
Chapter 5e:

Metal Processing Facilities

Chapter 5e: Metal Processing Facilities

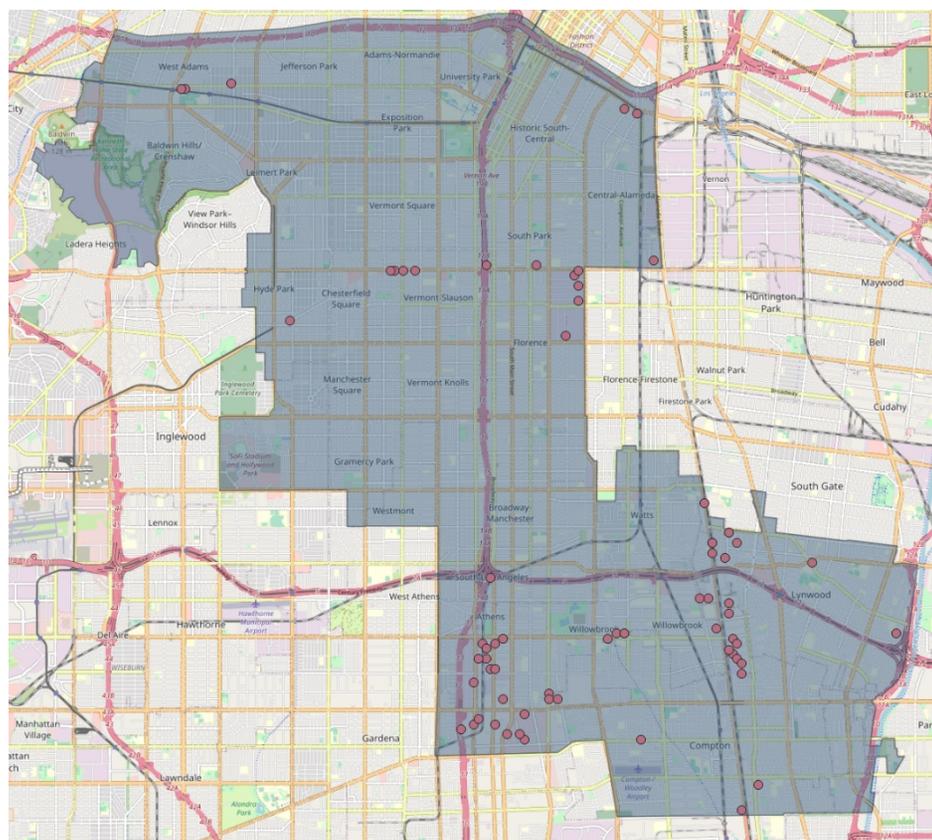
Community Concerns

During the Community Steering Committee (CSC) meetings, the co-leads helped lead discussions to identify air quality concerns and actions for the Community Emissions Reduction Plan (CERP). The South Los Angeles (SLA) CSC expressed concerns about health effects from emissions of criteria air pollutants, toxic air contaminants (TACs), and strong odors from metals facilities. The CSC is concerned with metal recyclers and metal scrap yards, such as Atlas Iron & Metal Co., near sensitive receptors. Lead, hexavalent chromium, nickel, and arsenic are metal TACs; a TAC is defined as an air pollutant which may cause or contribute to increase the rate of premature death or serious illness and may pose a potential risk to human health.¹

Regulatory Background

Based on the South Coast AQMD permitting database, there are approximately 69 metal processing facilities that are permitted with South Coast Air Quality Management District (South Coast AQMD) within the SLA community boundary (**Figure 5e-1**). South Coast AQMD utilizes multiple methods to classify facility types including the North American Industrial Classification Codes (NAICS), a key data source for information in this CERP. South Coast AQMD inspection teams use a broader category, Technical Specialty Code (TS-Code),² to categorize a

Figure 5e-1: Metal Processing Facilities in SLA



¹ California Health and Safety Code, Section 39655

² TS-Code refers to the internal code South Coast AQMD inspectors use to determine the appropriate inspection team. Please refer to Appendix 4: Enforcement Overview and History for more information on South Coast AQMD inspection teams.

facility, which does not detail industry type. Please refer to Appendix 4: Enforcement Overview and History for information on which inspection team conducts the inspection for each facility, which is directly tied to the TS-Code. These metal processing facilities conduct various operations, including melting, plating, finishing, machining, crushing, and grinding. Most metal recyclers and metal scrap yards do not have equipment subject to South Coast AQMD permits but could still be subject to some South Coast AQMD rules such as Rule 403.³ These facilities may be the source of public complaints even though they do not have active permits; when such complaints are received, these locations will be investigated.

California Air Resources Board (CARB) identifies and controls TACs from a multitude of sources, informs the public of significant toxic exposures, and provides ways to reduce risks from these exposures through its Air Toxics Program. South Coast AQMD, as well as other air agencies in California, rely on the state's Office of Environmental Health Hazard Assessment (OEHHA) to identify TACs, their health effects, and the methodology to estimate the health risks from air toxic metal exposure. South Coast AQMD regulates TACs from stationary sources through several rules, including but not limited to, Rules 1401,⁴ 1402,⁵ 1420,⁶ 1426,⁷ 1430,⁸ and 1469.⁹ CARB also has the authority to develop rules or regulations to control TACs. For example, after hexavalent chromium was identified as a TAC,¹⁰ CARB developed the Airborne Toxic Control Measure (ATCM) for Chromium Plating and Chromic Acid Anodizing Facilities,¹¹ which was adopted to reduce hexavalent chromium emissions from decorative and hard chrome plating facilities and chromic acid anodizing operations. CARB is developing an update to its Air Toxics Control Measure (ATCM), which is tentatively scheduled for approval at its Board Meeting in October 2022. For additional details regarding regulatory efforts for metal processing facilities, please refer to Appendix 5e: Metal Processing Facilities.

³ South Coast AQMD, Rule 403 – Fugitive Dust, <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf>

⁴ South Coast AQMD, Rule 1401 – New Source Review of Toxic Air Contaminants, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf>

⁵ South Coast AQMD, Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1402.pdf>

⁶ South Coast AQMD, Rule 1420 – Emissions Standard for Lead, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1420.pdf?sfvrsn=4>

⁷ South Coast AQMD, Rule 1426 – Emissions from Metal Finishing Operations, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1426.pdf>

⁸ South Coast AQMD, Rule 1430 – Control of Emissions from Metal Grinding Operations at Metal Forging Facilities, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1430.pdf>

⁹ South Coast AQMD, Rule 1469 – Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1469.pdf>

¹⁰ OEHHA, Chromium-hexavalent, <https://oehha.ca.gov/chemicals/chromium-hexavalent>

¹¹ CARB, Chrome Plating: Meetings & Workshops, <https://ww2.arb.ca.gov/our-work/programs/air-toxics-program/chrome-plating-atcm/chrome-plating-meetings-workshops>

Actions to Reduce Emissions or Exposure

In the process of developing this CERP, CSC members requested a phase out of the use of hexavalent chromium and requirements to report emissions for metals facilities not subject to South Coast AQMD's Annual Emissions Reporting (AER) program¹² or Rule 1469. Community members requested buffer zones to be established near sensitive receptors, installation of enclosures and engineering controls, and outreach to the community to inform them of best management practices. Additionally, the CSC requested more information related to community-identified metals facilities and information on applicable rules, compliance history, and air monitoring data. The CSC also requested outreach efforts to local business owners and to provide information on applicable rules and regulations, South Coast AQMD's permitting process, and the South Coast AQMD Small Business Assistance program.

The CSC requested the following goals for metal processing facilities in SLA.

- A. Inform the CSC of CARB's Criteria Pollutant and Toxics Emissions Reporting (CTR) process and CARB's Chrome Plating ATCM amendment adoption.
- B. Identify permitted metal processing facilities and inform the community of applicable rules and regulations, compliance history, and available data as they relate to metal processing facilities in the community.
- C. Identify emissions and exposure reduction measures and strategies for metal processing facilities and assess rules for best management practices.
- D. Conduct air measurements surveys to identify facilities with potential elevated emissions and to characterize these emissions.
- E. Inform the CSC of metals emissions data, criteria pollutants, and TACs that may be found in the community (e.g., hexavalent chromium, lead, zinc, nitrogen oxides (NOx)).
- F. Inform metal processing facilities of best management practices, applicable rules and regulations, South Coast AQMD's Small Business Assistance program,¹³ and "Good Neighbor" practices.

¹² The Annual Emissions Reporting (AER) program requires facilities to report their emissions if they emit at least four tons of either sulfur oxides (Sox), volatile organic compounds (VOCs), NOx, particulate matter (PM), or emissions of 100 tons per year or more of carbon monoxide (CO) (<https://www.aqmd.gov/home/rules-compliance/compliance/annual-emission-reporting>). Facilities subject to the AB 2588 Toxic Hot Spots Program also report more detailed toxics emissions inventories every four years (<http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588>). CARB's new CTR regulation will require many additional metals facilities to begin reporting emissions to South Coast AQMD's AER program, phasing in from 2023 through 2029 (<https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting>)

¹³ South Coast AQMD, Small Business Assistance, <http://www.aqmd.gov/home/programs/business/business-detail?title=small-business-assistance>

G. Reduce fugitive metal emissions from metal recycling facilities.

The CSC developed the following CERP actions to address community concerns regarding the seven CERP goals. **Table 5e-1** below summarizes goals, actions, metrics, and provides a timeline to achieve emissions or exposure reductions from metal processing facilities in SLA.

Table 5e-1: Actions to Reduce Emissions from and Exposure to Metal Processing Facilities

Goals:	Actions	Responsible Entity(ies)	Metrics	Timeline	
				Start	Complete
A: CARB Regulations	<ul style="list-style-type: none"> Conduct a community workshop on the Criteria Pollutant and Toxics Emissions Reporting (CTR) process and share the data that has been collected from facilities in the community 	CARB	<ul style="list-style-type: none"> Delivery of CTR Workshop 	2023	2024
	<ul style="list-style-type: none"> CARB to provide information regarding CARB Chrome Plating ATCM amendments 	CARB	<ul style="list-style-type: none"> Number of updates to the CSC on ATCM amendments 	2023	2024
	<ul style="list-style-type: none"> South Coast to enforce CARB Chrome Plating ATCM through South Coast AQMD Rule 1469 	South Coast AQMD	<ul style="list-style-type: none"> Number of updates on Rule 1469 enforcement activities 	2023	2024
B: Identify Metals Facilities	<ul style="list-style-type: none"> Identify all permitted metals facilities within the SLA community boundary Provide a list of South Coast AQMD rules applicable to the metals facilities identified Provide three (3) year compliance history of the facilities identified 	South Coast AQMD	<ul style="list-style-type: none"> Provide list of permitted metals facilities Provide applicable rules list for identified facilities Provide compliance history for identified facilities 	2 nd quarter, 2022	2023

Goals:	Actions	Responsible Entity(ies)	Metrics	Timeline	
				Start	Complete
	<ul style="list-style-type: none"> Summarize available emissions and air monitoring data collected at or near facilities 		<ul style="list-style-type: none"> Provide emissions and air monitoring data, if available, for identified facilities 		
C: Identify Strategies	<ul style="list-style-type: none"> Work with the CSC to identify and prioritize air quality concerns related to sources of metal emissions and metals facilities of concern Based on CSC-identified facilities, identify potential strategies and approaches to address the CSC-identified concerns (e.g., incentive opportunities for businesses to incorporate best management practices) Conduct an assessment of best management practices in South Coast AQMD metal processing rules. If rules regulating metal toxic air contaminants lack best management practices, initiate rulemaking to incorporate provisions for best management practices. 	<p>South Coast AQMD</p> <p>CSC</p>	<ul style="list-style-type: none"> Provide list of prioritized concerns related to sources of metal emissions Provide strategies list, if applicable If strategies are found, prioritize strategies for implementation through consensus building amongst the CSC and then implement strategies Conduct assessment of best management practices in metal processing rules Initiate rule development, if rules regulating metal particulates lack requirements for best management practices Updates to CSC regarding results of assessment and 	2023	2 nd quarter, 2027

Goals:	Actions	Responsible Entity(ies)	Metrics	Timeline	
				Start	Complete
			potential rule development		
D: Air Measurement Survey	Conduct initial air measurement surveys near facilities of concern to identify and characterize any potential emissions	South Coast AQMD	<ul style="list-style-type: none"> Conduct air measurements survey Provide updates to the CSC 	2 nd quarter, 2022	2 nd quarter, 2027
E: Emissions Data	Provide informational handout or presentation and an overview on criteria pollutants and toxics that may be found in the community (e.g., hexavalent chromium, lead, zinc, NOx)	South Coast AQMD	Number of handouts distributed and/or delivery of presentation	2023	2025
F: Outreach to Owners or Operators	<ul style="list-style-type: none"> Conduct targeted outreach to metals facility owners or operators in the community, including providing information on best management practices, South Coast AQMD’s Small Business Assistance Program, permitting process, and applicable rules and regulations – with a focus on new rule requirements from CARB and South Coast AQMD Collaborate with communities and businesses to encourage incorporation of best management and “Good Neighbor” practices 	CSC South Coast AQMD CARB	<ul style="list-style-type: none"> Number of outreach events or materials distributed to metals facilities Number of updates to the CSC regarding collaboration efforts 	2023	2025

Goals:	Actions	Responsible Entity(ies)	Metrics	Timeline	
				Start	Complete
G: Metal Recycling Facilities	Initiate rule development process for Proposed Rule 1460 ¹⁴ to address housekeeping and best management practices at metal recycling facilities	South Coast AQMD	Number of updates to the CSC on rule development efforts	2023	2026

¹⁴ South Coast AQMD, Proposed Rule 1460 – Control of Particulate Emissions from Metal Recycling and Shredding Operations, <http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/rule-1460>