Update on Implementation of Rule 1148.2

Rule 1148.2 Working Group Meeting

November 12, 2014
Background – Rule 1148.2

- Adopted April 5, 2013
- Applies to operators of oil and gas wells and chemical suppliers
- Requires pre-project notification, emissions and chemical usage reporting for drilling, well completion, or rework activities
- SCAQMD website where the public may access notification and chemical usage information
Board Resolution 13-31

• Convene Working Group within 6 months after the first emissions report is received to discuss equipment and chemical data, and emissions monitoring/sampling results

• Report semi-annually to Stationary Source Committee (SSC) on notifications, emissions, and chemical use reporting

• Report to the SSC within 2 years of rule adoption, findings and recommendations for the need, if any, for emission controls or regulatory efforts for well drilling, well completion, and well reworks
Key Elements of Rule 1148.2

Event Notification
- Notify SCAQMD 10 days to 24 hours prior to:
  - Well drilling
  - Well completion
  - Well Rework
  - Identify nearest sensitive receptor within 1,500 feet

Emissions Reporting
- Report following emission sources:
  - Combustion sources
  - Dry materials usage/fugitive dust
  - Drilling and flowback fluids

Chemical Reporting
- Non-Trade Secret Chemical Information (Operators)
- Trade-Secret Chemical Information (Suppliers)

Emissions Reporting Sunsets
April 2015
Summary of Event Notifications
Summary of Rule 1148.2 - Notification Data (June 2013 - Sep 2014)

- Approximately 821 Notifications representing 923 events (Some notifications have multiple events)
- >99% oil wells and <1% gas wells

- Acidizing: 46% (426)
- Vertical Drilling: 17% (153)
- Horizontal Drilling: 9% (80)
- Unspecified/Other*: 4% (41)
- Hydraulic Fracturing: 1% (14)
- Gravel Packing: 23% (209)
Summary of Notifications

April 2014 began distinguishing between Matrix and Maintenance Acidizing.

14 Hydraulic Fracturing Events occurred in 2013. None in 2014.
Acidizing Reporting Changes

• Consultation with DOGGR led to conclusion that comparison of acidizing events between DOGGR and SCAQMD data bases resulted in inconsistencies due to:
  – DOGGR only logging Matrix Acidizing
  – SCAQMD logging all types of acidizing without breakdown of different types of acidizing

• SCAQMD reporting portal changed in April, 2014 to require operators to report different types of acidizing such as:
  – Maintenance Acidizing
  – Matrix Acidizing
  – Acid Fracking
R 1148.2 – Well Activity by Location

- 93% of notifications in Los Angeles County
- 7% of notifications in Orange County
- No notifications in Riverside or San Bernardino County
Location of Acidizing Events

--- County lines
--- Freeways
△ Acidizing
Location of Gravel Packing Events

--- County lines
--- Freeways
Gravel Packing

Santa Clarita
Los Angeles
Pasadena
Glendora
Diamond Bar
Fullerton
Santa Monica
Rancho Palos Verdes
Long Beach
Newport Beach
Dana Point
Location of Hydraulic Fracturing Events

--- County lines
--- Freeways
• Hydraulic Fracturing
Location of Drilling Events

--- County lines
--- Freeways
◆ Vertical Drilling
◆ Horizontal Drilling
Distance to Sensitive Receptor

- ~ 50% of events ≤1,500 feet from sensitive receptor
- All 14 hydraulic fracturing events >1,500 from sensitive receptor

<100 Ft
- 21 Events
  - 16 Acid
  - 1 Drill
  - 4 Gravel

101 to 500 Ft
- 152 Events
  - 73 Acid
  - 42 Drill
  - 29 Gravel
  - 8 Other

501 to 1000 Ft
- 191 Events
  - 72 Acid
  - 63 Drill
  - 24 Gravel
  - 5 Other

1001-1500 Ft
- 105 Events
  - 55 Acid
  - 24 Drill
  - 24 Gravel
  - 2 Other

~ 50% of events ≤1,500 feet from sensitive receptor
All 14 hydraulic fracturing events >1,500 from sensitive receptor
Distribution of Well Activities Near Sensitive Receptors by City

- **Cities With < 10 Notices**: 32
- **Cities With >=10 and < 20 Notices**: 37
- **Los Angeles**: 61
- **Santa Fe Springs**: 21
- **Wilmington**: 51
- **Tidelands**: 117
- **Thums**: 112
- **Other**: 8

**Total Notices for Well Events <1,500 Feet from a Sensitive Receptor**: 469
Summary of Emissions Reporting
Emissions Reporting

- Calculated and analyzed combustion emissions
- Analyzed reports for amount of dry materials used
- Analyzed reports for flowback fluids
Emissions from Combustion Equipment

- Calculated average NOx and PM emissions per event and per day
- Assumed a load factor of 0.6 (CARB recommended)
- Operators report engine horsepower, hours of operation, and engine Tier
- Used composite CARB emission factor if Tier was not reported
Average NOx Emissions

NOx Emissions Per Day

<table>
<thead>
<tr>
<th>Activity</th>
<th>NOx (lbs/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidizing</td>
<td>0</td>
</tr>
<tr>
<td>Gravel Packing</td>
<td>0</td>
</tr>
<tr>
<td>Hydraulic Fracturing</td>
<td>100</td>
</tr>
<tr>
<td>Horizontal Drilling</td>
<td>250</td>
</tr>
<tr>
<td>Vertical Drilling</td>
<td>300</td>
</tr>
<tr>
<td>Drilling and Gravel Packing</td>
<td>150</td>
</tr>
</tbody>
</table>

NOx Emissions Per Event

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</tr>
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<td>0</td>
</tr>
<tr>
<td>Gravel Packing</td>
<td>0</td>
</tr>
<tr>
<td>Hydraulic Fracturing</td>
<td>500</td>
</tr>
<tr>
<td>Horizontal Drilling</td>
<td>2000</td>
</tr>
<tr>
<td>Vertical Drilling</td>
<td>3500</td>
</tr>
<tr>
<td>Drilling and Gravel Packing</td>
<td>1000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>NOx (lbs/event)</th>
</tr>
</thead>
<tbody>
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<td>0</td>
</tr>
<tr>
<td>Gravel Packing</td>
<td>0</td>
</tr>
<tr>
<td>Hydraulic Fracturing</td>
<td>1000</td>
</tr>
<tr>
<td>Horizontal Drilling</td>
<td>3000</td>
</tr>
<tr>
<td>Vertical Drilling</td>
<td>1500</td>
</tr>
<tr>
<td>Drilling and Gravel Packing</td>
<td>500</td>
</tr>
</tbody>
</table>
Average PM Emissions

**PM Emissions Per Day**

- Acidizing
- Gravel Packing
- Hydraulic Fracturing
- Horizontal Drilling
- Vertical Drilling
- Drilling and Gravel Packing

**PM (lbs/day)**

**PM Emissions Per Event**

- Acidizing
- Gravel Packing
- Hydraulic Fracturing
- Horizontal Drilling
- Vertical Drilling
- Drilling and Gravel Packing

**PM (lbs/event)**
### Combustion Equipment Summary

<table>
<thead>
<tr>
<th>Activity</th>
<th>Average Engine Size (HP)</th>
<th>Average Operating Hours/Event</th>
<th>Average Maximum Operating Hours/Event*</th>
<th>Average Event Duration</th>
<th>Average Number of Engines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Drilling</td>
<td>566 HP</td>
<td>102 Hours</td>
<td>198 Hours</td>
<td>19 Days</td>
<td>11</td>
</tr>
<tr>
<td>Gravel Packing</td>
<td>495 HP</td>
<td>10 Hours</td>
<td>31 Hours</td>
<td>4 Days</td>
<td>6</td>
</tr>
<tr>
<td>Horizontal Drilling</td>
<td>451 HP</td>
<td>38 Hours</td>
<td>310 Hours</td>
<td>10 Days</td>
<td>7</td>
</tr>
<tr>
<td>Acidizing</td>
<td>460 HP</td>
<td>4 Hours</td>
<td>12 Hours</td>
<td>1 Day</td>
<td>2</td>
</tr>
<tr>
<td>Hydraulic Fracturing</td>
<td>960 HP</td>
<td>13 Hours</td>
<td>32 Hours</td>
<td>6 Days</td>
<td>8</td>
</tr>
</tbody>
</table>

* Individual engine maximum
Gravel Packing
Combustion Emissions

Several generators for drilling rigs that operate for the majority of the event (100 to 450 hours per event)

~30 lbs/event

~3000 lbs/event

Gravel Packing Events

NOx Emissions (lbs/event)
Horizontal Drilling Combustion Emissions

- Average Hours of operation - 211
- Average Number of Engines - 13

- Average Hours of operation - 2
- Average Number of Engines - 6
Assumptions for Estimating Cancer Risk from Single Drilling Operation

• Estimated lifetime cancer risk for single drilling event
  – Average PM emissions (90 lbs/event)
  – Maximum PM emissions (423 lbs/event)
• Assumed radius of 25 yards for engine distribution
• Long Beach meteorology conditions
• Used current and proposed revised risk assessment methodology
• Evaluated risk at varying receptor distances up to 1,500 feet
## Estimated Cancer Risk from Single Drilling Event

### DRAFT Cancer Risk (Current Risk Assessment Methodology) (in a million)

<table>
<thead>
<tr>
<th>Distance to Receptor</th>
<th>Cancer Risk (90 lbs/event)</th>
<th>Cancer Risk (423 lbs/event)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Feet</td>
<td>0.07</td>
<td>0.26</td>
</tr>
<tr>
<td>500 Feet</td>
<td>0.04</td>
<td>0.14</td>
</tr>
<tr>
<td>1,500 Feet</td>
<td>0.02</td>
<td>0.08</td>
</tr>
</tbody>
</table>

### DRAFT Cancer Risk (Revised Risk Assessment Methodology)* (in a million)

<table>
<thead>
<tr>
<th>Distance to Receptor</th>
<th>Cancer Risk (90 lbs/event)</th>
<th>Cancer Risk (423 lbs/event)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Feet</td>
<td>1.65</td>
<td>7.12</td>
</tr>
<tr>
<td>500 Feet</td>
<td>0.82</td>
<td>3.83</td>
</tr>
<tr>
<td>1,500 Feet</td>
<td>0.50</td>
<td>2.33</td>
</tr>
</tbody>
</table>

* Assumed for children age 0 to 2 years.
Flowback Fluids Reporting

• Of the 626 emissions reports, only 9 events reported flowback fluid
  – 2 Vertical Drilling (larger volumes of few thousands gal)
  – 2 Well Redrill
  – 2 Maintenance Acidizing (small volume of ~28 gal reported)
  – 3 Unspecified well completions and well reworks

• No flowback fluids reported for gravel packing events

• Reports consistent with site visits
Dry Materials Reporting

- As of September 2014 – dry materials reported on 342 events
- On average reported per event:
  - 14 types of dry materials
  - ~140,000 lb of dry material
- Examples of dry materials:
  - Alpine spotting beads
  - Bicarbonate of soda
  - Cement
  - Drilling Mud
  - Gravel Pack Sand
  - Magma Fiber
  - Potassium Chloride
  - Walnut Shells
  - Sawdust
Emissions Reporting Findings

- Drilling operations have the highest NOx and PM emissions
- Drilling operations generally have several engines that will operate for the duration of the event
- Drilling rigs at gravel packing events can operate over a long duration (100 to 450 hours)
- Cancer risk for the largest drilling events can pose a significant health risk at close in receptors
Summary of Non-Trade Secret Chemical Reporting
## Non-Trade Secret Air Toxic
Chemicals Used in Well Activities

<table>
<thead>
<tr>
<th>Chemical Ingredient</th>
<th>Acidizing</th>
<th>Drilling</th>
<th>Gravel Packing</th>
<th>Hydraulic Fracturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene Glycol</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glutaral</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Hydrochloric Acid</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrofluoric Acid</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methanol</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Phosphoric Acid</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Toluene</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xylene</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Drilling
(Top 9 Chemicals Used (lbs))

Potassium Chloride 124,442
Calcium Salts 56,486
Calcium Chloride 47,813
Barite 45,875
Crystalline Silica 20,661
(Gaseous Air Contaminant)
Calcium Carbonate 18,813
Gypsum 9,806
Halides, Inorganic Salt 9,412
Amorphous Silica 7,187

Average Non-Trade Secret Chemical Use
741,451 lbs of Water Used
Acidizing
(Top 8 Chemicals Used (lbs))

- Toxic Air Contaminants: 4813 lbs
- Citrus Terpenes: 167 lbs
- Organic Acid: 245 lbs
- Potassium Chloride: 1082 lbs
- Ammonium Chloride: 2141 lbs
- Hydrochloric Acid: 4051 lbs
- Xylene: 292 lbs
- Hydrofluoric Acid: 289 lbs
- Methanol: 180 lbs

Average Non-Trade Secret Chemical Use: 109,389 lbs of Water Used
Gravel Packing
(Top 8 Chemicals Used (lbs))

- Crystalline Silica
  7,427
  (Toxic Air Contaminant)

- Halides, Inorganic Salt
  12,459

- Calcium Chloride
  5,336

- Barite
  2,752

- Calcium Salts
  2,501

- Calcium Carbonate

- Amorphous Silica
  1,415
  332

Average Non-Trade Secret Chemical Use
62,582 lbs of Water Used
Hydraulic Fracturing
(Top 11 Chemicals Used (lbs))

- Crystalline Silica: 285681 lbs
- P/F Resin: 7578 lbs
- Guar Gum: 5202 lbs
- Potassium Chloride: 4387 lbs
- Distillates, Petroleum: 4190 lbs
- Monoethanolamine: 1399 lbs
- Carbonic Acid, Potassium Salt (1:2): 1167 lbs
- Methanol: 1792 lbs
- Carbonic Acid, Potassium Salt (1:2): 1167 lbs
- Toxic Air Contaminants: 287473 lbs

Average Non-Trade Secret Chemical Use
Reported 2,044,054 lbs of Water Used
Summary of Observations, Monitoring, and Sampling
R1148.2 – Well Inspection Summary

- Since June 2013, SCAQMD staff conducted 104 inspections of oil/gas sites performing drilling, well completion, and well rework operations
  - 21 well drilling events
  - 14 hydraulic fracturing events
  - 44 acidizing events
  - 11 gravel packing events
  - 4 Misc. events
R 1148.2 – Well Inspection Summary

- Observations at well inspections include:
  - Visible smoke at 13 inspections (13%)
  - Visible dust at 13 inspections (13%)
  - Noticeable odors at 10 inspections (10%)
Sampling & Monitoring – Draft Standard Operating Procedure (SOP)

- **Objective**
  - Discern emissions generated from various well activities
  - Provide general guideline for SCAQMD personnel to follow when conducting monitoring/sampling

- **Elements**
  - Covers equipment for monitoring, sampling, and safety (PPE) to be used
  - Guidelines and procedures for gradient monitoring
  - Forms for field observation/project notes
  - Additional instruction for gravel packing and hydraulic fracturing events
Sampling and Monitoring Equipment

- Handheld devices used to measure PM and H$_2$S:
  - Jerome Monitors (H$_2$S)
  - DustTrak Monitors (PM)
- Summa canisters used to measure hydrocarbons
- Sample vials and jars to test flowback fluids and drilling mud
Challenges

• Coordinating site visits is challenging due to rescheduling notifications
  – 48% of submitted notifications get rescheduled
  – 10% of submitted notifications get rescheduled multiple times
Sampling and Monitoring (July – October 2014)

- Well Activities Sampled/Monitored
  - Re-drill (1)
  - Maintenance acidizing (1)
  - Matrix acidizing (1)
  - Gravel packing (3)

- Measurements taken:
  - Monitored H₂S and PM
  - Canister samples for non-methane organic compounds (NMOC) upwind, downwind, and at return fluid catch basin and storage tanks
  - Return fluids collected in sample vials
# Monitoring and Sampling Results
(July – October 2014)

<table>
<thead>
<tr>
<th>Event</th>
<th>Event ID</th>
<th>Date</th>
<th>Handheld Results for PM and H$_2$S</th>
<th>Canister Results for Organics</th>
<th>Other Observations</th>
</tr>
</thead>
</table>
| Maintenance Acidizing | 1934     | 7/15/14  | • No elevated levels of PM10.  
• No elevated levels of H$_2$S. | No canister samples taken.    | Diesel odors from engines used in well activities.  
Complaint reported to SCAQMD from the public. |
| Matrix Acidizing     | 2238     | 9/10/14  | • No elevated levels of PM10.  
• No elevated levels of H$_2$S. | No elevated levels (typical ambient air range of 100-700 ppbc) of NMOCs. | Petroleum hydrocarbon odors 75 feet from subject well. |
| Gravel Packing       | 2329     | 9/25/14  | • Slightly elevated levels of PM10 due to high wind speeds and dust from loose dirt roads.  
• No elevated levels of H$_2$S. | No elevated levels (typical ambient air range) of NMOCs. | Strong petroleum hydrocarbon odors at catch basin for return fluid (open to atmosphere). |
| Gravel Packing       | 2329     | 9/26/14  | • No elevated levels of PM10.  
• No elevated levels of H$_2$S. | Elevated levels (900-2900 ppbc) of NMOC at catch basin. | Strong petroleum hydrocarbon odors at catch basin for return fluid (open to atmosphere). |
| Gravel Packing       | 2354     | 10/2/14  | • No elevated levels of PM10, except for one short-term period of elevated levels due to road dust from vehicular traffic.  
• No elevated levels of H$_2$S. | Elevated levels (20 – 13,000 ppmvc) of NMOCs at open hatch of Adler tank for return fluids. Above thresholds for SCAQMD Rules 1148.1, 1166, 1173, 1176, and 1178. | Strong hydrocarbon odors from Adler tank for return fluids. |
| Drilling             | 2356     | 10/17/14 | Pending                            | Pending                      | Pending                                                |
Sampling & Monitoring
Return Fluids from Catch Basin

• Interim holding area prior to storage in Adler tank
• Sampled within 2 feet of return fluid surface
• Results showed
  – Elevated levels of benzene, toluene, ethylbenzene, and xylene
  – Max NMOC concentration of 3,000 ppbc
Sampling & Monitoring
Return Fluids from Adler Tank

• Return fluid goes directly to tank from well
• Sampled 2 feet of open hatch
• Results
  – Elevated levels of benzene, toluene, ethylbenzene, and xylene
  – High NMOC concentration of 13,000 ppm
• Max thresholds in SCAQMD Rules
  – 500 ppm (R1148.1)
  – 500 ppm (R1176)
  – 500 ppm (R1178)
  – 1,000 ppm (R1166)
  – 50,000 ppm (R1173)
Well Activity Observations – Flowback Fluids

• Gravel packing does not have flowback immediately after well treatments/stimulations due to low pressure in the formations found in the Basin

• “Return fluid" from well stimulation/treatment activities not viewed as “flowback” by operators
  – Rule 1148.2 defines this return fluid as “flowback”
  – SCAQMD staff monitoring and sampling return fluid

• Different techniques seen to capture/contain return fluids
  – Interim catch basin before storage in Adler tank with control
  – No catch basin, directly into Adler tank with no control
Well Activity Observations – Gravel/Sand Mixing

• Operators use different techniques to mix gravel/sand in well completion fluids:
  – Fabric tote over hopper (open system)
  – Plastic tote feed into hopper (closed system)
Controls and Housekeeping (Gravel Packing)

- Carbon canister drums connected to Adler tanks storing return fluid
- Keeping hatches closed at all times
- Plastic sheet ground cover to capture liquid leaks and spills of gravel packing fluids and dry materials
Findings from Sampling and Monitoring and Well Observations

• No elevated levels seen for $\text{H}_2\text{S}$ or PM for acidizing or gravel packing
• Elevated NMOC concentration levels seen at holding areas of storage tanks for “return fluids” from gravel packing events
• Use of carbon canisters for Adler tanks and keeping hatches closed will reduce NMOC emissions
• Plastic tote for adding dry materials provides reduces opportunity for spillage
Summary of Compliance Activities
Key Requirements for Operators and Chemical Suppliers

Operators
- Submit Emissions Reports within 60 days
- Submit Non-Trade Secret Chemical Report within 60 days
- Must provide specific non-trade secret chemical information

Primary Chemical Suppliers
- Submit Trade-Secret Chemical Report within 60 days
- Identified by Operator
- Must provide specific chemical information

Secondary Chemical Suppliers
- Submit Trade Secret Chemical Report within 60 days
- Identified by Primary Supplier
- Must provide specific chemical information
Overall Compliance Approach

• Compliance Advisories
  – Issued compliance advisories if system-wide problem or
  – Issued compliance advisories if clarification regarding system-wide problem in reporting

• Notices to Comply
  – Issued Notices to Comply if operators or suppliers not submit required information and/or entire report
  – SCAQMD staff working with operators and suppliers to encourage compliance

• Notices of Violation
  – Failure to submit required forms after issuance of Notice to Comply
  – No Notices of Violation have been issued
Compliance Advisories

• Two compliance advisories sent to operators
• February 2014 Compliance Advisory
  – Operators advised to re-submit all reports where on-road engines were used to power well rework/ stimulation equipment pursuant to R1148.2 (e)(1)(C)
  – Operators incorrectly interpreting rule requirement that on-road engines usage need not be reported
• August 2014 Compliance Advisory
  – Operators advised to report fluid of injected and/or recovered fluids required by 1148.2 (e)(1)(E)(i)
  – High number of missing or zero entries for fluid volumes
Compliance Activities for Operators
Emission Reports

For each Notification, Verified Emission Report Submitted within 60 Days

Identified Operators that Did Not Submit Emissions Source Report

14 Notices to Comply issued to Operators (47 Well Events) for Failure to Submit Emissions Source Report

- 19 out of 47 well events outstanding.
- Staff continuing to work with operators.
Compliance Activities for Operators Non-Trade Secret Chemical Reports

For each Notification, Verified Non-Trade Secret Chemical Report Submitted within 60 Days

Identified Operators that Did Not Submit Chemical Report

14 Notices to Comply issued to Operators (143 Well Events) for Failure to Submit Chemical Report

- 17 out of 143 well events are outstanding.
- Staff is continuing to work with operators.
Data Analysis Approach for Chemical Supplier Reporting

- Examine quality of data reported by trade secret chemical Suppliers

- Identified issues with reporting by Suppliers:
  - Omitting CAS numbers
  - Providing chemical family names instead of the exact names of compounds
  - Omitting identification of compounds as toxics
  - Unsatisfactory entries of chemical ingredient names such as “non-hazardous ingredient” of “proprietary blend”

- Work with Suppliers on individual basis to correct these reporting issues
Compliance Activities for Primary Chemical Suppliers

- Primary Supplier Must Submit Trade Secret Chemical Report within 60 Days
- Identified Notifications Where Primary Suppliers Were Identified, but No Trade Secret Report Received
- 5 primary suppliers representing 63 well events issued NCs for failure to submit Chemical Report Forms.

Revised

- Working with suppliers through conference calls and emails
- Suppliers are submitting Chemical Report Forms
- Staff is continuing to work with suppliers and evaluating submittals
Primary Chemical Suppliers Incorrect Reporting

• Evaluation of submitted Chemical Supplier Report Forms identified two primary suppliers submitting incorrect information such as:
  – Generic (substitute) information in lieu of detailed chemical ingredients
  – Missing CAS #
  – Not properly identifying chemical as an air toxic
• Suppliers notified through emails and conference calls and AQMD staff providing assistance on completeness of reports
• Current Status:
  – Primary suppliers have re-submitted all Chemical Supplier Report Forms
  – Staff currently evaluating completeness of reports
Compliance Activities for Secondary Chemical Suppliers

Secondary Supplier Must Submit Trade Secret Chemical Report within 60 Days

Identified Notifications Where Secondary Suppliers Were Identified, but No Trade Secret Report Received

11 secondary suppliers representing 243 well events issued NCs for failure to submit Chemical Report Forms

- Working with suppliers through emails and phone conferences
- Suppliers are submitting missing Chemical Reports
- Smaller suppliers contracted larger chemical suppliers to submit forms
- Staff is evaluating compliance for these submittals
Compliance Summary

• Progress in receiving reports and corrected reports
• There are still outstanding reports
• Staff will continue working with operators and suppliers to encourage compliance
• Compliance is ongoing
Next Steps

• Briefing Stationary Source Committee
  November 21, 2014
• Continue to collect and analyze data
• Report back to the Working Group in six months