PROPOSED RULE 1460 – CONTROL OF PARTICULATE EMISSIONS FROM METAL RECYCLING AND SHREDDING OPERATIONS

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South Coast AQMD acknowledges the challenges to businesses and stakeholders due to COVID-19.

To ensure safe social distancing, Working Group meetings initially will be held via Zoom or a call-in option is also available.

Although it is a different format, staff will ensure stakeholders will have an ability to participate.

As we move through the rulemaking process, staff will take the time to listen to all stakeholder comments.

In addition to Working Group meetings, staff is available for individual meetings.
Agenda

- Introduction
- Rule Development Process
- Information Gathering
- Metal Recycling and Shredding Operations
- Next Steps
INTRODUCTION
South Coast AQMD

- Local air pollution control agency
  - Largest of the 35 local air agencies in CA and in the U.S.
  - 10,743 square miles
  - 17 million residents

- Responsibilities
  - Regulate air emissions from stationary sources
  - Permit and inspect 28,400 affected businesses
  - Develop and implement plans to meet State and Federal air quality standards
  - Administer over $100 million of incentive funding annually
In 2017, Assembly Bill 617 (AB 617) was signed into law and the legislation requires a statewide strategy to reduce toxic air contaminants and criteria pollutants in designated communities.

The Bill establishes new community-focused and community-driven actions to reduce air pollution and improve public health.

In South Coast AQMD, there are currently six designated communities under AB 617:
- Wilmington/West Long Beach/Carson (WCWLB)
- San Bernardino/Muscoy (SBM)
- Boyle Heights/East Lost Angeles/West Commerce (ELABHWC)
- Southeast Los Angeles (SELA)
- South Los Angeles (SLA)
- Eastern Coachella Valley (ECV)
• Under the AB 617 program, South Coast AQMD has been working with stakeholders to develop Community Emission Reduction Plans (CERPs) to identify air pollution sources and control strategies within designated communities.

• During this process, several communities expressed concerns with particulate matter emissions from metal recycling facilities.

• The Southeast Los Angeles CERP was adopted in December 2020 and included the following control action:

**Chapter 5e: Metal Processing Facilities**

**Control Action B**

Initiate rule development process to address housekeeping and best management practices at metal recycling facilities to reduce fugitive emissions.
The purpose of this rulemaking process is to identify regulatory pathways to minimize fugitive particulate emissions from metal recycling and shredding facilities.

Initial thoughts are to focus on:

- Best Management Practices
- Housekeeping
RULE DEVELOPMENT PROCESS
Rule Development Process

1. **Information Gathering and Analysis**
   - Released 75 days before Public Hearing

2. **Preliminary Draft Rule and Staff Report**
   - Released 30 days before Public Hearing

3. **Public Workshop**
   - Public comment on Preliminary Draft Rule

4. **Draft Rule and Staff Report**
   - Public comments and Board action

5. **Public Hearing**

*Working Group and stakeholder meetings continue throughout process*
Working Group Meetings

• Working Group Meetings are a key component of the rule development process

• Comprised of representatives from industry, equipment suppliers, community and environmental groups, other agencies, and other interested parties

• Working Group Meetings are generally held monthly and throughout the rule development process
  • Email notices are sent out before each Working Group Meeting

• Objectives of Working Group Meetings:
  • Build consensus and work through issues
  • Exchange information and understanding of key issues
  • Collaboration and create a dialogue with stakeholders
Stakeholder Input

• Stakeholders can provide input throughout the rulemaking process
• Early input is strongly encouraged
  • Provides staff the opportunity to try to resolve issues
• Variety of ways for stakeholders to provide input
INFORMATION GATHERING
Information Gathering

• Detailed process to research metal recycling and shredding facilities and air pollution controls
  • Reviewing South Coast AQMD permits and other agency regulations
  • Contacting industry associations
    • California Metals Coalition (CMC)
    • Institute of Scrap Recycling industries (ISRI)
  • Identifying facilities
  • Conducting facility site visits
Facilities

- Staff currently working to compile a list of potentially impacted facilities by reviewing South Coast AQMD databases and permits, supplemented with:
  - Internet searches
  - Industry association contacts

- Initial facility search based on the following NAICS codes:

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>423140</td>
<td>Motor Vehicle Parts (Used) Merchant Wholesalers</td>
</tr>
<tr>
<td>423510</td>
<td>Metal Service Centers and Other Metal Merchant Wholesalers</td>
</tr>
<tr>
<td>423930*</td>
<td>Recyclable Material Merchant Wholesalers</td>
</tr>
<tr>
<td>562920*</td>
<td>Materials Recovery Facilities</td>
</tr>
</tbody>
</table>

* After further review of facility operations, search narrowed to focus on NAICS Codes 423930 and 562920
Facilities (cont.)

- Staff identified two general categories of metal recycling and shredding facilities

**Metal Recycling Facility**
- Metals collected, sorted, and packaged on-site and then transported off-site for further processing
- No shredding done on-site
- South Coast AQMD permits not required at most metal recycling facilities

**Metal Shredding Facility**
- On-site shredder to process metals (size reduction and sorting)
- South Coast AQMD permits required for shredder
- Recycling operations (e.g., collecting, sorting) conducted on site for metals not shredded
• Based on South Coast AQMD databases
  • 5 metal shredding facilities with active permits for metal shredders
  • ~81 facilities with AQMD facility IDs identified as potential metal recycling facilities
    • Not required to have permits for metal recycling

• Metal recycling facilities not registered in South Coast AQMD databases
  • Approximately 297 facilities identified from various sources including Employment Development Department (EDD) database, includes very small sites
In 2013, Bay Area AQMD adopted Regulation 6 Rule 4 Metal Recycling and Shredding Operations

- Applicable to facilities that receive ≥1,000 tons of metal per year
- Emission mitigation plan (EMP) required for large facilities
- EMP to include:
  - Description of facility operations
  - Current and future actions to mitigate fugitive emissions (control equipment, best management practices, and housekeeping)
  - Procedures for updating plans every 5 years
Site Visits

- Conducted 13 facility site visits
  - 12 sites accept both ferrous and non-ferrous metals
  - 1 site only accepts non-ferrous metals
  - 4 facilities with metal shredders equipped with control devices
  - 1 facility with a car crusher

- Observed equipment such as shears, grapplers, cranes, skip loaders, conveyors, balers, torch cutters

- Housekeeping practices and frequencies varied
  - Mobile sweepers
  - Brooms
  - Water suppression
METAL RECYCLING AND SHREDDING OPERATIONS
Types of Metals Processed

Both metal recycling and shredding facilities receive and process ferrous and non-ferrous metals.

• Ferrous metals are any metals that contain iron
  • Highly durable
  • Many are magnetic

• Common ferrous metals include:
  Steel, Cast Iron, Wrought Iron

• Non-ferrous metals do not contain iron
  • More malleable than ferrous metals
  • More resistant to rusting

• Common non-ferrous metals include:
  Aluminum, Copper, Lead, Tin
Metal Recycling Operations

• Metals are received from various sources including the public, industry, and other private clients

• Metal recycling facilities sort the metal to sell, export, or send to larger facilities that conduct shredding or other processing

• Typical processes include:
  • Receiving metals
  • Using large industrial shears to break down the scrap metal
  • Sorting between ferrous and non-ferrous metals
  • Loading material into bins and containers for transport off-site

• Some facilities bale the metal before loading
Metal Shredding Operations

- Metal shredding facilities receive scrap metal from metal recycling facilities, public, industry, and private clients.
- Metals are processed through a shredder to create metal shredder aggregate.
- Ferrous and non-ferrous metals separated and loaded into containers for transport.
- Metal shredder residue is material which cannot be sold.
  - Treated on-site before being sent to a landfill or transported off-site for further processing.
Fugitive and Point Source Emissions

Metal recycling and shredding operations can have two sources of emissions:

**Fugitive Emission Source:** Facility generated emissions that can become airborne, excluding emissions from a control device.

**Point Source:** Emissions originate from a fixed point such as a shredder.
The purpose of Proposed Rule 1460 is to minimize fugitive particulate emissions. Activities that may generate fugitive particulate emissions at metal recycling and shredding facilities are grouped into three categories:

- Material Handling
- Metal Processing
- Storage

The following slides will further describe fugitive emission sources within these three categories.
Material Handling

- Facilities sort materials into piles for processing or transporting

- The following activities are potential sources of fugitive emissions:
  - Unloading and loading
  - Sorting (grapplers, cranes, etc.)
  - Vehicular movement (skip loaders, trucks, etc.)
Metal Processing

- As part of metal processing, facilities may break down or compact the metal before loading into containers

- The following activities can be potential sources of fugitive emissions:
  - Shearing
  - Torch cutting
  - Baling
Storage

- Material may be stored in piles before and after processing
- Storage activities can be sources of fugitive emissions
- Piles are generally stored outside and uncovered
- Some facilities store material within barriers or in bins
- Some facilities spray water on piles to minimize dust
Shredders are subject to South Coast AQMD permitting process
- Evaluated for compliance with regulatory requirements
- Requirements (permit conditions) added to protect public health

Permit conditions include
- Cannot operate unless vented to air pollution equipment with South Coast AQMD permits
- Materials must be handled in a manner that minimizes dust and smoke emissions
Next Steps

- Continue to obtain additional facility information to refine facility universe
- Continue consultations with other regulatory agencies
- Refine scope and applicability for proposed rule
- Next Working Group meeting tentatively scheduled for April
Staying Updated

- Sign up to receive e-mail updates via http://www.aqmd.gov/sign-up

Subscribe by scrolling down the page and checking off the box for Proposed Rule 1460 to receive future meeting notices and links to documents.
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