Quemetco
AB2588 Health Risk Assessment
Public Meeting
South Coast Air Quality Management District
June 23, 2016

Outline
• Discuss results of SCAQMD approved Health Risk Assessment
  • Conducted under AB2588 Air Toxics ‘Hot Spots’ Act
• Next Steps
  • Risk Reduction Plan
  • Quemetco’s requested permit modification to increase daily throughput by 25% and substitute the use of petroleum coke instead of calcined coke
  • California Environmental Quality Act (CEQA)

SCAQMD
• Multi-County Air Pollution Control Agency
  • Governed by 13-member Board of local elected and appointed officials
    • 16+ million people
    • ~28,000 permitted sources

Quemetco
• Facility in operation since 1959
• Located at 720 S. 7th Ave, City of Industry
• Recovers lead from used batteries and other lead bearing materials
  • Key activities include crushing, smelting, and refining
• Can operate up to 24 hrs/day, 7 days/week
• Smelters are not fed for a few hours each day due to restrictions in SCAQMD-issued Title V permit
Emissions from Quemetco

- Emissions from a variety of sources
- Stacks of Air Pollution Control Systems
  - Wet Electro Static Precipitator (WESP)
  - Baghouse vents
- Fugitive emissions
- Key air pollutants
  - Arsenic
  - Lead
- Quemetco subject to many SCAQMD Rules and permit conditions to control and monitor emissions

Emissions Data

- Monitoring equipment measures emissions directly from stack
- New system can continuously monitor emissions
- Monitoring equipment measures ambient levels at one offsite and four onsite stations
- Best available method to evaluate fugitive emissions
Recent Compliance History

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Compliance of facility to be resolved monitor</td>
<td>1</td>
</tr>
<tr>
<td>2015</td>
<td>Temporary failure of an air pollution control device</td>
<td>2</td>
</tr>
<tr>
<td>2016</td>
<td>Reclassification of battery unit at source</td>
<td>3</td>
</tr>
<tr>
<td>2016</td>
<td>Modified air pollution controls without</td>
<td>3</td>
</tr>
<tr>
<td>2017</td>
<td>First obtaining the required Title V permit revision</td>
<td>1</td>
</tr>
<tr>
<td>2017</td>
<td>The fuel meter for one source did not comply with rule requirements</td>
<td>1</td>
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</tbody>
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- 8 Notices of Violation (NOVs) issued in 2014-15
- NOVs are currently in the process of being resolved with SCAQMD legal department
- Since 2015, no further air quality violations observed

Recent SCAQMD Rule Development Activities Affecting Quemetco

- Rule 1402 (Amended June 2015)
  - Implements AB2588
  - Amended to incorporate recent health risk assessment guidance from state EPA (OEHHA) that takes into account greater risks to children from cancer-causing pollutants (~3-5X higher)
- Rule 1420.1 (Amended four times since 2014)
  - Applies to large lead battery recyclers
  - Requirements for:
    - Enclosures
    - Emission limits (arsenic, lead, benzene, 1,3-butadiene)
    - Source testing and Ambient air monitoring
    - Housekeeping and maintenance activities

AB2588

- The AB2588 Toxic "Hot Spots" law requires facilities to:
  - Report toxic emissions every four years
  - Prepare a Health Risk Assessment (HRA) if emissions above thresholds
  - Notify public and reduce emissions if risks above thresholds
- Quemetco required to prepare a HRA, conduct public notification, and submit a Risk Reduction Plan
- Quemetco previously implemented AB2588 Risk Reduction in 2008
  - Quemetco required to conduct Risk Reduction again due to new OEHHA guidance

Quemetco AB2588 HRA Results

- 2013 Scenario (Arsenic source test)
  - Maximum residential cancer risk up to 16 per million
  - Maximum worker non-cancer hazard index (HI) up to 1.3
  - Public notification required for cancer risk >10 per million or HI > 1.0
- 2014 Scenario (Lower emissions, consistent with Rule 1420.1 limits)
  - Cancer burden = 0.66
    - SCAQMD threshold = 0.5
  - Cancer burden is population-wide estimate of total number of expected cases of cancer using conservative exposure assumptions
  - Risk reduction required
Cancer Risk Comparisons

<table>
<thead>
<tr>
<th>Regional Average Cancer Risk from Air Pollution Sources*</th>
<th>0.009</th>
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</thead>
<tbody>
<tr>
<td>Maximum Residential Cancer Risk from Quenetteo 2013 Emissions Continued**</td>
<td>16</td>
</tr>
<tr>
<td>SCAQMD Risk Reduction Threshold***</td>
<td>25</td>
</tr>
<tr>
<td>SCAQMD Public Notification Threshold</td>
<td>10</td>
</tr>
</tbody>
</table>

* Based on MATES IV study
** Future emissions will be reduced by Rules 1402 & 1420.1
*** Risk Reduction also required if cancer burden > 0.5

AB2588 Public Notification Process

- Letter sent to ~12,000 people
- Public meeting (tonight)
- Annual public notification until risks below risk reduction threshold
- Website: www.scaqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/quenetteo

AB2588 Public Notification Area

- Public Notification Area for Residents
  - Cancer Risk ≥ 10/million
- Public Notification Area for Workers
  - Non-Cancer Hazard Index* ≥ 1.0

* A "Hazard Index" less than 1.0 indicates that adverse non-cancer health effects are not expected.

Next Steps – AB2588

- Risk Reduction Plan (RRP)
  - RRP due no later than November 2016
  - SCAQMD Rule 1402 requires cancer burden to be reduced below 0.5 as soon as possible but no later than three years after RRP submittal (i.e. 2019)
- 2015 source test data indicates cancer burden may already be below Rule 1402 thresholds
- Website will be updated as new data becomes available
Next Steps – Quemetco’s Requested Permit Modification

- Quemetco currently has a permit condition limiting furnace feed to 600 tons per day
- Requires idling furnace for one to six hours every day
- Quemetco has requested a Title V permit modification to increase furnace feed 25% to 750 tons per day
- Also requested use of petroleum coke to address market shortage of calcined coke
- Permit request under evaluation and NO preliminary decision made yet

Next Steps – CEQA

- SCAQMD must certify a CEQA document for the Quemetco project before considering approval of permits
- SCAQMD is preparing a Notice of Preparation outlining environmental topic areas requiring further evaluation in upcoming Draft EIR
- Draft EIR must include analysis of all AB2588 requirements and analysis of Quemetco’s ability to comply with SCAQMD rules

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