SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Preliminary Draft Staff Report
Proposed Rule 1460 – Control of Particulate Emissions from Metal Recycling and Shredding Operations

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EXECUTIVE SUMMARY

South Coast Air Quality Management District (South Coast AQMD) worked with local community members and industry stakeholders to develop Proposed Rule 1460 – Control of Particulate Emissions from Metal Recycling and Shredding Operations (PR 1460). This rule development focuses on metal recycling facilities and metal shredding facilities that process and recycle scrap metal in response to community concerns identified through the Assembly Bill 617 (AB 617) Community Emissions Reduction Plan (CERP) process. PR 1460 will establish housekeeping requirements and best management practices such as spraying water during facility operations to minimize fugitive dust emissions from metal recycling and metal shredding facilities. PR 1460 will also require facilities to register facility information with South Coast AQMD, as well as install facility contact signage. The proposal also includes additional requirements for new facilities, such as full enclosure of new metal shredders. PR 1460 will reduce fugitive particulate matter (PM) emissions from metal recycling and metal shredding activities and lower community exposure to these pollutants.

PR 1460 is estimated to affect 200 metal recycling facilities, many of which are located within AB 617 communities. Five metal shredding facilities have also been identified and would be subject to PR 1460. These facilities are also subject to existing South Coast AQMD rules and State Water Resources Board regulations that require measures to minimize dust. Accordingly, PR 1460 water suppression activities to minimize fugitive dust emissions supplement existing regulations. The amount of water necessary to comply with PR 1460 will vary by facility.

CHAPTER 1 – BACKGROUND

INTRODUCTION

Scrap metal recycling is a process that involves taking scrap metal from end-of-life products, sorting, processing, and sometimes shredding it so that it can be reused in the production of new goods. Metal recycling facilities collect and process metals so materials can be sold to other companies for further processing. Metal shredding facilities, which use shredding techniques and equipment to process end-of-life vehicles, appliances, and other forms of scrap metal, are a subset of scrap metal recycling facilities. A review of the available data indicates there are approximately 200 metal recycling facilities, of which five have metal shredders. Activities such as cutting, shearing, sorting, handling, bailing, shredding, and storing scrap metal at metal recycling and metal shredding facilities can generate fugitive particulate matter emissions.

Pursuant to AB 617, South Coast AQMD staff worked collaboratively with community members to identify air quality issues and develop strategies to reduce air pollution. This effort resulted in the adoption of CERPs for AB 617 environmental justice communities which bear the disproportionate impacts of air pollution. During the CERP development process, several communities expressed concerns about particulate matter emissions from scrap metal recycling facilities. For example, the Southeast Los Angeles and South Los Angeles CERPs included an action to initiate rule development to require additional housekeeping and best management practices at scrap metal recycling facilities to reduce fugitive particulate emissions. PR 1460 includes requirements to reduce fugitive particulate emissions and improve air quality. Control of hexavalent chromium emissions from torch cutting and welding operations will be addressed in an upcoming separate rule making process.

ASSEMBLY BILL 617

In July 2017, AB 617 was adopted to address air quality impacts. The legislation requires a strategy to reduce toxic air contaminants and criteria pollutants in designated environmental justice communities disproportionately impacted by air pollution from mobile sources and industrial facilities. These communities also experience social and economic disadvantages that contribute to cumulative burdens. The AB 617 program accelerates actions, provides additional resources to address air quality concerns in these communities, and establishes new community-focused and community-driven actions to reduce air pollution and improve public health. As a result of AB 617, local air districts have been working with community members to develop CERPs. The CERP development process is intended to identify local air pollution sources of concern and establish control strategies within these designated communities. The AB 617 legislation also requires developing Community Air Monitoring Plans which set out air monitoring efforts to better understand air pollution in these communities and support CERP implementation.

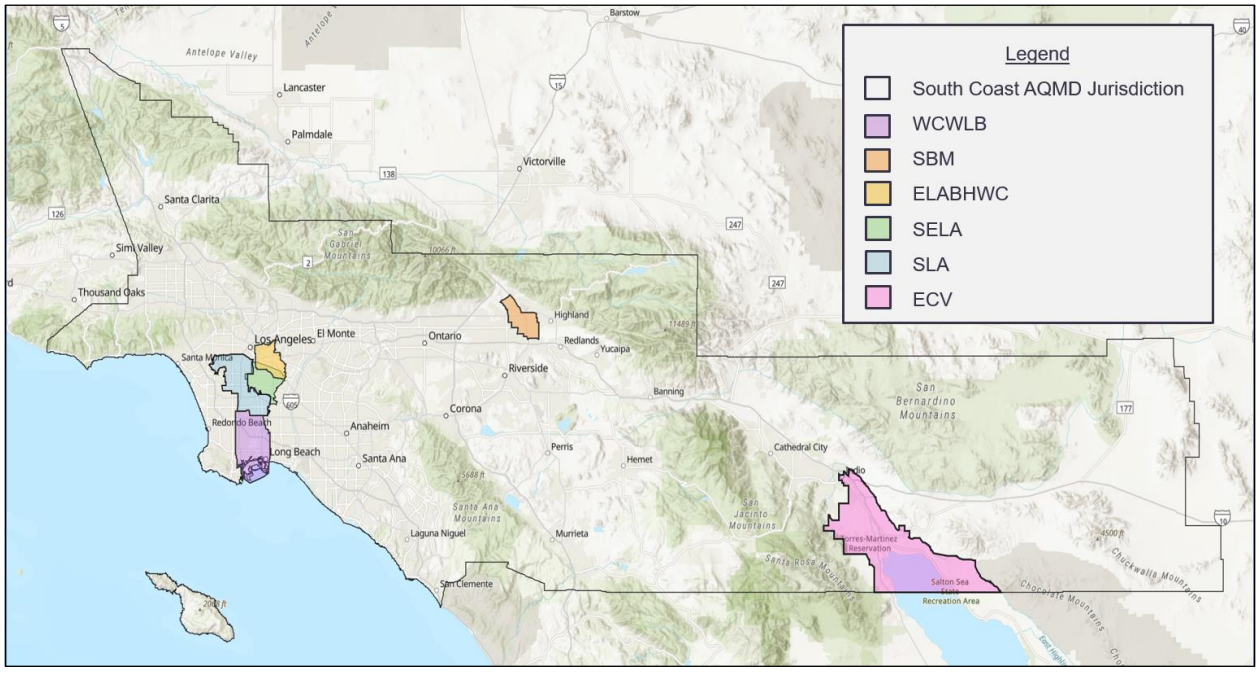
AB 617 Designated Communities

In South Coast AQMD, there are currently six designated communities under AB 617 (as shown in Figure 1-1):

- Wilmington/Carson/West Long Beach (WCWLB)
- San Bernardino/Muscoy (SBM)
- East Lost Angeles/Boyle Heights/West Commerce (ELABHWC)
- Southeast Los Angeles (SELA)
- South Los Angeles (SLA)

- Eastern Coachella Valley (ECV)

Figure 1-1



Community Emissions Reduction Plan

The CERP development process for each community is a collaboration between the Community Steering Committee (CSC), the South Coast AQMD, and the California Air Resources Board (CARB). The CSC comprises a diverse group of stakeholders that live, work, own businesses, and attend school within the community and includes representatives from local land-use agencies, public health agencies, and elected officials. Under AB 617 legislation, the CSC guides the development and implementation of the CERP. These CERPs are unique to each community to address the community's air quality priorities and include a variety of strategies, including commitments to develop new regulations, focused enforcement, outreach to businesses and the general public, air monitoring efforts, and collaborations with community stakeholders and other agencies.

In December 2020, the Southeast Los Angeles community released a CERP that included a series of actions to reduce emissions from metal processing facilities. Action B from Chapter 5e specifically includes language to initiate the rule development process to address housekeeping and best management practices at metal recycling plants to reduce fugitive emissions.[1] The Southeast Los Angeles CERP was approved by the South Coast AQMD Governing Board on

[1] *Southeast Los Angeles Community Emissions Reduction Plan: Final*. Pg. 116 (pg. 5e-1), Retrieved August 18, 2022, from: https://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/southeast-los-angeles/final-cerp/final-cerp.pdf?sfvrsn=9

December 4, 2020, and CARB on May 21, 2021.[2] In May 2022, the South Los Angeles community released a revised Preliminary Draft CERP[3] which also includes an action to address fugitive emissions at metal recycling facilities and metal shredding facilities. Specifically, Action G from Chapter 5e specifies for South Coast AQMD to initiate a rule development process to require additional housekeeping and best management practices at metal recycling facilities.

REGULATORY HISTORY

Permit Requirements for Metal Recycling Facilities and Metal Shredding Equipment

Under the South Coast AQMD Rule 203, any facility that operates equipment that causes or reduces air pollutants must have a permit to operate. As part of the permit application process, equipment is evaluated to ensure compliance with regulatory requirements to protect public health. A South Coast AQMD permit to operate provides details on how the equipment can be operated and emissions limits. Permitted facilities are required to maintain their equipment, air pollution control equipment, if any, and comply with all permit conditions to avoid excess emissions. A typical metal recycling facility does not have equipment that requires a permit; however, there are five metal shredding facilities with South Coast AQMD permits for metal shredding equipment and the associated air pollution control devices.

Rule 403 – Fugitive Dust

Rule 403 was adopted on May 7, 1976, and has undergone six amendments. The purpose of Rule 403 is to reduce the amount of particular matter (PM) entrained in the ambient air due to anthropogenic (man-made) fugitive dust sources. Rule 403 broadly applies to any activity or man-made condition capable of generating fugitive dust and provides compliance options. Therefore, metal recycling facilities and metal shredding facilities are subject to Rule 403 and these facilities should be complying with the rule requirements.

The rule requires actions to prevent, reduce or mitigate fugitive dust emissions from active operations, which include, but are not limited, to earth-moving activities, construction/demolition activities, and heavy- and light-duty vehicular movement. Rule 403 provides a list of control measures and options for the operator to select. Rule 403 presents dust control measures in four tables. Table 1 provides a list of best available control measures (BACMs) which apply to all construction activity sources. Table 2 details dust control measures for Large Operations, defined as active operations on property containing 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 5,000 cubic yards or more three times per year. Table 3 identifies contingency control measures for Large Operations to implement when Table 2 dust control measures are insufficient to meet the rule performance standards. Table 4 identifies conservation management practices for confined animal facilities.

For projects that meet the specifications for a Large Operation (i.e., greater than 50 acres of disturbed surfaces or more than 5,000 cubic yards of earth movement, Rule 403 requires

[2] *CARB Approves Community Emissions Reduction Program for Southeast Los Angeles*. Retrieved July 12, 2022, from: https://ww2.arb.ca.gov/news/carb-approves-community-emissions-reduction-program-southeast-los-angeles

[3] *South Coast AQMD: CERP Archive - South Los Angeles (SLA)*. Retrieved August 17, 2022, from: https://www.aqmd.gov/nav/about/initiatives/environmental-justice/ab617-134/south-la/cerp-archive

notification to South Coast AQMD, designation of a dust control supervisor, contract signage, and recordkeeping of dust control actions implemented.

OTHER REGULATIONS FOR METAL RECYCLING AND METAL SHREDDING FACILITIES

National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements

The Clean Water Act (CWA) was passed in 1972 and specifies that no person is allowed to discharge pollutants into a "water of the United States" without a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit establishes requirements to control water pollution and regulate point sources that can discharge pollutants. The permit limits what can be discharged, such as numeric effluent pollutant limits, numeric action levels, and technology and water quality-based effluent limitations for storm water and non-storm water discharges. There are monitoring and reporting requirements for sampling discharges, and inspectors verify that facilities comply with permit conditions.[4] A metal recycling facility or metal shredding facility is subject to the requirements of the CWA.

Industrial Stormwater Program

Section 402(p)(3)(A) of the CWA requires storm water runoff from specified types of industrial facilities (categorized by standard industrial classification [SIC] codes) to be regulated under the NPDES permit program. In California, the State Water Resources Control Board (State Board) and the nine Regional Water Quality Control Boards (RWQCBs) implement the requirements of the CWA. Generally, storm water runoff associated with industrial activities is currently regulated under the State Board's Industrial General Storm Water Permit. Within the Los Angeles County portion of South Coast AQMD, metal recycling facilities covered under the Industrial General Permit include those listed under SIC Code 5093 (scrap and waste materials) and engaged in the following types of activities: (1) automotive wrecking for scrap-wholesale (this category does not include facilities engaged in automobile dismantling for the primary purpose of selling second-hand parts, such as Pick-n-Pull); (2) iron and steel scrap- wholesale; (3) junk and scrap metal – wholesale; (4) metal waste and scrap- wholesale; and (5) nonferrous metals scrap wholesale. Other types of facilities listed under SIC Code 5093 and engaged in waste recycling, such as glass, paper, or plastic recyclers, are not included. Metal recycling facilities located within the Orange, Riverside, and San Bernardino County portions of South Coast AQMD are subject to a Sector-Specific Permit for storm water runoff associated with industrial activities from scrap metal recycling facilities within the Santa Ana Region (RWQCB 8).

Metal recycling facilities and metal shredding facilities covered by either an Industrial General Permit or the Sector-Specific Permit for the Santa Ana Region are required to develop and

[4] *United States Environmental Protection Agency: National Pollutant Discharge Elimination System (NPDES) Permit Basics*. Retrieved June 8, 2022, from: https://www.epa.gov/npdes/npdes-permit-basics#:~:text=It%20depends%20on%20where%20you,municipality%20about%20their%20permit%20requirements

implement a Storm Water Pollution Prevention Plan (SWPPP).[5] Each SWPPP is specific to the facility and details the facility's potential pollutant sources, and establishes various types of best management practices, such as operational source control, structural source control, treatment control, and erosion and sediment control to reduce stormwater pollution and offsite discharges. SWPPPs may also include housekeeping, inspection, maintenance, and recordkeeping requirements. These requirements also specify procedures to minimize fugitive dust emissions. The State Board developed the Storm Water Multiple Application and Report Tracking System (SMARTS) database, which contains SWPPPs for metal recycling facilities. The public can view or download information through the SMARTS website.[6]

Bay Area Air Quality Management District Regulation for Metal Recycling and Shredding Operations

In May 2013, the Bay Area Air Quality Management District (BAAQMD) adopted Regulation 6, Rule 4: Metal Recycling and Shredding Operations. The purpose of the rule is to minimize fugitive particulate matter emissions from metal recycling and metal shredding facilities. The rule establishes recordkeeping requirements for facilities with a metal throughput of 1,000 tons or more per rolling twelve-month period. Facilities with a metal throughput of 50,000 tons or more per rolling twelve-month period are required to prepare an Emissions Minimization Plan (EMP) for approval. The EMP includes descriptions of facility operations and actions to mitigate fugitive emissions, such as through air pollution controls, best management practices, and housekeeping. As of August 2022, three metal shredding facilities have been required to submit an EMP under this rule, and the documents are available on the BAAQMD website.[7] Under BAAQMD Regulation 6, Rule 4 EMPs are required to be updated every five years.

METAL RECYCLING AND SHREDDING OPERATIONS

Metal Recycling Facilities

Metal recycling operations occur in both metal recycling and metal shredding facilities. The primary purpose of metal recycling facilities is sorting and preparing the scrap metal received for sale to other larger facilities that conduct shredding or other metal processing activities. Metal recycling facilities, also known as feeder yards, can vary in size from processing several hundred, to thousands of tons of scrap metal per year. Most of the metals recycled are steel and other ferrous metal alloys, and nonferrous metals such as aluminum, copper, brass, and bronze. The scrap metals received come from a variety of sources such as automobiles, demolition projects (buildings and construction sites), manufacturing, wiring, and miscellany (appliances and other consumer products).

The process at a metal recycling facility begins after scrap metal is purchased from either individuals, companies, or public agencies. At the facility, it is initially weighed and inspected for

[5] *United States Environmental Protection Agency: Developing Your Stormwater Pollution Prevention Plan*. Retrieved June 10, 2022, from: https://www.epa.gov/sites/default/files/2015-10/documents/sw_swppp_guide.pdf

[6] *California State Water Resources Control Board*. Retrieved August 17, 2022, from: https://smarts.waterboards.ca.gov/smarts/faces/SwPublicUserMenu.xhtml

[7] *Bay Area Air Quality Management District: Metal Facilities*. Retrieved August 17, 2022, from: https://www.baaqmd.gov/plans-and-climate/emission-tracking-and-monitoring/metal-facilities

substances such as wood, paper, dirt, rocks, glass, and free liquid. Scrap metal can also be contaminated with other metals, insulation, plastics, paints, and oil. Section 42175 of the Public Resources Code requires that hazardous materials be removed from major appliances and vehicles before crushing for transport or transferring to a baler or shredder for recycling. This process is known as depollution and involves the safe removal of "materials that require special handling," which includes materials such as gasoline, oil, antifreeze, lead-acid batteries, vehicle airbags, compressed gas cylinders (e.g., propane tanks, compressed gas tanks, and fire extinguishers), refrigerants in air conditioning or heat transfer systems, capacitors containing polychlorinated biphenyls (PCBs), light ballasts, transformers, and items containing elemental mercury (e.g., tilt-switches or thermostats) (DTSC, 2021). Facilities that conduct depollution operations are subject to hazardous waste generator requirements (DTSC, 2021).

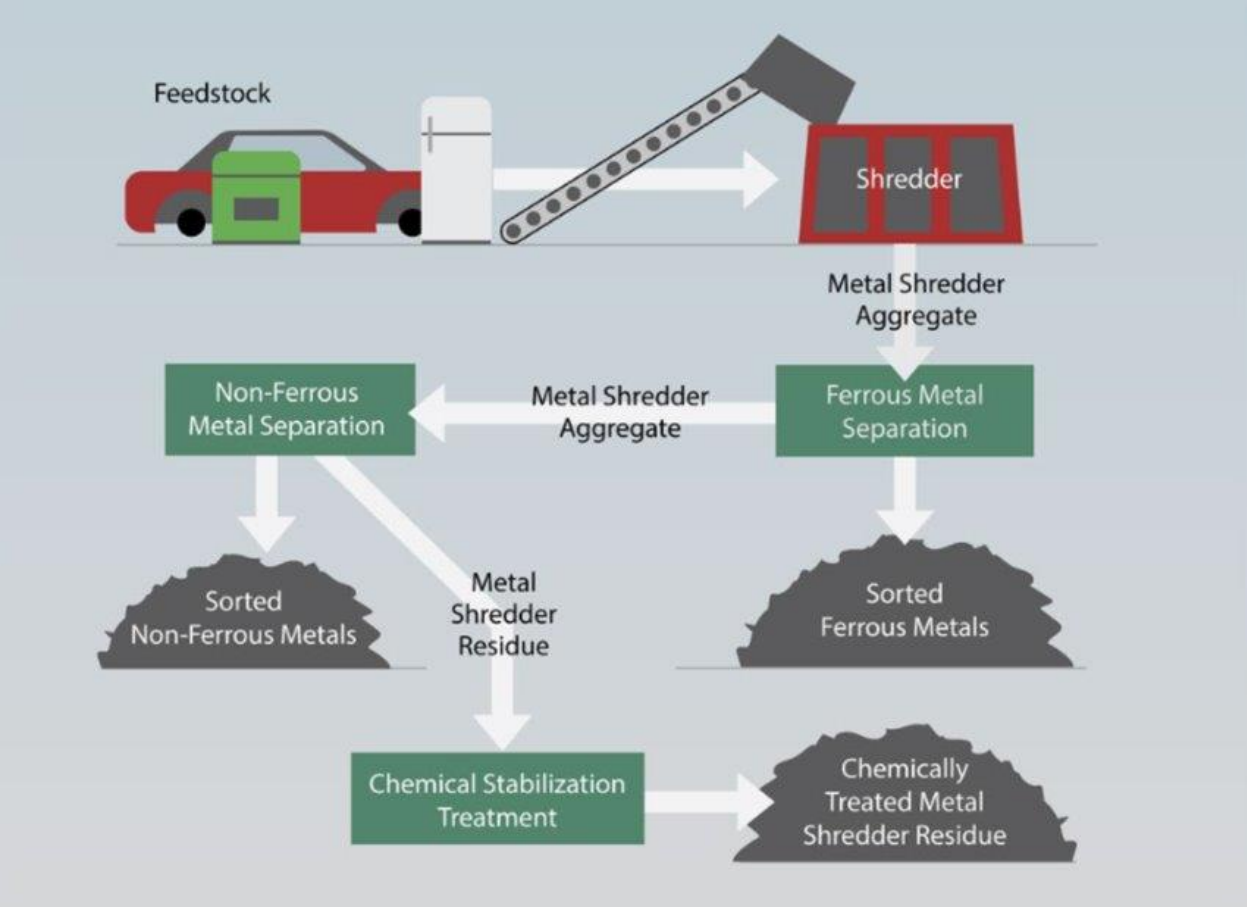
Once the scrap metal has been inspected to ensure it has been properly depolluted, it is sorted. The sorting varies between facilities, but the scrap metal is generally organized by metal type or whether it is ferrous or nonferrous. The scrap metal can be sorted through various methods, such as through the use of grapplers, cranes, and magnets. Afterward, the scrap metal can be broken down or resized so that it is easier to handle. This process varies between facilities and can include using large industrial shears, torch cutting, or baling scrap metal. After the scrap metal has been sorted and resized, it is loaded into containers to be transported to the next location for further processing.

Metal Shredding Facilities

The process at metal shredding facilities is very similar to metal recycling facilities in that the facilities receive, sort, and process scrap metal. Metal shredding facilities receive and purchase the same types of scrap metal as metal recycling facilities which can come from individuals, companies, public agencies, and other metal recycling facilities. For the most part, the receiving, sorting, and processing activities at metal shredding facilities are the same as metal recycling facilities, but the key difference is that metal shredding facilities also shred scrap metal as part of on-site processing activities.

The general process at scrap metal facilities is depicted in Figure 1-2. Metal shredding facilities receive scrap metal from various sources, and typically scrap metal provided by metal recycling facilities has already been depolluted and the hazardous materials removed. However, facilities must conduct on-site depolluting activities for scrap metal that is received from the public (DTSC, 2021). The depolluted scrap metal is processed through a shredder which cuts and crushes the scrap metal into fist-sized scraps of metal, creating a mixture of scrap metal called metal shredder aggregate. This aggregate is a mix of ferrous and nonferrous metals, plastic, rubber, glass, and other components that were part of the scrap metal. Ferrous metal is separated using magnets or eddy currents, and the remaining metal shredder aggregate is processed to separate the nonferrous metals. After separating ferrous and nonferrous metals, the remaining material is called metal shredder residue (MSR). Some facilities chemically treat MSR so it can be sent to a municipal solid waste landfill for use as an alternative daily cover. Other facilities transfer MSR offsite for further processing. The scrap metal that is shredded and sorted is then loaded into containers to be transported for further processing.

Figure 1-2



Point Source Emissions

A point source is an emission source with a specific fixed point at a facility. Metal shredders are considered a point source of emissions for metal shredding facilities. Due to the nature of the operation, even if the scrap metal has been depolluted, there still may be residual amounts of non-metal material that also go into the shredder. These materials include plastics, paints, caulks, sealants, rubber, switches, fluids, and fluid residues. The process of grinding and shredding scrap metal generates heat, resulting in residual fluids and fuels becoming gases. The nature of the shredding process creates the potential for particulate matter emissions of various sizes. Thus, the metal shredding process generates emissions of volatile organic compounds, particulate matter, and hazardous air pollutants, including lead, zinc, cadmium, mercury, and organic pollutants.[8] Metal shredders are subject to the South Coast AQMD permitting process and must have a permit to operate. This equipment is evaluated to ensure compliance with regulatory requirements, and permit conditions are added to the permit to protect public health. Permit conditions would include venting to an air pollution control device while operating and requiring materials to be handled in a way to minimize dust and smoke emissions. Examples of air pollution control devices at shredding facilities include cyclones and venturi scrubbers or bag house systems for particulate

[8] *Violations at Metal Recycling Facilities Cause Excess Emissions in Nearby Communities*. Retrieved June 2, 2022, from: https://www.epa.gov/system/files/documents/2021-07/metalshredder-enfalert.pdf

matter control. Sometimes, a carbon absorber or a regenerative thermal oxidizer is used for VOC control.

Fugitive Source Emissions

Under Title 40 of the Code of Federal Regulation Section 70.2, fugitive emissions are emissions that could not reasonably pass through a stack, chimney, vent, or another functionally-equivalent opening. These fugitive emissions generated by a facility can become airborne. For metal recycling and metal shredding facilities, the sources of fugitive emissions can be placed in three categories: material handling, material processing, and material storage.

Material Handling

Material handling activities at metal recycling and metal shredding facilities include loading and unloading trucks, sorting scrap metal, and vehicular movement through the facility. While scrap metal can be brought to the facility from personal vehicles, it can also be brought by large semi-trucks that need to be unloaded. As shown in Figure 1-3, trucks generally tilt the container holding the scrap metal to dump the materials on the ground during the unloading process. Fugitive emissions can be generated as scrap metal, dust, and other residue debris reaches the ground.

Figure 1-3

After the material has been unloaded, facilities may need to sort the scrap metal into the appropriate piles, which can be done by hand or using equipment such as grapplers, cranes, and skip loaders (see Figure 1-4). These activities can also lead to fugitive emissions as disturbed scrap metal is picked up, moved, and dropped. One method to reduce fugitive emissions during these activities is applying dust suppressants such as water to minimize dust and other potential emissions from becoming airborne.

Figure 1-4

The top image depicts a skip loader. The two bottom images depict grapplers

Once the scrap metal has been processed, the material will need to be loaded into containers, as shown in Figure 1-5. Like other material handling activities, this process of moving scrap metal can lead to fugitive emissions.

Figure 1-5

Material Processing

Material processing activities at metal recycling and metal shredding facilities include breaking down or compacting scrap metal for easier handling. Equipment commonly used includes shears, torch cutters, and balers (as shown in Figure 1-6). Industrial shears are used to break down scrap metal into smaller pieces, a process that can emit fugitive emissions due to the disturbance of any dirt or residue on the scrap metal. When pieces of scrap metal are too large for a shear, a torch cutter may be used instead. The process of cutting metal using a very hot flame is a potential source

of fugitive emissions, and torch cutting stainless steel can lead to toxic hexavalent chromium emissions. Torch cutting is similar to welding as they both involve melting metal at high temperatures, which generate fugitive emissions. Chromium is a component found in stainless steel, nonferrous alloys, and chromate coatings. When high heat is applied, such as during torch cutting or welding, chromium is converted into hexavalent chromium, a carcinogen.[9] Some facilities will also bale scrap metal for compaction and easier handling. This process of crushing scrap metal may also release fugitive emissions.

Figure 1-6

The top image is a metal shear. The bottom left image is a baler and bottom right image is a torch cutter

Material Storage

Scrap metal material may be stored in piles before and after processing. As shown in Figure 1-7, these storage activities can be sources of fugitive emissions as piles are generally stored outside and uncovered. However, some facilities may store specific types of scrap metal within barriers or bins. Some material piles are considered active as workers are consistently adding or removing material from these piles. Others are static, but both types of material piles can be sources of fugitive emissions. Similar to material handling activities, applying dust suppressants such as water to scrap metal piles can minimize dust and other potential emissions from becoming airborne.

[9] *Controlling Hazardous Fume and Gases during Welding*. Retrieved July 12, 2022, from: https://www.osha.gov/sites/default/files/publications/OSHA_FS-3647_Welding.pdf

Figure 1-7

NEED FOR PROPOSED RULE 1460

PR 1460 is needed to address community concerns and minimize fugitive dust emissions from metal recycling and metal shredding facilities. Although Rule 403 contains requirements to minimize fugitive dust emissions, the control actions are tailored to earth-moving activities, construction/demolition activities, and heavy- and light-duty vehicular movement. PR 1460 is specific to metal recycling and metal shredding facilities and is based on operations at these facilities. It will include housekeeping provisions and dust suppression requirements such as spraying water on scrap metal material before truck unloading and loading, material handling, and material processing and site improvements where necessary to minimize fugitive emissions. A large majority of metal recycling facilities do not have South Coast AQMD permits as the facilities do not operate equipment requiring a permit. PR 1460 will require facilities to register with South Coast AQMD, which will aid outreach and compliance activities. Additionally, AB 617 community members have expressed concerns about fugitive emissions at metal recycling and shredding facilities and have requested improved communication between regulatory agencies and the public. PR 1460 accomplish this with signage requirements that identify the facility and South Coast AQMD contact information to facilitate the ability for members of community to contact the facilities or to file an air quality complaint with the South Coast AQMD.

AFFECTED FACILITIES

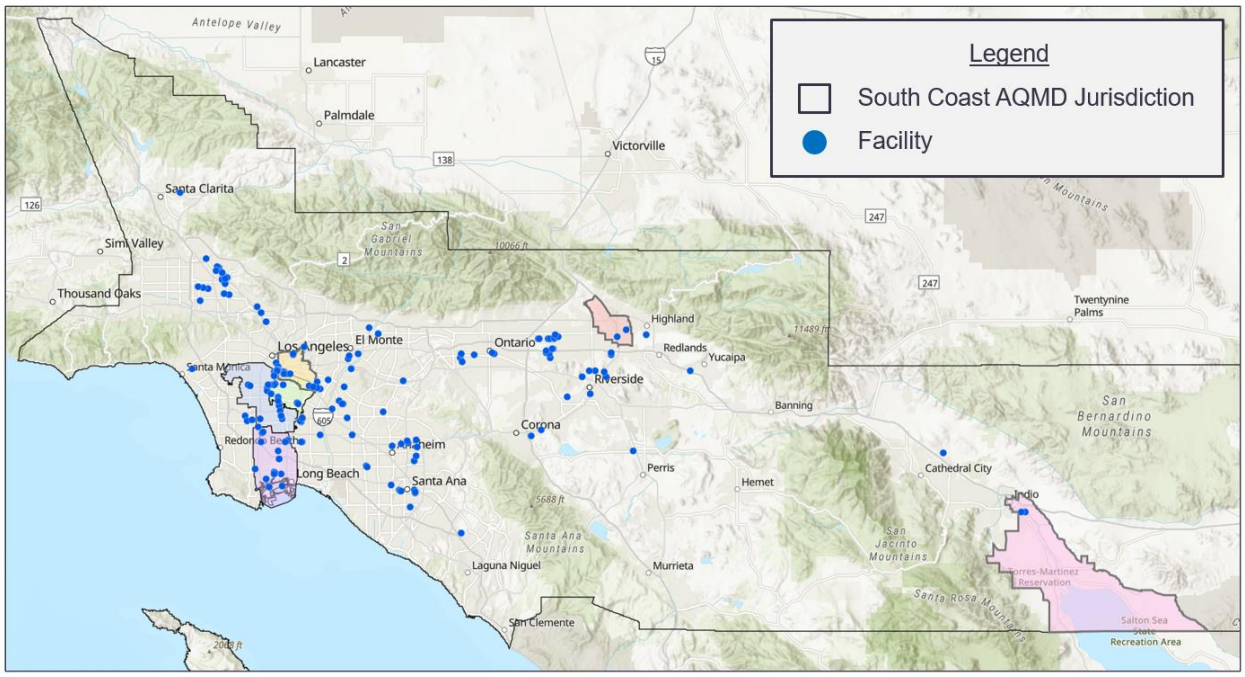
The facilities subject to PR 1460 were identified by reviewing South Coast AQMD databases and documentation from the California State Water Resources Control Board and Department of Toxic Substances Control (DTSC). Staff also identified facilities with a scrap metal permit under the local Santa Ana Regional Water Quality Control Board, searched websites for metal recycling and metal shredding facilities, and reviewed aerial images. PR 1460 will not apply to recycling centers where the primary business is to provide the refund value for empty beverage containers, material recovery facilities that primarily process non-metal material, auto dismantlers, metal melting facilities, and lead processing facilities. Further information about facility applicability will be discussed in Chapter 2.

Based on the search process described above, staff estimates 200 facilities would be subject to PR 1460 requirements. The facilities are metal recycling and metal shredding facilities that are generally classified under the following NAICS codes:

- 423930 Recyclable Material Merchant Wholesalers
- 562920 Materials Recovery Facilities

Of the estimated 200 facilities, five metal shredding facilities have been identified, and the remaining are metal recycling facilities. Figure 1-8 provides a representation of the facility locations as well as AB 617 designated community boundaries. For the AB 617 designated community boundaries please refer to the legend in Figure 1-1.

Figure 1-8



PUBLIC PROCESS

The development of PR 1460 has been conducted through a public process. A PR 1460 Working Group was formed to allow the public and stakeholders to discuss details of the proposed rule and provide South Coast AQMD staff with input during the rule development process. The Working Group includes business representatives, environmental and community groups, public agencies, and consultants. As discussed, PR 1460 applies to many facilities that do not have permits or experience with South Coast AQMD. As part of the public process, staff consulted with two trade associations, the California Metals Coalition and the Institute of Scrap Recycling Industries, to help notify their members of working group meetings. Staff also mailed a notice about the PR 1460 rule development process to a list of recycling facilities identified through an Employment Development Department (EDD) database. South Coast AQMD staff also updated community members about the PR 1460 rule development process at Community Steering Committee (CSC) meetings for the Southeast Los Angeles and South Los Angeles AB 617 communities. South Coast AQMD has held three Working Group Meetings via Zoom videoconference and teleconference due to COVID-19. The meetings held via Zoom were on March 16, 2022, May 18, 2022, and July 13, 2022. A Public Workshop is scheduled for September 6, 2022, via Zoom to present preliminary draft rule language for PR 1460 and receive public comment.

CHAPTER 2 – SUMMARY OF PROPOSED RULE 1460

OVERALL APPROACH

PR 1460 addresses metal recycling and shredding operations and establishes requirements to minimize fugitive dust emissions through housekeeping and best management practices. PR 1460 also includes a registration process and recordkeeping requirements to aid South Coast AQMD in ensuring compliance. For this chapter, when referring to PR 1460 specific terms that are defined in the rule language, the terminology will be capitalized.

The following is a summary of PR 1460 provisions.

Purpose – Subdivision (a)

The purpose of PR 1460 is to minimize Fugitive Dust emissions from Metal Recycling and Metal Shredding Facilities and address AB 617 community concerns. Offsite Fugitive Dust emissions will be minimized by reducing particulate emissions from metal recycling and metal shredding activities.

Applicability – Subdivision (b)

PR 1460 applies to an owner or operator of a Metal Recycling Facility or Metal Shredding Facility. PR 1460 requirements are supplemental to the requirements to control Fugitive Dust in Rule 403. The definitions for an Existing or New Metal Recycling Facility or Metal Shredding Facility are included in subdivision (c) – Definitions. A list of facilities not subject to PR 1460 is included in subdivision (m) – Exemptions.

Definitions – Subdivision (c)

PR 1460 includes definitions for specific terms. Some definitions are based on other South Coast AQMD rules, while others are unique to PR 1460. For certain definitions, additional clarification is provided in this section or where the definition is used within a specific Rule provision. Please refer to PR 1460 for actual definitions.

Building Enclosure

A Building Enclosure means a permanent building or physical structure, or a portion of a building, with a floor, walls, and a roof to prevent exposure to the elements (e.g., precipitation, wind, runoff), where openings are only to allow access for people, vehicles, equipment, or Scrap Metal. This definition has been adapted from other existing South Coast AQMD rules.

Fugitive Dust

Fugitive Dust means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person. If wind where to blow on a Scrap Metal pile and cause Fugitive Dust, that is an example of a result due to the activities of any person. This is an existing definition from South Coast AQMD Rules 102, 403, 403.1, and 403.2.

Existing Metal Recycling Facility

An Existing Metal Recycling Facility is a Metal Recycling Facility that has been in operation before the date of the rule adoption. These are facilities that have been operating and meet the definition of a Metal Recycling Facility but there may be certain scenarios that would cause facilities to no longer be considered an Existing Metal Recycling Facility. For example, if a facility

is deemed an Existing Metal Recycling Facility, but there is a modification in facility operation, such as installing a Metal Shredder, the facility will become a New Metal Shredding Facility. Additional scenarios where an Existing Metal Recycling Facility would become a New Metal Recycling or New Metal Shredding Facility include:

- If an Existing Metal Recycling Facility changes their active operations to no longer be in the metal recycling or metal shredding industry and later changes back
- If an existing facility moves its operation to a new physical location
- If an existing facility expands its operation by adding a non-adjoining property (such as across the street or down the block)

The following are scenarios where an Existing Metal Recycling Facility remains an Existing Metal Recycling Facility:

- The existing facility changes ownership but not the physical location of operation
- The existing facility adds a secondary operation on its property, but the majority of the operation is the same
- If an existing facility expands the facility by adding adjoining property to the existing location
- The existing facility halts operation for a period of time (could extend to multiple years), during which it does not operate any activities, and then resumes the original operation

Existing Metal Shredding Facility

An Existing Metal Shredding Facility is a Metal Shredding Facility that has been operating before the date of the rule adoption. These are facilities that have been operating and meet the definition of a Metal Shredding Facility but there may be certain scenarios that would cause facilities to no longer be considered an Existing Metal Shredding Facility. If an Existing Metal Shredding Facility removes and no longer operates a Metal Shredder, the facility will remain an Existing Metal Recycling Facility. Additional scenarios where an Existing Metal Shredding Facility would become a New Metal Recycling or New Metal Shredding Facility include:

- If an Existing Metal Shredding Facility changes their active operations to no longer be in the metal recycling or metal shredding industry and later changes back
- If an existing facility moves its operation to a new physical location
- If an existing facility expands its operation by adding a non-adjoining property (such as across the street or down the block)

The following scenarios where an Existing Metal Shredding Facility remains as an Existing Metal Shredding Facility include:

- The existing facility changes ownership but not the physical location of operation
- The existing facility adds a secondary operation on its property, but the majority of the operation is the same
- If an existing facility expands the facility by adding adjoining property to the existing location
- The existing facility halts operation for a period of time (such as a few years), during which it does not operate any activities, and then resumes the original operation

Homogenous Metal Pile

A Homogenous Metal Pile is a specific type of metal pile comprised of only one type of material, such as aluminum, steel, or copper, and is free of contaminants, including, but not limited to, any paints, oils, greases, coatings, rubber, and plastics. A Homogenous Metal Pile would not include a situation where steel and aluminum are mixed together. An example of a Homogenous Metal Pile would be a pile of busheling. According to the Institute of Scrap Recycling Industries, busheling is a clean steel scrap with a maximum size of 2 feet by 5 feet and consisting of new factory busheling such as sheet clippings and stampings from metal production that is free of metallic coatings. Busheling also does not include old auto body and fender stock and is only new production scrap rather than scrap from obsolete used items. Homogenous Metal Piles are of higher value and are not a source of fugitive dust as they arrive clean. Requirements such as watering could lessen the value of the metal and result in unnecessary use of water. Rule 1460 defines Homogenous Metal Piles to include different best management practices for these materials.

Metal Recycling Facility

Metal Recycling Facility means a facility that receives, stores, segregates, or separates Scrap Metal and mixed materials for reuse or resale by purchasing or processing (sorting, shearing, baling, or torch cutting) metals. Metal materials include but are not limited to Ferrous Metals, Non-Ferrous Metals, auto bodies, and major appliances. All facilities subject to PR1460 conduct metal recycling operations, and a small subset of facilities also conduct metal shredding operations.

Metal Shredder

A Metal Shredder is a piece of equipment using machinery driven by rotors that spin hammers that cut and crush metallic items into smaller pieces.

Metal Shredding Facility

A Metal Shredding Facility is any Metal Recycling Facility that accepts Scrap Metal and also uses a Metal Shredder to mechanically rend that Scrap Metal into smaller pieces and separates the Ferrous Metals, Non-Ferrous Metals, and other materials for recycling. As previously mentioned in the paragraph for Metal Recycling Facility, Metal Shredding Facilities conduct metal recycling activities and also utilize Metal Shredders in their operations.

Metal Shredder Residue

Metal Shredder Residue means the non-metallic material that remains after shredding Scrap Metal, after Ferrous Metals and Non-Ferrous Metals have been separated and removed. This is a byproduct produced only at Metal Shredding Facilities. Some facilities treat Metal Shredder Residue onsite while other facilities send it to another facility for offsite processing. Metal Shredder Residue contains light fibrous material. According to DTSC, light fibrous material can be dispersed offsite due to wind or rain if not properly managed. Collected samples of light fibrous material have been shown to exceed regulatory thresholds for zinc, lead, and copper and meet the criteria for hazardous waste in California.[10]

New Metal Recycling Facility

[10] *Evaluation and Analysis of Metal Shredding Facilities and Metal Shredder Wastes*. Retrieved August 3, 2022, from: https://dtsc.ca.gov/wp-content/uploads/sites/31/2021/08/2021.08.09_Metal_Shredder_Analysis.pdf

A New Metal Recycling Facility means a Metal Recycling Facility that begins operation on or after the date of rule adoption. Additional clarification and scenarios are provided in the paragraphs above for Existing Metal Recycling Facility and Existing Metal Shredding Facility.

New Metal Shredding Facility

A New Metal Shredding Facility means a Metal Shredding Facility that begins operation on or after the date of rule adoption. Additional clarification and scenarios are provided in the paragraphs above for Existing Metal Recycling Facility and Existing Metal Shredding Facility.

Throughput

Throughput means the weight of the material, in tons, received at a Metal Recycling Facility or Metal Shredding Facility. This is the weight of materials brought to the facility during the receiving process and not the weight of Scrap Metal that is exported out of the facility.

Waste Material

Waste material includes plastics, vinyl, sponge, foam, leather, textiles, Soil, rubber, glass, etc., not intended for resale or recycling. These are materials separated from the metals during the Scrap Metal sorting and processing activities and discarded in separate piles or containers. This material is different from the materials collected during the housekeeping requirements pursuant to subdivision (e).

Registration – Subdivision (d)

Initial Registration

PR 1460 will require Metal Recycling Facilities and Metal Shredding Facilities to register and provide South Coast AQMD with information about the facility and its operation. Many Metal Recycling Facilities do not have equipment permitted by South Coast AQMD. To streamline the registration process, South Coast AQMD is proposing to develop a form that facilities can use to provide the required registration information. Collected information will be used by the South Coast AQMD for outreach and to conduct compliance activities.

Paragraph (d)(1) requires Existing Metal Recycling Facilities and Existing Metal Shredding Facilities to submit registration information on or before January 1, 2023. Subparagraphs (d)(1)(A) through (G) specify the information required under the registration process, including facility information such as name, address, contact information, number of employees, hours of operation, and acreage.

Subparagraph (d)(1)(H) further requires facilities to denote if there is a Sensitive Receptor within 100 meters (328 feet) of the facility boundary. This is due to a requirement in paragraph (f)(5) where facilities within 100 meters of a Sensitive Receptor are required to cease specific facility activities if instantaneous wind speed exceeds 25 miles per hour. A Sensitive Receptor is defined in paragraph (c)(16) as a residence, schools, preschools, daycare centers, prisons, and health facilities such as hospitals or retirement and nursing homes. School or school grounds includes any building or structure, playground, athletic field, or other areas of school property but does not include unimproved school property. When identifying a Sensitive Receptors, facilities can utilize an online mapping system (e.g., Google Maps, Apple Maps, etc.) to identify building uses nearby. The 100-meter distance shall be measured from the facility's outmost perimeter to the property line of the sensitive receptor.

Subparagraph (d)(1)(I) through (K) require facilities to provide regulatory information, including identification or permit numbers issued by the California Integrated Waste Management Board or the Local Enforcement Agency, South Coast AQMD facility ID (if applicable), and South Coast AQMD permitted equipment.

Subparagraph (d)(1)(L) requires facilities to list torch cutting equipment used for metal recycling activities.

Subparagraph (d)(1)(M) requires facilities to report facility Throughput for the preceding calendar year by denoting which range of Throughput the facility processes. Throughput is defined in paragraph (c)(19) as the weight of the material in tons received at metal recycling and metal shredding facilities. The following are the annual Throughput categories specified under subparagraph (d)(1)(M).

Annual Throughput	< 1,000	≥1,000 to <25,000	25,000 to <50,000	50,000 to <75,000	75,000 to <100,000	≥100,000

Registration for New Facilities

Paragraph (d)(2) requires a New Metal Recycling Facility or Metal Shredding Facility to submit registration information. As previously defined, a New Metal Recycling Facility or Metal Shredding Facility is a facility not in existence before the date of PR 1460 adoption. PR 1460 would require registration with South Coast AQMD for new facilities before the first day the facility is in operation.

Update Registration for Facilities that Change Operations

Paragraph (d)(3) of PR 1460 requires submittal of an updated registration before January 15, 2024, and by that date on each year after if the Metal Recycling Facility or a Metal Shredding Facility has a change to any one of the following facility characteristics: location or mailing address, legal owner, facility contact information, Throughput range, the addition of torch cutting equipment, or new or additional Sensitive Receptors within 100 meters (328 feet) of the facility property line. The paragraph (d)(3) update notifications are required once per year and only if there are changes to the items specified in subparagraphs (d)(3)(A) through (d)(3)(G).

Housekeeping – Subdivision (e)

Paragraph (e)(1) requires daily cleaning using a Prescribed Cleaning Method for specific areas throughout the facility. Prescribed Screening Methods are defined in paragraph (c)(15) as a process of removing or collecting debris using a wet mop, damp cloth, wet wash, low-pressure spray nozzle, dry vacuum with dust suppression, or a combination of the described methods which minimize Fugitive Dust emissions. Specified areas for daily cleaning include traffic areas used by vehicles throughout the facility, including, but not limited to, equipment paths used within the facility, the entrances and exits of the facility, and truck scales where weighing occurs. Additional locations requiring daily cleaning include all areas where truck or container loading or unloading occurs and other areas where recycling-related activities such as sorting, shearing, torch cutting, baling, shredding, or Scrap Metal storage take place. In subparagraph (e)(1)(B), the provision specifies cleaning areas where the surface of the ground is exposed to clarify that these are areas of the ground that are not covered by heavy machinery or Scrap Metal piles and are reasonably

accessible to clean. Examples of areas that facilities will not be required to clean include under a pile of Scrap Metal, under or inside a Metal Shredder, or under a shipping container.

Paragraph (e)(2) requires that materials collected during housekeeping requirements in paragraph (e)(1) are to be stored in covered containers that are to remain covered at all times, except when being filled. Materials collected from daily housekeeping can include dirt and debris and are intended to be placed into containers prior to disposal and not transferred to other containers. Requirements for limiting Fugitive Dust from Waste Material, defined as remaining material after the metal sorting/recycling process (e.g., plastics, vinyl, glass, etc.) that is not intended for resale, are included in paragraph (f)(9). Under the provisions of paragraph (f)(9), Waste Material is also required to be stored in a container that is covered but this material can be transferred to other containers.

Best Management Practices – Subdivision (f)

Paragraph (f)(1) established requirements for reducing Fugitive Dust emissions from unloading or loading Scrap Metal from vehicles or containers, handling Scrap Metal, processing Scrap metal (includes sorting, shearing, bailing, or shredding activities), and Scrap Metal storage pile activities, excluding Homogeneous Metal Piles. The requirements for Scrap Metal storage pile activities apply to materials placed on the ground and not to metals within containers such as barrels, three-yard bins, or roll-off containers. Paragraph (f)(1) requires the application of water at sufficient quantities and frequencies to minimize Fugitive Dust emissions. The amount and process of applying water is not specified, but staff has identified misting equipment systems that use less water than traditional high-pressure hoses. Use of recycled water (if available) and recycling of water used on-site for dust control is also encouraged to minimize potable water use.

Paragraph (f)(2) provisions are intended to reduce emissions from Scrap Metal storage piles, excluding Homogenous Metal Piles. Under paragraph (f)(2), facilities are required to implement at least one of the following measures: watering, use of three-sided enclosures, or installation of three-sided windscreens. Subparagraphs (f)(2)(A) through (f)(2)(C) specify the minimum requirements for each measure intended to minimize Fugitive Dust from storage piles.

Paragraph (f)(3) provisions are specific to a Homogenous Metal Pile and the requirements included are based on industry stakeholder input about the different types of metal received at facilities. The materials comprising a Homogenous Metal Pile are of a higher value, and concerns were expressed that applying water to these metals would decrease their value. Under paragraph (f)(3), applicable facilities would be required to label the material specifying the type of metal (aluminum, steel, or copper) and the date the facility received the material. Paragraph (f)(3) also requires facilities that have Homogenous Metal Piles onsite for at least seven days to implement at least one of the measures listed in subparagraphs (f)(3)(A) through (f)(3)(C): covering, use of three-sided enclosures, or installation of three-sided windscreens.

Vehicles traveling on site can resuspend material into the air and the amount of material resuspended is a function of the loose material on the surface (referred to as silt loading) and vehicle weight and speed.[11] Paragraph (f)(4) provisions are intended to reduce Fugitive Dust emissions by requiring operators to post signs at all entrances of the site to designate the vehicle

[11] *EPA: 13.2.1 Paved Roads.* Retrieved August 5, 2022, from: https://www.epa.gov/sites/default/files/2020-10/documents/13.2.1_paved_roads.pdf

speed limit of 15 miles per hour. To allow time to install speed limit signs, signage is required beginning July 1, 2023.

Paragraph (f)(5) establishes additional requirements for a Metal Recycling Facility or Metal Shredding Facility that is located within 100 meters (328 feet) of a Sensitive Receptor. As previously described, Sensitive Receptors are defined in paragraph (c)(16) and generally include schools, hospitals, and residences. Under the provisions of subparagraph (f)(5)(A), a Metal Recycling Facility or Metal Shredding Facility that is within 100 meters (328 feet) of a sensitive receptor is required to monitor wind speeds in accordance with subdivision (m) provisions. Subparagraph (f)(5)(B) requires a Metal Recycling Facility or Metal Shredding Facility that is within 100 meters (328 feet) of a sensitive receptor to cease unloading and loading activities, sorting, shearing, baling, torch cutting, and shredding activities for at least 30 minutes following an instantaneous wind speed above 25 mph. Paragraph (m)(2) in the exemptions subdivision establishes an exclusion from the subparagraph (f)(5)(B) work cessation requirements for Scrap Metal unloading and loading activities, sorting, shearing, baling, torch cutting, or shredding activities conducted within a Building Enclosure.

Paragraph (f)(6) includes requirements for areas of the site to be paved with asphalt or concrete if the following activities occur: Scrap Metal unloading and loading, sorting, shearing, torch cutting, baling, shredding, or Scrap Metal storage. Paving requirements are effective January 1, 2025, to allow facilities to upgrade previously unpaved areas on site. Under the provisions of paragraph (f)(6) paved areas will need to be maintained in good operating condition to prevent the generation of Fugitive Dust. Over time, pavement can develop damage, including but not limited to divots, cracks, potholes, and spalling of concrete or asphalt. Facilities will need to maintain pavement such that it is not a source of Fugitive Dust emissions.

Paragraph (f)(7) and (f)(8) provisions complement Storm Water regulations and other existing South Coast AQMD rules. They are intended to limit the amount of material tracked out from vehicles exiting a facility onto paved public roads where material could be resuspended by passing vehicles. Under paragraph (f)(7), facilities are required to ensure track-out does not extend more than 25 feet from a facility. Track Out is defined as material that adheres to motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions. Track Out is measured from each exit, and facilities with multiple exits would be required to ensure the track out from a facility does not exceed a cumulative distance of 25 feet. Paragraph (f)(7) also requires removal of Track Out at the end of the workday or evening shift. Paragraph (f)(8) requires facilities to install and maintain at least one of the specified measures to minimize Track Out. As described in subparagraphs (f)(8)(A) through (f)(8)(C) measures include a wheel shaker, a wheel washing system or paving. The requirements under paragraphs (f)(7) and (f)(8) are effective July 1, 2023, allowing facilities time to install equipment or paving, if necessary.

Paragraph (f)(9) establishes that Waste Material is to be stored in a container that remains covered unless being filled or emptied. As mentioned, Waste Material is defined in paragraph (c)(21) as material generated from Metal Recycling Facility or Metal Shredding Facility activities that are not intended for resale and include but are not limited to plastics, vinyl, sponge, foam, leather, textiles, Soil, rubber, and glass.

The provisions of paragraph (f)(10) are specific to a Metal Shredder Facility that generates Metal Shredder Residue. Under subparagraph (f)(10)(A), beginning July 1, 2023, a Metal Shredding

Facility will be required to store all Metal Shredder Residue within a three-sided enclosure that is at least two feet higher than the height of the Metal Shredder Residue. Subparagraph (f)(10)(B) further clarifies that the Metal Shredder Residue is to not extend beyond the perimeter of the enclosure. The requirement that the residue "not extend beyond the perimeter of the enclosure" means that no Metal Shredder Residue can be located outside of the perimeter of the structure as determined if it had all four sides. Figure 2-1 below shows an example of residue spilling out over the perimeter of a three-sided enclosure; this would be a violation of subparagraph (f)(10)(B).

Figure 2-1

If a facility receives three violations of the provisions of paragraph (f)(10), paragraph (f)(11) establishes that the facility has 180 days after receiving the third violation to store Metal Shredder Residue within a Building Enclosure. All rule provisions, including paragraph (f)(10) requirements, will be enforced, and facilities can become subject to additional enforcement actions, if necessary. Paragraph (f)(11) represents an additional requirement for facilities that receive multiple violations of paragraph (f)(10).

Signage – Subdivision (g)

Signage at facilities is intended to provide the public with information to directly contact the facility with questions, concerns, or complaints about potential air quality issues. Under subdivision (g), the facility will be required to document the complaint and subsequent mitigation actions, if any. The signage shall include South Coast AQMD contact information [1-800-CUT-SMOG®] as an additional resource for the community.

Paragraph (g)(1) establishes signage requirements consistent with many other South Coast AQMD rules. Paragraph (g)(1) also references the alternative signage provisions under paragraph (g)(3). The signage dimensions and requirements contained in subparagraphs (g)(1)(A) through (g)(1)(D) are intended to make the signs more visible to the public. Since many PR 1460 facilities are located in AB 617 communities with many Spanish speaking and bilingual individuals, signage is required

in English and Spanish. The specific text that must be included on each sign is presented below and in clauses (g)(1)(D)(ii) and (g)(1)(D)(iii). Paragraph (g)(1) provisions are effective July 1, 2023, to allow facilities the time necessary to develop and install signs.

> "TO REPORT AIR QUALITY ISSUES SUCH AS ODORS, DUST, OR SMOKE FROM THIS FACILITY, PLEASE CALL [FACILITY CONTACT AND PHONE NUMBER] OR THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT 1-800-CUT-SMOG®".
>
> "PARA REPORTAR PROBLEMAS DE CALIDAD DEL AIRE COMO OLORES, POLVO O HUMO DE UNA INSTALACIÓN, LLAME A [CONTACTO DE LA INSTALACIÓN Y NÚMERO DEL TELÉFONO] O AL EL DISTRITO DE ADMINISTRACIÓN DE LA CALIDAD DEL AIRE DE LA COSTA SUR AL 1-800-CUT-SMOG®".

Paragraph (g)(2) also requires that New Metal Recycling or New Metal Shredding Facilities install signage, following the dimensions and requirements in paragraph (g)(1), before the first day of conducting metal recycling or metal shredding operations.

Paragraphs (g)(3) and (g)(4) establish procedures for facilities that seek an alternative to paragraph (g)(1) and (g)(2) signage requirements.

Prohibitions – Subdivision (h)

Subdivision (h) requires any Metal Shredder installed or constructed after January 1, 2023, be within a Building Enclosure when operating. Paragraph (c)(1) defines a Building Enclosure as a permanent building or physical structure, or a portion of a building, with a floor, walls, and a roof to prevent exposure to the elements (e.g., precipitation, wind, runoff), where opening are only to allow access for people, vehicles, equipment, or Scrap Metal.

Requirements for New Metal Recycling or New Metal Shredding Facilities – Subdivision (i)

Subdivision (i) establishes requirements for New Metal Recycling or New Metal Shredding Facilities that begin operation after on or after the date of PR 1460 rule adoption. Under paragraph (i)(1), all areas where the following activities are conducted are required to be paved with concrete: Scrap Metal unloading or loading, sorting, shearing, torch cutting, baling, shredding, or Scrap Metal storage. Under paragraph (i)(2), a New Metal Shredding Facility is required to ensure all Metal Shredder Residue is stored within a Building Enclosure.

Recordkeeping – Subdivision (j)

Recordkeeping provisions are included in South Coast AQMD regulations to document facility compliance activities. Subdivision (j) includes PR 1460 recordkeeping requirements for monthly Throughput, housekeeping, complaints received (and actions taken), invoices for a Homogenous Metal Pile, wind monitoring, and records to show compliance with subparagraph (f)(5)(B). Under paragraph (j)(1), the monthly Throughput records must be made available to South Coast AQMD compliance staff by the 15th of the following month. Paragraph (j)(2) requires housekeeping records to be completed by the end of each business day. PR 1460 housekeeping records can be maintained through a checklist. Under subdivision (j), all required records must be kept and maintained on-site for a minimum of three years and made available to South Coast AQMD staff upon request.

Fees – Subdivision (k)

Fees are collected under South Coast AQMD regulations to recover program implementation costs whenever feasible. Under subdivision (k) provisions, facilities submitting a registration or an update will be subject to a Plan Filing Fee pursuant to subdivision (c) of Rule 306 – Plan Fees (Rule 306). As of August 2022, the Plan Filing Fee for a Non-Title V facility is $179.52 and for a Title V facility the fee is $224.97.

Wind Monitoring Requirements – Subdivision (l)

Subdivision (l) establishes the wind monitoring requirements to determine wind speed pursuant to subparagraph (f)(5)(A). Facilities will be required to install a stationary anemometer or wind sensor that follows the requirements specified in paragraphs (l)(1) through (l)(5).

Exemptions – Subdivision (m)

PR 1460 applies only to Metal Recycling and Metal Shredding Facilities that primarily process Scrap Metal. Since other types of facilities can generate or handle Scrap Metal, paragraph (m)(1) specifies facilities exempted from this rule to provide additional clarification. Exempted facilities include auto dismantlers, recycling centers that primarily recycle empty beverage containers like aluminum cans, material recovery facilities that primarily take the solid waste and other recyclables, and metal melting and lead processing facilities that are currently subject to other South Coast AQMD rules.

Auto dismantlers are exempt from PR 1460 since their primary operation involves dismantling and taking out car parts for resale. Auto dismantlers generally do not recycle Scrap Metal and instead send what is left of the car, after all parts have been removed, to a Metal Recycling Facility or Metal Shredding Facility.

Recycling centers that primarily recycle empty beverage containers such as aluminum cans are exempted from PR 1460 as these operations have a low potential to generate Fugitive Dust emissions.

Material recovery facilities receive a variety of waste such as trash, plastic, paper, and metal. Material recovery facilities do not process metals as the primary material and are regulated through other South Coast AQMD rules such as Rule 410 – Odors from Transfer Stations and Material Recovery Facilities and are exempt from PR 1460.

Metal melting and lead processing facilities recycle metals through melting processes that include but are not limited to die casting, refining, sintering, smelting, or soldering. These operations differ from the metal recycling and metal shredding operations subject to this rule. Metal melting and lead processing facilities are subject to existing South Coast AQMD rules which require housekeeping and recordkeeping requirements. To provide clarity, facilities subject to the following South Coast AQMD rules are exempt from PR 1460:

- Rule 1407 – Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Chromium Metal Melting Operations
- Rule 1407.1 – Control of Toxic Air Contaminant Emissions from Chromium Alloy Melting Operations
- Rule 1420 – Emissions Standard for Lead

- Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities
- Rule 1420.2 – Emission Standards for Lead from Metal Melting Facilities

Paragraph (m)(2) provides an exemption from the requirement for facilities located within 100 meters (328 feet) of a Sensitive Receptor to cease operations during high wind conditions provided the Scrap Metal unloading and loading, sorting, shearing, baling, torch cutting, or shredding is conducted within a Building Enclosure.

CHAPTER 3 – IMPACT ASSESSMENT

AFFECTED SOURCES

It is estimated that up to 200 facilities will be impacted by PR 1460. The affected sources are limited to metal recycling and metal shredding facilities. Of the facilities, five metal shredding facilities have been identified; the remaining are metal recycling facilities. PR 1460 defines a metal recycling facility as a facility that receives and processes scrap metal through activities such as sorting, shearing, cutting, or baling ferrous metals and, non-ferrous metals for reuse or resale. A metal shredding facility is defined as a facility that receives scrap metal and mechanically renders that metal into smaller pieces for recycling through a metal shredder. The magnitude of operation per facility varies greatly, ranging from less than 1,000 tons of scrap metal to over 100,000 tons of scrap metal received annually. Based on information from a DTSC evaluation of metal shredding facilities in California, the three largest metal shredder facilities within South Coast AQMD's jurisdiction have an annual average throughput of approximately 290,000 tons.[12] Many facilities are located in AB 617 communities.

As previously mentioned, facilities subject to PR 1460 are also subject to South Coast AQMD Rule 403 and State Water Resources Board regulations that require measures to minimize dust. Accordingly, the PR 1460 water suppression activities to minimize fugitive dust emissions are supplemental to existing regulations. The amount of additional water necessary to comply with PR 1460 will vary by facility. Some facilities recycle water used for dust control on-site which will limit the need for additional water use. Based on available metal recycling throughput[13] information, staff estimates the daily increase in water could range from approximately 180,000 to 250,000 gallons under PR 1460 depending on a facility's current usage to comply with Rule 403.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to the California Environmental Quality Act (CEQA) and South Coast AQMD's certified regulatory program (Public Resources Code Section 21080.5, CEQA Guidelines Section 15251(l) and South Coast AQMD Rule 110), the South Coast AQMD, as lead agency, is currently reviewing the proposed project (PR 1460) to determine if it will result in any potential adverse environmental impacts. Appropriate CEQA documentation will be prepared based on the analysis.

SOCIOECONOMIC IMPACT ASSESSMENT

A socioeconomic assessment for Proposed Rule 1460 will be conducted and will be available to the public at least 30 days prior to the South Coast AQMD Governing Board Meeting anticipated for November 4, 2022.

[12] *DTSC Evaluation and Analysis of Metal Shredding Facilities and Metal Shredder Wastes*. Retrieved on August 4, 2022, from: https://dtsc.ca.gov/wp-content/uploads/sites/31/2021/08/2021.08.09_Metal_Shredder_Analysis.pdf

[13] *State of Disposal and Recycling for Calendar Year 2019*. Retrieved on August 19, 2022, from: https://www2.calrecycle.ca.gov/Publications/Download/1742#:~:text=An%20estimated%2028.9%20million%20tons,of%2050%20percent%20in%202014.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings

California Health and Safety Code Section 40727 requires that prior to adopting, amending, or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report.

Necessity

PR 1460 is needed to address the air quality impact of fugitive dust from metal recycling and metal shredding facilities, which has been identified as a priority by AB 617 communities.

Authority

The South Coast AQMD Governing Board has authority to adopt PR 1460 pursuant to the California Health and Safety Code Sections 39002, 4000, 40001, 40702, 40716, 41700, and 41508.

Clarity

PR 1460 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency

PR 1460 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

Non-Duplication

PR 1460 will not impose the same requirements as any existing state or federal regulations. The proposed rule is necessary and proper to execute the powers and duties granted to, and imposed upon, South Coast AQMD. South Coast AQMD Rule 403 is applicable to any activity capable of generating fugitive dust emissions, but PR 1460 is specific to metal recycling and metal shredding facilities and establishes provisions that supplement Rule 403.

Reference

By adopting PR 1460, South Coast AQMD Governing Board will be implementing, interpreting, and making specific provisions of the California Health and Safety Code Section 41700 (nuisance), 39002 (air pollution from non-vehicular sources), 40001 (rules to achieve ambient air quality standards) and 41508 (additional standards).

COMPARATIVE ANALYSIS

Under California Health and Safety Code Section 40727.2, South Coast AQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal requirements, existing or proposed South Coast AQMD rules, and other air pollution control requirements and guidelines that apply to fugitive dust emissions. PR 1460 would not conflict with existing rules of South Coast AQMD

regulating fugitive dust emissions but in some instances would require similar provisions to existing rules.

PR 1460 is specific to metal recycling and metal shredding facilities and requires additional best management practices, housekeeping, and administrative requirements. There are also rule-specific prohibitions for facilities in close proximity to a sensitive receptor and for new facilities.

Existing Rule 403 regulates any activity capable of generating fugitive dust and requires similar best management practices to PR 1460, such as applying dust suppressants during unloading of materials and for storage piles; and prohibiting track out extending 25 feet. While Rule 403 also includes signage and recordkeeping requirements, these provisions are specific to earth-moving activities defined as large operations (greater than 50 acres of disturbed surfaces or more than 5,000 cubic yards of daily earth-movement).

Other South Coast AQMD existing rules relating to the reduction of fugitive dust include Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources, Rule 1157 – PM10 Emission Reductions from Aggregate and Related Operations, and Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants. However, these existing rules do not specifically address dust control from metal recycling or metal shredding facilities. Existing Rule 403.1 regulates fugitive dust but applies only to sources in the Coachella Valley area and is supplemental to Rule 403. Existing Rule 1157 applies only to aggregate and related operations. Existing Rule 1466 applies to earthmoving activities for toxic soils. Existing Rules 401 and 402 prohibit excess visible emissions and public nuisance respectively. There are no Federal Regulations identified. See Table 3-1 for a comparative analysis matrix.

Table 3-1

Rule / Statute	Source	Emission Reductions / Limits	Averaging Procedures (Units), Work Practices, Operating Provisions	Monitoring, Recordkeeping, Reporting, Test Methods	Notification Requirements
401	Any single source of emissions; including exhaust stack emissions.	Prohibits excess visible emissions.[14]	20 percent opacity cannot be exceeded three minutes in any hour, cumulatively.	Test method based on opacity as determined by Ringlemann chart or U.S. EPA Method 9.	None
402	Any source	Prohibits public nuisance caused by emissions of air	None	None specified.	None

[14] Rule 401 limits visible emissions to Number 1 Ringlemann or 20% opacity in excess of three minutes within any hour. PR 1460 would prohibit unloading, loading, sorting, shearing, baling, and shredding activities within 100 meters of sensitive receptors if instantaneous wind speeds exceed 25 mile per hour.

Rule / Statute	Source	Emission Reductions / Limits	Averaging Procedures (Units), Work Practices, Operating Provisions	Monitoring, Recordkeeping, Reporting, Test Methods	Notification Requirements
		contaminants.[15]			
403	Any active operation;	No visible emissions past property line / no greater than 20 percent opacity for vehicle emissions[16]	Best Available Control Measures for construction activity sources)[17]	None specified for construction activity sources[18]	None specified for construction activity sources[19]
403.1	Active operations in Coachella Valley	None	Fugitive Dust Control Plan with BACM (operations >5000 sq ft)[20]	Windspeed recording Daily recordkeeping	None
404	Any source	Prohibits discharge of particulate matter in excess of certain rates.[21]	Based on grains per cubic foot of air stream.	None specified.	None
405	Any source	Prohibits discharge of particulate matter weight in excess of	Establishes maximum discharge rate (lbs./hr.) based on process weight per hour.	None specified.	None

[15] Rule 402 provisions are implemented primarily in response to public complaints. PR 1460 requirements are applicable regardless of whether public complaints are filed.

[16] PR 1460 does not specify a limit for visible emissions past property lines but would minimize any emissions from metal recycling and metal shredding activities. Rule 403 visible emission provisions would be in addition to other requirements in PR 1460.

[17] PR 1460 would require control measures which are in some instances more stringent than the BACM requirements of Rule 403 but which are equivalent to the control measures required of construction activity sources under Rule 403.

[18] PR 1460 would require daily recordkeeping for housekeeping, monthly recordkeeping of throughput, and recordkeeping for complaints and mitigation actions taken.

[19] PR 1460 would require facilities to submit updated registration information to South Coast AQMD for changes in information specified in subparagraph (d)(3).

[20] Rule 403.1 only applies to the Coachella Valley and requires a fugitive dust control plan with control measures, signage, and a dust control supervisor consistent with and supplemental to Rule 403. PR 1460 would impose signage to enable community members to directly contact the facility or South Coast AQMD for air quality concerns.

[21] This Rule is used in conjunction with the South Coast AQMD's permitting system. Metal recycling operations such as unloading, loading, sorting, shearing, and baling that are subject to PR 1460 requirements are not subject to South Coast AQMD permits. Metal Shredders used by Metal Shredding Facilities are subject to South Coast AQMD permits.

Rule / Statute	Source	Emission Reductions / Limits	Averaging Procedures (Units), Work Practices, Operating Provisions	Monitoring, Recordkeeping, Reporting, Test Methods	Notification Requirements
		specified rates.[22]			
1157	Aggregate and related operation[23]	No visible plumes extending > 100 ft / no greater than 20 percent opacity	Opacity Test Method No. 9B (12 reading avg) Work practice control measures	Recordkeeping of work practice controls implemented	None
1466	Earth-moving activities of toxic soil	Reduce monitored PM_{10} concentrations 25 microgram/m^3 averaged over 30 minutes.	Fencing for on-site earth-moving activities, dust control measures, stockpiles, speed limits, signage.[24]	Monitor PM_{10} concentrations, recordkeeping of work practice controls implemented.	Notification to District at least 72 hours before conducting earth-moving activities
CA Health & Safety Code41700	Any source	Prohibits public nuisance caused by emissions of air contaminants.[25]	None	None specified.	None
CA Health & Safety Code 41701	Any source.	Prohibits discharge of excessive visible emissions.[26]	40 percent opacity cannot be exceeded three minutes in any hour, cumulatively.	Test methods - Ringlemann chart or U.S. EPA Method 9.	None
Federal Regulation	No regulations identified.	No regulations identified.	No regulations identified.	No regulations identified.	No regulations identified.

[22] This Rule is used in conjunction with South Coast AQMD's permitting system. Metal recycling operations such as unloading, loading, sorting, shearing, and baling that are subject to PR 1460 requirements are not subject to South Coast AQMD permits.

[23] PR 1460 minimizes fugitive dust emissions from metal recycling and metal shredding operations. Rule 1157 prohibition on emissions is focused on aggregate operations.

[24] Rule 1466 regulates earth-moving activities and includes that these activities shall be adequately wet to prevent the generation of visible dust plumes and implementing a 15 mile per hour speed limit. PR 1460 will require facilities to apply water at sufficient quantities and also include a speed limit of 15 miles per hour.

[25] The statute is co-extensive with Rule 402. See footnote 9.

[26] The statute is co-extensive with Rule 401. See footnote 8.

REFERENCES

"Evaluation and Analysis of Metal Shredding Facilities and Metal Shredder Wastes", California Department of Toxic Substances Control, https://dtsc.ca.gov/wp-content/uploads/sites/31/2021/08/2021.08.09_Metal_Shredder_Analysis.pdf, accessed August 4, 2022.