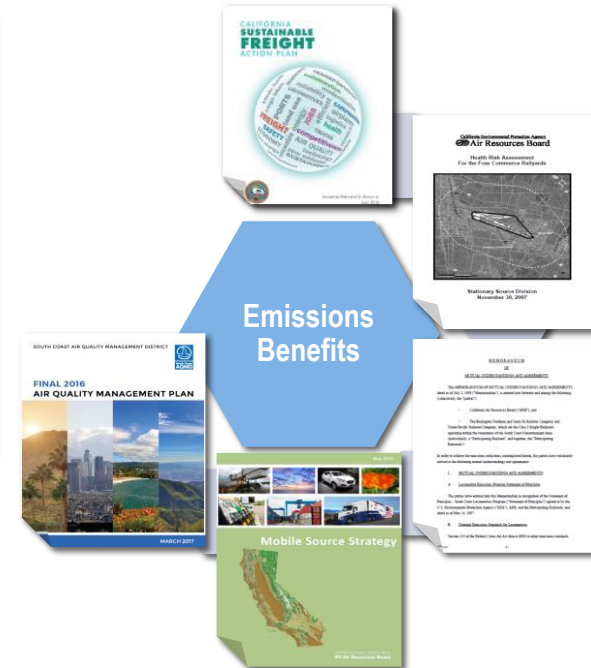
Regulations & Other Commitments

Existing

- EPA Locomotive Emission Standards
- CARB 1998 & 2005 MOUs
- SCAQMD Regulation XXXV
- EPA Heavy Duty On-Road Engine Standards
- EPA Off-Road Engine Standards
- CARB In-Use Off-Road Rules
- CARB Cargo Handling Rule
- CARB Drayage Truck Rule
- CARB Heavy Duty Truck and Bus Rule
- Other

Future

- 2016 AQMP and CARB State Strategy
- State Sustainable Freight Action Plan
- Petition to US EPA for Tier 5 locomotive standard
- Other



Regulations & Other Commitments (Continued)

- Key considerations
 - Exact requirements of existing regulations that affect emissions
 - Timing of implementation
 - Key assumptions of how regulation is accounted for in emission inventory
 - Status of currently proposed future measures

State Implementation Plan Credit

**Key components needed
to take credit in the SIP
for emission reductions
attributable to a
voluntary program**

“Integrity Elements”

Enforceable commitment

Technical analysis/support

**Demonstration of state funding
and legal authority**

Procedures for public disclosure

**Provisions to measure and track
performance**

Permanent

Enforceable

Quantifiable

Surplus

Emission Reductions Opportunities – Example

➤ Cargo Handling Equipment example:

- EPA sets emissions standards for new engines
- CARB sets in-use standards
 - Requirements for new equipment/yard trucks
 - Phase-in of BACT for in-use equipment/yard trucks
 - Opacity Monitoring
 - Recordkeeping and Reporting
- Tier 4 equipment is commercially available
- Zero emission technologies emerging

Emission
Source

Regulations

Technology

Emission Reductions Opportunities

– Example (Continued)

- Measures that could result in additional emission reduction from Cargo Handling Equipment
 - Use more recent model year CHE than required by CARB in-use standards
 - Use zero-emission cargo handling equipment
 - Other
- Future Working Group meetings on implementation mechanisms, obtaining SIP credit, etc.

**Opportunities
for Emission
Reductions**

**Mechanisms,
SIP Credit**

Technologies

- Many technologies emerging to reduce emissions
 - SCAQMD regularly provides substantial funding to demonstrate these technologies
- Information is available, but often in technical reports and not in a single repository
- SCAQMD is proposing to develop a living website to present user-friendly summaries of key technologies, with resources for more information
 - Website will be developed in parallel with FBMSM Working Groups

Stakeholder Input

- Staff is seeking input by June 30 on:
 - Potential refinements to FBMSM Development Framework for this Working Group (slide #7)
 - Emission Reduction Opportunities
 - Projects/approaches used previously that may have future applicability
 - Potential new projects/approaches
 - Suggestions for opportunities that staff should prioritize evaluating
 - Metrics to determine progress of the working group process

Next Steps

- Next working group dates for consideration
 - July 26th and 27th
 - September 12th and 13th
 - Seeking feedback on potential schedule conflicts
- Topics being considered for discussion at next meeting:
 - Update of Framework
 - Potential Opportunities for Emission Reductions to consider
 - Implementing mechanisms

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Questions or Comments?
