### Facility-Based Mobile Source Control Measures

## **Commercial Airports (MOB-04)**





1<sup>st</sup> Working Group Meeting May 31, 2017



# 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 Measure for Mobile Source Measure (MOB-04) for Emission Reductions at Commercial Airports



- 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						
Facility-Based Mobile Source Measures										
MOB-04	Emission Reductions at Commercial Airports [NOx, PM]	2018	2019-2031	SCAQMD	TBD					

- Measure seeks to achieve the following:
  - Quantify emission reductions resulting from mitigation measures and other actions initiated by airport authorities
  - Undertake a stakeholder process and draft for Governing Board consideration an indirect source rule for commercial airports within the South Coast Basin by February 1, 2019 to control emissions of NOx, PM2.5, lead, and diesel particulate matter from non-aircraft sources

# 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

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# 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)		Implementation (Discussion Topics for Working Groups)		
Emission Sources	Regulations & Other Commitments	Technologies	Emission Reduction Opportunities	Financial and Other Incentives*		Implementing Mechanisms	SIP Credit
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-	-	-	-	-		-	-
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# FBMSM Development Framework Example

#### Regulations **Emission Implementing Emission** & Other **Technologies** SIP Credit, etc. Reduction **Mechanisms Sources Commitments Opportunities** Incentives Ground EPA Non-Road Increased use Guidelines, -Funding of Tier 4 Support Diesel New Tier 4 Diesel etc. -Fees **Engine Standards** Equipment equipment -Other EPA Non-Road Switch to **CARB 2010 Voluntary Measures** Spark-Ignition alternative LSI Standard -Projects **New Engine** fuels -MOUs Standards -Other Installation of Emerging supporting CARB In-Use Off-**Technologies** Additional Regulations infrastructure Road Diesel Rule -Faster timelines -Tighter standards -Indirect Source Rules CARB Off-Road -Other Large Spark **Ignition Rule**

# 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 Commercial Airports:
  - Aircraft Emissions
  - Ground Service Equipment (GSE)
  - Passenger Transportation
  - Stationary Equipment
  - Construction activities
- Pollutants will vary from each source
  - > NOx is focus, but opportunities for other pollutants will be considered

# Regulations & Other Commitments

### Existing

- ICAO CAEP Tier 8
- EPA Heavy Duty On-Road Engine Standards
- EPA Off-Road Engine Standards
- EPA Non-Road Large Spark Ignition Standards
- CARB In-Use Off-Road Rules
- CARB Heavy Duty Truck and Bus Rule
- CARB Off-Road Large Spark Ignition Rule
- CARB Portable Equipment Registration program
- Airport Authority GSE Policies
- SCAQMD Fleet Rule
- 2016 RTP/SCS
- Others

#### **Future**

- 2016 AQMP and CARB State Strategy
- State Sustainable Freight Action Plan
- 2020 RTP/SCS
- CARB ZEV Airport Shuttle Bus
- 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

- ➤ Ground Support Equipment example:
  - > EPA sets emissions standards for new engines
  - CARB sets in-use standards
    - Off-Road Diesel
    - Large Spark Ignition
    - Portable Equipment Registration Program
  - > Tier 4 equipment is commercially available
  - > Emerging zero emission equipment

**Emission Source** 

Regulations

**Technology** 

### **Emission Reductions Opportunities**

- Example (Continued)
- Measures that could result in additional emission reduction from Ground Support Equipment
  - Lower fleet wide averages than required by CARB in-use standards
  - Lower idling limits
  - > Zero-emission 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 12<sup>th</sup> and 13<sup>th</sup>
  - Seeking feedback on potential schedule conflicts
- > Topics being considered for discussion at next meeting:
  - Update of Framework
  - Implementing mechanisms

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## Questions or Comments?