Working Group Meeting #1:
PR 1188 – Vacuum Truck Operations

South Coast Air Quality Management District
Kennard Ellis
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**
  \[
  \text{Annual Emissions} = (\# \text{ of Transfers per Year}) \times (\text{VOC Emissions per Transfer}) \times (1 - \text{Control Efficiency of Control Equipment})
  \]

- **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

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