Community Air Initiatives

Wilmington, Carson and West Long Beach Community Steering Committee Meeting #3

Tuesday, February 12th, 2019
Wilmington, CA
The Office of Compliance and Enforcement

Presented by:
Terrence Mann
Assistant Deputy Executive Officer

The Office of Compliance and Enforcement
Air Quality Inspectors

Approximately 80 inspectors, plus managers/supervisors and support staff

- Refinery
- Energy
- Industrial
- Commercial
- Government Operations
- Toxics and Waste Management
- Retail Gas Dispensing
- Major Sources

TEAMS
Enforcement Activities

- **Complaint Response** – over 9,000 complaints annually
- **Facility inspections** – approx. 22,000 facilities & over 67,000 permits
- **Portable equipment inspections** (3,600+)
- **Responding to notifications**, such as for equipment breakdowns, flaring events, and renovations/demolitions
- **Source education & outreach**
- **Special projects** – investigations, interagency coordination, emergency response, etc.

**Enforcement Action** – Notices to Comply, Notices of Violation, Orders for Abatement, Criminal Referrals
Outside of SCAQMD Jurisdiction

• Noise Complaints
• Indoor Air Quality Issues
• Private Residences, with exceptions such as wood burning on no-burn days
• Soil/Water Issues – also with limited exceptions
Public Complaints

• 1-800-CUT-SMOG or online @ www.aqmd.gov.

• Live attendant during business hours (Monday-Friday) or to our standby system off-hours

• Common Complaints: Dust, Odors, Flaring, Smoke, Retail Gas Stations, Overspray, Residential Wood Burning

• Complainant information = confidential

• Complaints can be made anonymously, but may be insufficient and will not receive a live response

• **INSPECTORS RESPOND TO ALL COMPLAINTS!**
You have identified many different sources of air pollution. Those include, among others, the following:

1. Refineries;
2. Warehouses and Industrial Facilities;
3. Oil & Gas Sites;
4. Waste Management; and
5. Ports/ Harbor
Refineries:

- Marathon/Tesoro (Carson & Wilmington), Valero, Phillips 66
- Many applicable rules, such as 1118 (flaring), 1173 (fugitive emissions), and 1180 (fenceline monitoring)
- Field office in Long Beach with Refinery Team
- Respond to all complaints and to every breakdown & unplanned flaring event
- Blue Sky Inspections & Title V Audits
Warehouses and Industrial Facilities:

- Carson Logistics, Carson Warehousing District, Watson Land Corp., Dominguez Tech/Distribution Area (Warehouses)
- Sir Mix Concrete Products (Concrete Batch Plant)
- Other industrial sites, such as scrap yards and paint shops
- Routine Inspections, Idling Truck Sweeps, and Nuisance Investigations
Oil & Gas Sites:

• Oil Wells: Warren E&P, SoCal Holdings, E&B Natural Resources, Tidelands

• Storage Facilities: Shell Tank Farm, Kinder Morgan, Rancho LPG

• Many applicable rules – e.g., Rule 463 (storage tanks), Rule 1148 (oil wells), and Rule 1173 (fugitive emissions)

• Inspections using infrared gas imaging technology and gas detection instruments
Waste Management:

- Waste Management, Inc. (waste transfer station), SERRF (waste to energy facility), JWPCP (wastewater treatment plant); Carousal Tract (contaminated soil)
- Title V inspections
- Odor investigations
- Oversight of cleanup operations (Rules 1166 & 1466)
Ports/Harbor:

- Tracking & boarding crude oil tankers for leak detection (Rule 1142)
- Inspections of vessels and terminals
- Idling Truck Sweeps
- Offshore Odor Investigations
- Regular shoreline surveillance operations using infrared gas imaging technology
Ship emissions through an infrared camera
Strategies to Address Air Pollution Concerns
## Potential approaches

### Emission Reduction Strategies
- Regulation
- Incentives
- Enforcement
- Outreach and education
- Collaborations

### Other Complementary Tools
- Exposure reduction
- Monitoring
- Public information
- Collaborations

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**Emission reduction**: Decrease in the amount of pollutants discharged from a specific source (e.g. a stack or tailpipe)

**Exposure reduction**: Decrease in the amount of pollutants that people inhale
Regulation

Regulations (Rules) are like local laws that specify what facilities and equipment owners are required to do.

Examples:

- Rule 1430 (Metal grinding)
- Rule 1469 (Chrome plating and anodizing)
- Rule 1178 (Emission reductions from storage tanks at petroleum facilities)

Pros:

- Applies to all facilities/equipment of that type in our District
- Permanent emissions reductions
- Enforceable

Cons:

- Lengthy process

Note: Rules need to be approved by the SCAQMD Board.
Incentives

Examples:

• Carl Moyer program
• Lawn & garden equipment program
• Lower-Emission School Bus Incentive Program
• Replace combustion-based appliances with high efficiency electric models

Pros:

• Get equipment that is cleaner than what regulation requires
• Relatively fast
• Can be tuned to benefit local community

Cons:

• Expensive

To encourage equipment owner to use cleaner technologies, above and beyond what’s required
Outreach and Education

Engage stakeholders who can help reduce emissions

Examples:

• **Clean Communities Plan**: Outreach to auto-body shops to adopt water-based brake cleaners (incentives)
• Outreach to specific fleet owners about incentives they can use
• Educate business owners on how to comply with our regulations
• Community workshops on clean air vehicles
• High school electric vehicle showcase (e.g. Carson ESET)

Pros:

• Enhances compliance with existing rules, or can go beyond existing rules
• Relatively fast and low cost (other than incentives)

Cons:

• Need appropriate incentive funding
Enforcement

Targeted enforcement to address a specific air quality concern

Examples:
- Oil tanker leak investigations
- Idling truck sweeps
- Complaint cluster projects

Pros:
- Promotes compliance with rules
- Identifies violations → corrective actions

Cons:
- Only applies to existing rules and permit conditions
- Can be expensive and time-intensive
Monitoring

Can serve many purposes:
• Identify hot spots, to focus investigations
• Provides public information
• Tracks progress
• Tool for compliance

Examples:
• Mobile surveys to identify facility leaks
• Metals monitoring to identify sources of metals
• Refinery fenceline and community monitoring

Pros/Cons:
• See Meeting #2, slide 36
## Additional strategies

### Exposure reduction, other mitigation
- Air filtration systems (schools, community centers)
- Tree barriers, buffers

<table>
<thead>
<tr>
<th><strong>Pros</strong></th>
<th><strong>Cons</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Better indoor air quality, More green space</td>
<td>No emission reductions</td>
</tr>
</tbody>
</table>

### Public information
- Notification systems
- Easier access to facility reports (e.g. leak inspection reports)

<table>
<thead>
<tr>
<th><strong>Pros</strong></th>
<th><strong>Cons</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase access to data, which can guide individual action to reduce exposure</td>
<td>No emission reductions</td>
</tr>
</tbody>
</table>

### Collaboration with other stakeholders
- Truck routes
- Multiple environmental media (air, water, hazardous waste)

<table>
<thead>
<tr>
<th><strong>Pros</strong></th>
<th><strong>Cons</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage different agencies’ strengths</td>
<td>Can be a lengthy process</td>
</tr>
</tbody>
</table>
Combined strategies
Example 1 – Refineries, Oil & Gas facilities

- Monitoring for leak detection
- Compliance inspection
- Follow-up with facility operators for repairs
- Regulation and/or voluntary measures
## Combined strategies
### Example 2 – Truck traffic

<table>
<thead>
<tr>
<th>Enforcement sweeps</th>
<th>License plates readers</th>
<th>Targeted incentives</th>
<th>Local ordinances for neighborhood truck routes</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Enforcement sweeps" /></td>
<td><img src="image2.png" alt="License plates readers" /></td>
<td><img src="image3.png" alt="Targeted incentives" /></td>
<td><img src="image4.png" alt="Local ordinances" /></td>
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</tbody>
</table>
Combined strategies
Example 3 - Schools

Prioritize by air quality factors and other factors

Air filtration (exposure reduction)

Cleaner school buses (incentives)

Nearby facilities - Targeted inspections
Air Pollution Emissions Data from emissions inventory
Main air toxics in the community

Diesel particulate has the highest impact in the community

Other toxics may have impacts in areas close to the sources
- Emissions inventories don't account for unknown or unquantified leaks.

Diesel Particulate, 85.93%

- Benzene, 4.34%
- Hexavalent chromium, 3.80%
- Formaldehyde, 1.26%
- 1,3-butadiene, 2.63%
- Other, 2.05%
### Source Contribution to Air Toxics in this Community

#### Diesel Particulates
- **Point**: 5%
- **Trains**: 12%
- **Offroad**: 37%
- **Onroad**: 46%

#### Benzene
- **Point**: 41%
- **Area**: 8%
- **Offroad**: 21%
- **Onroad**: 29%
- **Trains**: 1%

#### Hexavalent Chromium
- **Aircraft**: 5%
- **Point**: 23%
- **Offroad**: 3%
- **Onroad**: 69%
Where does benzene come from in this community?

- Benzene is a part of crude oil and gasoline (and therefore motor vehicle exhaust).
- It is also used as a starting material in making other chemicals, (e.g. plastics, lubricants, detergents, pesticides...etc.).
## Other major pollutants in this community

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Main sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volatile Organic Compounds (VOCs)</strong></td>
<td>• Petroleum production and marketing&lt;br&gt;• Industrial sources&lt;br&gt;• Solvent evaporation&lt;br&gt;• Coatings</td>
</tr>
<tr>
<td><strong>Nitrogen Oxides (NOx)</strong></td>
<td>• Mainly from fuel combustion</td>
</tr>
</tbody>
</table>
Community Boundary and Prioritization of Air Quality Concerns
Prioritization – why we need to do this

We want to use resources appropriately to address the air pollution issues most important to this community

• Goal:
  • Evaluate **highest priorities** from the community
  • Use existing technical data to help guide priorities
  • Start thinking about potential strategies to put into the emission reduction plan

• Limited resources (money) and limited time
  • We will try to address the top few priorities
  • General expectation is that the plans should be fully implemented ~5 years
How much money?

These are the estimated costs in the first year, for everything other than incentives. This includes all three Year 1 communities, plus additional resources needed to support future AB 617 designated communities in the SCAQMD.

<table>
<thead>
<tr>
<th>Program Component</th>
<th>Description</th>
<th>Estimated Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Monitoring</td>
<td>• Equipment, staffing, and software to conduct air monitoring and display data</td>
<td>$11.5 million</td>
</tr>
<tr>
<td>Community Emissions Reduction Plans</td>
<td>• Staffing to develop and implement community emission reduction plans</td>
<td>$4.3 million</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>• Staffing and materials to work with communities to implement AB 617.</td>
<td>$1.6 million</td>
</tr>
<tr>
<td>BARCT</td>
<td>• Staffing to transition RECLAIM program to command and control (rule development, CEQA)</td>
<td>$8.5 million</td>
</tr>
<tr>
<td>Emissions Reporting</td>
<td>• Staffing and software enhancements to implement CARB emissions reporting rule</td>
<td>$1.8 million</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>Estimated need: $27.7 million</td>
</tr>
</tbody>
</table>

But we only received $20 million.
Final community boundary

- Emissions study area was assigned as the **community boundary**
  - Includes Phillips 66
  - Includes both ports
  - WLB boundary extended to Martin Luther King (north) & Long Beach Blvd. (south)

- Majority of community concerns fall within the **community boundary**

- Regions within and near the **community boundary** will also benefit from the emissions reductions

![Map of South Coast AQMD showing community boundary with icons for mobile and stationary sources, places where people spend time, and areas needing more information.](map_image)
Concerns About Stationary Sources*

- These are locations that came up several times (yellow/red) in the air quality mapping activity.

- Places where we may look to begin monitoring efforts.

*From CSC Meeting #1 air quality mapping activity.
Concerns About Mobile Sources*

- Places where we may begin to look for truck idling hot spots for compliance idling sweeps
- Targeted areas for license plate readers and incentives

*From CSC Meeting #1 air quality mapping activity
Prioritization – Group activity

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 min</td>
<td>Prioritization of Air Quality Concerns</td>
</tr>
<tr>
<td>20 min</td>
<td>Activity Report Back</td>
</tr>
<tr>
<td>5 min</td>
<td>Break</td>
</tr>
<tr>
<td>15 min</td>
<td>Activity Consensus Results Discussion</td>
</tr>
</tbody>
</table>

- The goal of this activity is to identify the few **highest priority areas**, so we can start developing specific strategies to address them
- Allow enough time for everyone to speak
- Be respectful
- There will be one facilitator and one note taker per table

Priorities

1. 
2. 
3. 3 items per section
Next steps and important reminders

Future meeting dates and locations:
- TAG Meeting #1: February 27\textsuperscript{th} (9:00 – 11:00 a.m.) at the SCAQMD
- CSC Meeting #4: March 14\textsuperscript{th} (6:00 – 8:00 p.m.) at Wilmington Senior Center

Future meeting potential topics:
- California Environmental Quality Act (CEQA) timeline
- RECLAIM – Best Available Retrofit Control Technology (BARCT) Rule development update
- Indirect Source Rule (ISR) development update
  - Rules to control mobile source emissions at warehouses, railyards, etc.
Next steps and important reminders

Technical Advisory Group (TAG):
• No consensus reached as of February 4th, 2019
• First TAG meeting has been scheduled for February 27th, 2019

- Please **send us your biographies** as soon as possible
- **Sign the charter** – hard copies are provided at registration
Thank you for the hard work!

More information on AB 617: www.aqmd.gov/AB617

Email: AB617@aqmd.gov

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