



Working Group Meeting #1:

PR 1188 – Vacuum Truck Operations

South Coast Air Quality Management District

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May 6, 2014

Agenda

- § Meeting Goals
- § Background and Purpose
- § Vacuum Truck Industry Overview
- § Stakeholder Input and Feedback
- § VOC Emissions Characterization
- § Tentative Schedule



Meeting Goals

- § Form Working Group
- § Define Expectations
- § Communicate Intent of Effort
- § Review Background Information
- § Solicit and Discuss Initial Feedback
- § Prioritize Gap Areas



Background and Purpose

§ **Control Measure (CM) FUG-01**

- PR 1188 will Implement CM FUG-01
- Reference: Initial Focus Group Meeting (1 year ago)
- Estimated Reductions: 1.05 tpd

§ **Vacuum Truck Operations**

- VOC Emissions Control During Transfer of Liquids and Solids
- VOCs (Vapor Phase) Currently Controlled During Tank Degassing (SCAQMD Rule 1149)

§ **BAAQMD Vacuum Truck Rule**

- Adopted in 2012; effective April 1, 2013
- Approximately 40 Facilities Affected
- Source Tests Conducted



Vacuum Truck Industry Overview

§ **Applicability**

- Petroleum Refineries
- Bulk and Marine Terminals
- Gasoline Terminals
- Oil and Gas Production Operations
- Pipelines

§ **Control Technology Options**

- Carbon Adsorption
- Thermal Oxidation
- Liquid Scrubbers
- Refrigerated Condensers
- Positive Displacement Pumps



Stakeholder Input and Feedback

§ Scope

- Conventional Operational Practices
- Current Regulatory Environment
- Current Industry Trends

§ Control Technology Feasibility (Pros/Cons)

- Suitability
- Cost and Availability
- Control Effectiveness

§ Other Input



VOC Emission Characterization

§ Emissions Result from Material Transfer Operations

§ Annual Emissions

$$= (\text{\# of Transfers per Year}) \times (\text{VOC Emissions per Transfer}) \times (1 - \text{Control Efficiency of Control Equipment})$$

§ Transfers per Year

- Based on Estimates by Operators at Affected Facilities
- Based on Information Provided by Vacuum Truck Operators

§ VOC Emissions per Transfer (Emission Factor)

- Based on Source Test Data



Preliminary Rule Development Schedule

Item	Action	Target
Vacuum Truck Activities at Affected Facilities	Form Working Group to: § Study Vacuum Truck Activities; § Conduct Source Testing; and § Collect Data and Use to Estimate VOC Emissions	May 2014 thru July 2014
Control Technology Application		
Field Visits		
Milestones	Working Group Meeting #2	June 2014
	Working Group Meeting #3	July 2014
	Public Workshop	Sept. 2014
	Set Hearing	Oct. 2014
	Final Hearing	Nov. 2014
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