

# **Agenda Item 7**

## **South Coast AQMD's Proposed Draft VOC Stationary Source Measures and Other Measures**

**2022 Air Quality Management Plan (AQMP)  
Control Measures Workshop – Morning Session**

**November 10, 2021**



# VOC Measures FUG-01 Improved Leak Detection and Repair

# FUG-01 Improved Leak Detection and Repair

- Source Category
  - Targets process and storage equipment from oil and gas production, petroleum refining, chemical products processing, storage and transfer, and marine terminal facilities
- Emissions Inventory
  - 3.6 tpd of VOC in 2018 and 4.2 tpd of VOC in 2037
- Proposed Approach
  - Implementation of enhanced leak detection devices
    - Optical gas imaging
    - Open path detection
    - Gas sensors
  - Implement AB617 Community Emissions Reduction Plan (CERP) goal for Wilmington, Carson, West Long Beach
- Emission Reductions
  - Potential 1.8 tons per day reduction (50%) in emissions from leaks
- Cost effectiveness to be determined



# VOC Measures FUG-02 Emission Reductions from Cooling Towers

# FUG-02 Emission Reductions from Cooling Towers

- **Source Category**
  - Industrial cooling towers at refineries and chemical plants used to cool hydrocarbon process streams
  - Excludes HVAC system cooling towers
- **Emissions Inventory**
  - VOC\*: 0.4 tons per day in 2018 and 2037
- **Technologies**
  - Regular sampling of cooling tower water to identify VOC leaks
  - Continuous hydrocarbon analyzers
- **Proposed Approach**
  - Step 1: Conduct assessment to evaluate need for additional controls and practices that can reduce VOC emissions from cooling towers
  - Step 2: Implement control approaches based on results of assessment
- **Emissions Reduction and Cost Effectiveness**
  - To be determined



# VOC Measures CTS-01 Further Emission Reductions from Coatings, Solvents, Adhesives, and Sealants

# CTS-01 Further Emission Reduction from Select Coatings, Adhesives, and Sealants

- Source Category
  - Metal part and product coatings are regulated by Rule 1107 – Coating of Metal Parts and Products
  - Automotive refinishing coatings are regulated by Rule 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations
  - Adhesives and sealants are regulated by Rule 1168 – Adhesive and Sealant Applications
- Emissions Inventory: 18 tpd of VOC (2018) / 19 tpd of VOC (2037)
- Technologies
  - Zero and near-zero VOC materials
  - Other technologies: UV light, electron beam, and light emitting diode cured materials
- Proposed Approach
  - Strategic VOC control program to maximize co-benefits of NO<sub>x</sub>, greenhouse gases, and air toxic controls
  - Incentivize use of zero and near-zero VOC materials and other technologies
  - Regulatory approach to address toxicity concerns of PCBTF and tBAC by removing exemption status
- Cost effectiveness to be determined





VOC Measures

FLX-02 Stationary Source VOC Incentives



# FLX-02 Stationary Source VOC Incentives

- Source Category
  - Residential, commercial and industrial sources
- Proposed Approach
  - Incentivize lower polluting and less toxic alternative processes and materials for existing residential, commercial, and industrial modernization
  - Encourage residents and businesses to make choices that will reduce emissions while minimizing cost impacts
- Emissions Reductions and Cost Effectiveness
  - To be determined

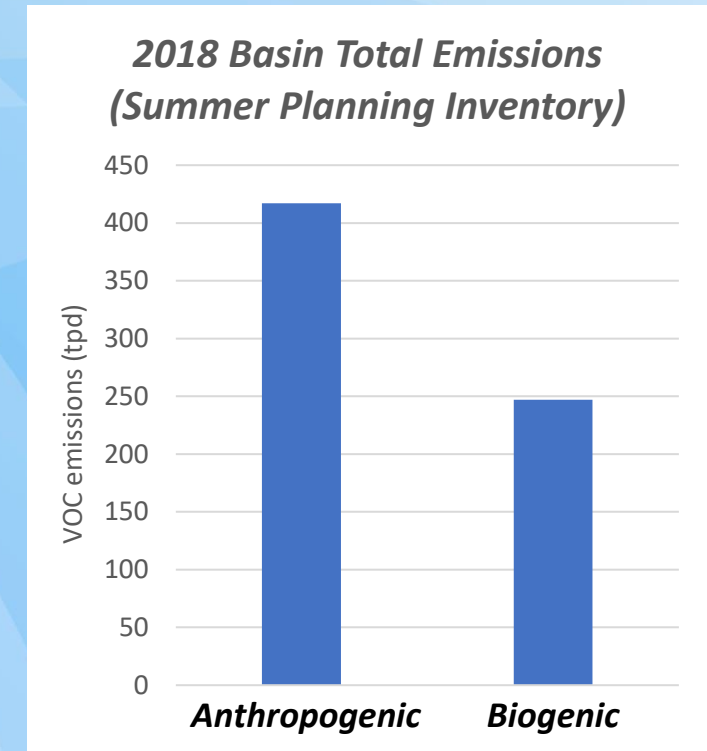




# VOC Measures BIO-01 Assessing Emissions from Urban Vegetation

# BIO-01 Assessing Emissions From Urban Vegetation

- Source Category
  - Trees emit large quantities of Biogenic Volatile Organic Compounds (BVOCs), some of which are highly reactive and exceed the ozone forming potential of Anthropogenic VOCs
  - Average BVOC emissions are approximately 250 tons per day in the Basin during May through September
- Background
  - 2009 Tree Partnership with cities and counties to plant trees on public lands
    - Over 4,300 low emitting trees planted in 19 cities
- Proposed Approach
  - Improve biogenic emissions inventory for the Basin, improve understanding of the BVOCs contribution to ozone and PM formation, and promote planting low VOC emitting species
- Emissions Reduction
  - To be determined





# Other Measures

## MCS-01 Application of All Feasible Measures

# MCS-01 Application of All Feasible Measures

- Source Category
  - Applicable stationary sources
- Regulatory Background
  - Address the State law requirement for all feasible measures for ozone
  - Serve as a placeholder for source categories not covered by other measures
- Proposed Approach
  - Continue to review new emission limits or controls introduced through federal, state or local regulations
  - Conduct research and development, identify feasible and cost-effective technologies, consider new retrofit technology control standards
- Emissions Reductions and Cost Effectiveness
  - To be determined





# Other Measures

## MCS-02 Wildfire Prevention

# MCS-02 Wildfire Prevention

- Source Category
  - Seeks to prevent emissions by mitigating the probability of an uncontrolled wildfire
- Proposed Approach
  - Regulatory and/or incentive efforts
    - Funding for a pilot project would treat ~1,400 acres - provision of funds for thinning of excess fuels and enhancement of defensible space via chipping at properties located in the San Bernardino National Forest
    - Implementing entities include local non-profits and fire departments with established track records of fire prevention and resiliency improvements
- Emissions Reductions
  - Prevented NOx emissions to be determined based on annual probability of wildfire and averaged over a daily period





# Other Measures

## FLX-01 Improved Education and Public Outreach



# FLX-01 Improved Education and Public Outreach

- Source Category
  - All sources
- Proposed Approach
  - Seeks to provide education and outreach for consumers to contribute to clean air efforts
  - Increase awareness of the benefits of purchasing/using low emitting products
  - Promote further implementation of efficiency and conservation projects
- Emission Reductions and Cost Effectiveness
  - Not quantifiable due to voluntary nature of this control measure



# Q & A and Public Comments

For ZOOM:

- Click on the “Raise Hand” button.

For TELEPHONE:

- Dial \*9 on your keypad