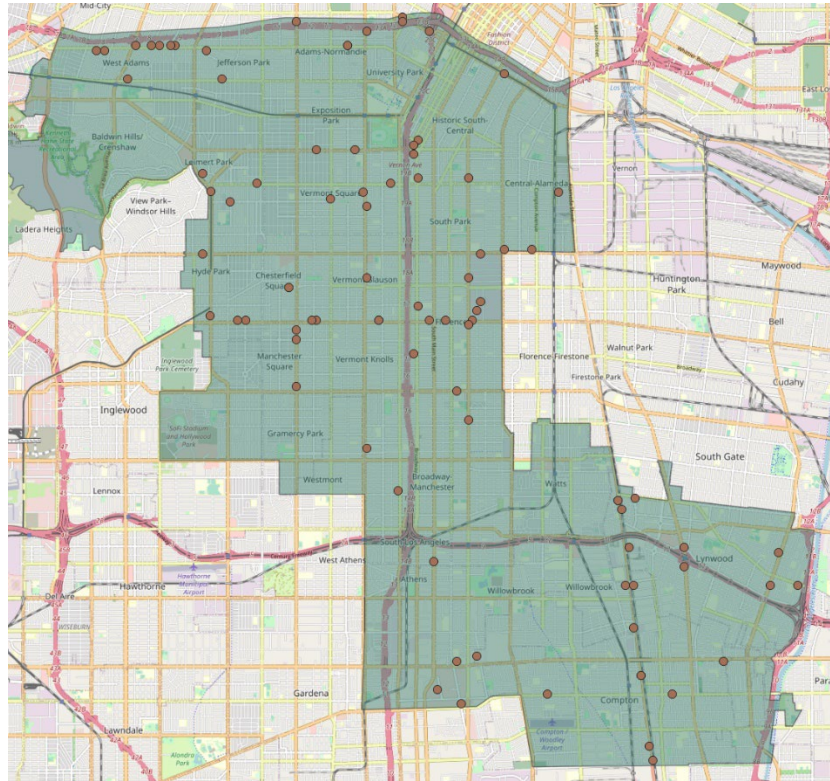

Appendix 5c:

Auto Body Shops

Introduction

During the Community Steering Committee (CSC) meetings, the co-leads helped lead discussions to identify air quality concerns and actions for this Community Emissions Reduction Plan (CERP). One of the concerns raised by the South Los Angeles (SLA) CSC is the volume and activities of both permitted and unpermitted auto body shops and their proximity to residences, schools, and public gathering areas. The CSC also expressed concerns with soil and water contamination, proper hazardous waste disposal, land-use issues, worker exposure, and noise pollution from some auto body shops and operations conducted on vacant lots. This appendix provides additional supporting information for Chapter 5c: Auto Body Shops, including an overview of community impacts, emissions, and regulatory efforts. The overview of regulatory efforts includes a summary of regulatory authority, air monitoring, compliance and enforcement, and incentives in addressing emissions from and exposure to auto body shops.

Figure A5c-1: Map of Facilities Applicable to the Auto Body Shop Air Quality Priority



Community Impacts from Auto Body and Repair Shops

There are approximately 89 permitted auto body shops within the SLA community boundary based on the South Coast AQMD permitting database¹ (**Figure A5c-1**).

Auto body shops are primarily classified within the North American Industry Classification System (NAICS)² as code 81121: Automotive Body, Paint, and Interior Repair and Maintenance.

¹ The total number of facilities applicable to this air quality priority was arrived at using multiple sources, such as permit type, technical specialty (TS) number, and NAICS codes. TS 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.

² United States Census Bureau, North American Industry Classification System, <https://www.census.gov/naics/>

Additional NAICS codes for auto body shops include: 336111: Automobile Manufacturing, 336211: Motor Vehicle Body Manufacturing, 811111: General Automotive Repair, and 811198: All Other Automotive Repair and Maintenance (**Table A5c-1**).³ Auto body shops conduct a variety of operations specializing in the repair of vehicles by fixing paint or body damage from scratches, dents, and collisions and as such multiple NAICS codes may apply to permitted body shops within the SLA community. Auto repair shops do maintenance and repair on vehicles including mechanical and electrical work.

Table A5c-1: NAICS Designation Examples Applicable to Auto Body Shops in SLA

NAICS Code	NAICS Industry Title	NAICS Industry Description
336111	Automobile Manufacturing	Facilities primarily engaged in 1) manufacturing complete automobiles (i.e., body and chassis or unibody) or 2) manufacturing automobile chassis only
336211	Motor Vehicle Body Manufacturing	Facilities primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. Products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles
811111	General Automotive Repair	Facilities primarily engaged in providing 1) a wide range of mechanical and electrical repair and maintenance services for automotive vehicles, such as passenger cars, trucks, and vans, and all trailers or 2) engine repair and replacement
811121	Automotive Body, Paint, and Interior Repair and Maintenance	Facilities primarily engaged in repairing or customizing automotive vehicles, such as passenger cars, trucks, and vans, and all trailer bodies and interiors; and/or painting automotive vehicles and trailer bodies
811198	All Other Automotive Repair and Maintenance	Facilities primarily engaged in providing automotive repair and maintenance services (except mechanical and electrical repair and maintenance; body, paint, interior, and glass repair; motor oil change and lubrication; and car washing) for automotive vehicles, such as passenger cars, trucks, and vans, and all trailers

³ The NAICS designation is not provided by South Coast AQMD. Rather, the NAICS designation is provided by the owner or operator within the permit application submitted to South Coast AQMD for any applicable equipment.

Emissions from Auto Body Shops

Emissions information for SLA auto body shops is available in Chapter 2d: Emissions and Source Attribution Analysis and Appendix 2d: Source Attribution. The emissions information in Appendix 2d includes several categories that may fall within this industry, such as coatings and related processes, cleaning and surface coatings, and consumer products.

This section will highlight emissions of toxic air contaminants (TACs) from this air quality priority since they were identified as a concern from the community.

People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems. Auto body shop coatings and solvents (**Figure A5c-2**) may contain ethylbenzene, tert-Butyl acetate (tBAC), and parachlorobenzotrifluoride (PCBTF). Ethylbenzene is classified as a volatile organic compound (VOC) and is usually found in concentrations less than five percent in coatings. PCBTF is classified as an exempt solvent⁴ in autobody coatings and may be found in much higher concentrations. tBAC may also be found in higher concentrations but is not considered an exempt solvent in the South Coast AQMD, except in limited applications.⁵ Exempt compounds (VOC Exemptions) are certain VOCs that the United States Environmental Protection Agency (U.S. EPA) excluded from the regulatory definition of a VOC as these VOCs have negligible contribution to the formation of ground-level ozone (smog).⁶ Rule 1151⁷ prohibits manufacturing, selling, offering for sale, distributing for use, or applying any automotive coating which contains any Group II Exempt Compounds as defined in Rule 102 which includes TACs such as methylene chloride and perchloroethylene. Rule 1151 also has specific provisions that prohibit the use of automotive coatings that contain cadmium or hexavalent chromium.

Figure A5c-2: Auto Body Repair Shop Painting a Motor Vehicle



⁴ South Coast AQMD, Rule 102 – Definition of Terms, <http://www.aqmd.gov/docs/default-source/rule-book/reg-i/rule-102-definition-of-terms.pdf>

⁵ South Coast AQMD, Exempt Compounds, <https://www.aqmd.gov/home/rules-compliance/compliance/vocs/exempts>

⁶ U.S. EPA, Volatile Organic Compound Exemptions, <https://www.epa.gov/ground-level-ozone-pollution/volatile-organic-compound-exemptions>

⁷ South Coast AQMD Rule 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1151.pdf>

Regulatory Efforts

Regulatory Authority

Auto body shops are regulated by South Coast AQMD as stationary sources of emissions for several air pollutants. Emissions from the operations and activities conducted at these sites may also have control technology requirements, such as paint spray booths, spray gun technology, and transfer efficiency. Several South Coast AQMD rules address VOC content limits of coatings and solvents, and also require housekeeping, recordkeeping, and storage requirements to limit emissions of VOC. Use of certain products at auto body shops may also have requirements through California Air Resources Board's (CARB's) authority over consumer products and TACs.

State and Federal Actions

United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (CARB)

In accordance with the Clean Air Act (CAA), the U.S. EPA establishes National Emission Standards for Hazardous Air Pollutants (NESHAP) as stationary source standards for hazardous air pollutants (**Table A5c-2**). The U.S. EPA has listed "Paint Stripping," "Plastic Parts and Products (Surface Coating)," and "Autobody Refinishing Paint Shops" as area sources of hazardous air pollutants (HAP) that contribute to the risk to public health in urban areas under the Integrated Urban Air Toxics Strategy.⁸ CARB has established a Suggested Control Measure for Automotive Coatings⁹ which has been incorporated in South Coast AQMD Rule 1151.⁷ CARB also established an Airborne Toxics Control Measure (ATCM) for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities.¹⁰

Bureau for Automotive Repair (BAR)

Another California regulatory agency overseeing operations and activities at auto body shops is BAR, which specifically licenses and regulates automotive repair dealers, Smog Check stations and technicians, and brake and lamp stations and adjusters.¹¹ BAR also manages the Smog Check test-and-repair (STAR) Station Certification program. South Coast AQMD will partner with BAR and other appropriate regulatory agencies when issues are found during inspections that fall outside of South Coast AQMD's jurisdiction.

⁸ U.S. EPA, Paint Stripping and Miscellaneous Surface Coating Operations: National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources, <https://www.epa.gov/stationary-sources-air-pollution/paint-stripping-and-miscellaneous-surface-coating-operations>

⁹ CARB, Suggested Control Measure for Automotive Coatings, <https://ww2.arb.ca.gov/our-work/programs/coatings/automotive-refinishing/suggested-control-measure-automotive-coatings>

¹⁰ CARB, ATCM for Automotive Maintenance and Repair Activities, <https://ww2.arb.ca.gov/resources/documents/atcm-automotive-maintenance-and-repair-activities>

¹¹ Bureau of Automotive Repair, About, https://bar.ca.gov/About_BAR/

Table A5c-2: State and Federal Programs to Address Emissions from Auto Body Shops

Program	Purpose
CARB ATCM for Emissions of Hexavalent Chromium and Cadmium from Motor Vehicle and Mobile Equipment Coatings¹²	<ul style="list-style-type: none"> • A statewide air emission control program to reduce air emissions from motor vehicle and mobile equipment coatings at stationary sources, including measures that address emissions of hexavalent chromium and cadmium
CARB Consumer Products Regulation¹³	<ul style="list-style-type: none"> • A statewide regulation that sets VOC limits for chemically formulated consumer products • Sets limits on toxic compounds and compounds with high Global Warming Potential (GWP) values for certain regulated categories
U.S. EPA NESHAP: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (Subpart HHHHHH)⁸	<ul style="list-style-type: none"> • A federal program that aims to control air emissions from paint stripping and surface coating operations
U.S. EPA Collision Repair Campaign¹⁴	<ul style="list-style-type: none"> • A federal program that addresses emissions from this industry through a voluntary effort aimed at reducing exposure to toxic air emissions from collision repair shops

South Coast AQMD

South Coast AQMD's efforts to address this air quality priority in the SLA community include regulations, air monitoring, and enforcement activities to identify, characterize, and address emissions from auto body shops.

Auto body shops that spray coatings must conduct the spray coating operation inside a spray booth which requires a South Coast AQMD permit. It should be noted that auto body shops do not require a permitted spray booth if they demonstrate low usage. However, in the City of Los Angeles, open spraying is prohibited and is considered a municipal code violation. Coatings and solvents that are contained and utilized at auto body shops must meet all applicable rule requirements to ensure VOC emissions are minimized. **Table A5c-3** provides an overview of South Coast AQMD rules that may be applicable to auto body shops. Some of the products used at these facilities may cause odors and emit air pollutants such as VOCs, or may contain HAPs excluding cadmium, hexavalent chromium, methylene chloride, and perchloroethylene which are prohibited in Rule 1151⁷ and by the definition of a VOC under Rule 102.⁴ The emissions and odors may come from solvents evaporating from paint and solvent application, cleaning of parts, or

¹² CARB, ATCM for Emissions of Hexavalent Chromium and Cadmium from Motor Vehicle and Mobile Equipment Coatings, <https://ww2.arb.ca.gov/our-work/programs/coatings/automotive-refinishing>

¹³ CARB, Consumer Products Program, <https://ww2.arb.ca.gov/our-work/programs/consumer-products-program>

¹⁴ U.S. EPA, About the Collision Repair Campaign, <https://www.epa.gov/collision-repair-campaign/about-collision-repair-campaign>

improper storage. Auto body shops may also conduct operations such as sanding, grinding, and spraying of coatings, which can emit fine dust, or particulate matter (PM) such as paint overspray.

Table A5c-3: South Coast AQMD Rules to Address Auto Body Shops¹⁵

Rule	Source Category	Air Pollutant	Purpose	Applicability	General Provisions
102 ⁴	All sources	N/A	<ul style="list-style-type: none"> Defines terms used in South Coast AQMD rules 	<ul style="list-style-type: none"> All South Coast AQMD rules 	<ul style="list-style-type: none"> Definitions
109 ¹⁶	All sources	VOCs	<ul style="list-style-type: none"> Recordkeeping for sources of VOCs when required by South Coast AQMD 	<ul style="list-style-type: none"> Owners or operators of stationary sources that conduct operations emitting VOCs 	<ul style="list-style-type: none"> Specified duration for retention of daily recordkeeping Option for monthly recordkeeping, if applicable Alternative recordkeeping system Test methods
219 ^{17,18}	All sources	VOCs	<ul style="list-style-type: none"> Identify equipment, processes, or operations that emit small amounts of air contaminants that do not require written permits 	<ul style="list-style-type: none"> Includes coating and adhesive processes and equipment 	<ul style="list-style-type: none"> Spray coating equipment operated within control enclosures Coating or adhesive application equipment must maintain VOC emissions under three pounds per day or less or 66 pounds per calendar month or less Recordkeeping requirements pursuant to Rule 109 Exemptions for equipment pursuant to Rules 402¹⁹ and 1401²⁰

¹⁵ All facilities within South Coast AQMD's jurisdiction that have the potential to emit air pollutants through equipment operation or use of regulated products may be subject a number of South Coast AQMD rules. For more information related to the entire suite of South Coast AQMD rules, please refer to: <http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book>

¹⁶ South Coast AQMD, Rule 109 – Recordkeeping for Volatile Organic Compound Emissions, <http://www.aqmd.gov/docs/default-source/rule-book/reg-i/rule-109.pdf>

¹⁷ This rule is applicable to a variety of sources and is included in this list in reference to auto body shop spray coating equipment. For information on this rule and its applicability, please refer to: <http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-219.pdf>

¹⁸ South Coast AQMD, Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II, <http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/Rule-219.pdf>

¹⁹ South Coast AQMD, Rule 402 – Nuisance, <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf>

²⁰ 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>

Rule	Source Category	Air Pollutant	Purpose	Applicability	General Provisions
481 ²¹	Spray painting and coating operations	VOCs	<ul style="list-style-type: none"> Reduce emissions from applicable operations 	<ul style="list-style-type: none"> Spray painting operations and equipment 	<ul style="list-style-type: none"> Meet specified conditions for operating any spray painting or spray coating equipment <ul style="list-style-type: none"> Must be operated inside a control enclosure with face velocity requirements Must be applied with high-volume, low-pressure spray equipment Test Methods Does not apply to spray coatings of 3 pound or less per day or 66 pounds or less per calendar month
1107 ²²	Coating of metal parts and products	VOCs	<ul style="list-style-type: none"> Reduce VOC emissions from coating of metal parts and products 	<ul style="list-style-type: none"> All metal coatings operations except those performed on aerospace assembly, magnet wire, marine craft, motor vehicle, metal container, and coil coating operations 	<ul style="list-style-type: none"> Specified methods of coating application and in accordance with manufacturer specifications VOC limits Disposal and cleaning Analysis methods Recordkeeping requirements for coating and solvent usage pursuant to Rule 109¹⁶¹⁶
1132 ²³	High emitting spray booth facilities	VOCs	<ul style="list-style-type: none"> Reduce VOC emissions from spray coating or laminating operations in high VOC-emitting facilities. 	<ul style="list-style-type: none"> Any spray booth facility, except petroleum industry facilities, that uses VOC-containing materials that amount to more than 20 tons per year of VOC emissions for a specified emissions inventory year 	<ul style="list-style-type: none"> Spray booth requirements Recordkeeping and reporting requirements
1151 ⁷	Motor vehicle and mobile equipment non-assembly line coating operations	VOCs, TACs, Stratospheric Ozone-Depleting and Global-Warming Compounds	<ul style="list-style-type: none"> Reduce emissions of applicable air pollutants from automotive coating applications performed on 	<ul style="list-style-type: none"> Any person who uses, applies, or solicits the use or application of any automotive coating or associated solvent Additionally, any person who supplies, 	<ul style="list-style-type: none"> VOC content limits Prohibition of sale of automotive coatings exceeding VOC content limits Alternative compliance allowed by using an approved emission control system

²¹ South Coast AQMD, Rule 481 – Spray Coating Operations, <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-481.pdf>

²² South Coast AQMD, Rule 1107 – Coating of Metal Parts and Products, <https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1107.pdf>

²³ South Coast AQMD, Rule 1132 – Further Control of VOC Emissions from High-Emitting Spray Booth Facilities, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1132-further-control-of-voc-emissions-from-high-emitting-spray-booth-facilities.pdf>

Rule	Source Category	Air Pollutant	Purpose	Applicability	General Provisions
			motor vehicles, mobile equipment, and associated parts and components	sells, offers for sale, markets, manufactures, blends, packages, repackages, possesses distributes any automotive coating or associated solvent	<ul style="list-style-type: none"> Recordkeeping requirements for VOC emissions and emission control systems pursuant to Rule 109¹⁶ Administrative requirements for automotive coating manufacturers Test Methods
1168²⁴	Adhesive and sealant applications	VOCs, TACs, and Stratospheric Ozone-Depleting Compounds	<ul style="list-style-type: none"> Reduce emissions of applicable air pollutants from the application of adhesives, adhesive primers, sealants, and sealant primers 	<ul style="list-style-type: none"> Any person who uses, sells, stores, supplies, distributes, offers for sale, or manufactures for sale any adhesives, adhesive primers, sealants, or sealant primers 	<ul style="list-style-type: none"> VOC limits Regulated products exceeding VOC limits, may not be used, sold, stored, supplied, distributed, offered for sale, or manufactured Recordkeeping requirements for regulated product usage pursuant to Rule 109¹⁶ Test Methods Administrative Requirements
1171²⁵	Solvent cleaning operations	VOCs, TACs, and Stratospheric Ozone-Depleting Compounds	<ul style="list-style-type: none"> Reduce emissions of applicable air pollutants from use, storage, and disposal of solvent cleaning materials in solvent cleaning operations and activities 	<ul style="list-style-type: none"> All persons who use solvent materials in solvent cleaning operations during the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas All persons who store and dispose of these materials used in solvent cleaning operations All solvent suppliers who supply, sell, or offer for sale solvent cleaning materials for use in solvent cleaning operations 	<ul style="list-style-type: none"> Requirements for solvent usage in cleaning operations VOC limits Solvent cleaning may only be performed using the specified cleaning devices or methods All VOC-containing solvents used in solvent cleaning operations shall be stored in non-absorbent, non-leaking containers Recordkeeping requirements pursuant to Rule 109¹⁶ Labeling requirements for selling regulated product Test Methods

Air Monitoring

The coatings and solvents used at auto body shops may cause odors and emit air pollutants such as VOCs, while sanding and grinding operations can emit fine dust or PM that could contain metals. South Coast AQMD rules and permit requirements have provisions to limit the emissions

²⁴ South Coast AQMD, Rule 1168 – Adhesive and Sealant Applications, <https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1168.pdf>

²⁵ South Coast AQMD, Rule 1171 – Solvent Cleaning Operations, <https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1171.pdf>

of VOC and PM. South Coast AQMD's monitoring strategy to address this air quality priority consists of conducting initial measurement surveys near auto body shops to identify any elevated levels of pollutants and characterize any emissions from these facilities. These surveys will focus on those facilities and locations identified and prioritized by the CSC and will initially rely on mobile monitoring which involves advanced air monitoring technologies for detection of VOCs and particulate metals. Measurements will be made downwind from these facilities and concurrent measurement of wind speed and direction during surveys will be used to help identify possible sources of emissions. Findings from these initial surveys will be used to determine whether additional measurements are needed (e.g., collection of samples for laboratory analysis). Measurements may also be expanded to other areas of SLA near auto body shop locations that were not prioritized by the CSC.

Figure A5c-3: Auto Body Repair Shop Painting a Motor Vehicle



Compliance and Enforcement

Compliance and enforcement information for auto body shops in SLA is available in Chapter 4: Enforcement Overview and History and Appendix 4: Enforcement Overview and History.

South Coast AQMD inspectors regularly conduct enforcement activities at auto body shops (**Figure A5c-3**) within SLA. These activities fall

into two categories:

- Those initiated by South Coast AQMD, such as routine facility inspections or targeted rule inspections.
- Those prompted by outside parties, such as, complaint investigations, facility notifications, and agency referrals.

While there are many reasons to conduct an inspection, air pollution concerns received directly from community members through public complaints are a very important source of information. All complaints received are assigned to an inspector for investigation. The complaint telephone line is handled by a live attendant during business hours (Monday to Friday) or by a standby system during non-business hours. Complainant information is kept confidential. While anonymous complaints are accepted, providing contact information is crucial for the inspector to be able to gather any relevant information to conduct an effective investigation. **To report complaints, community members can call 1-800-CUT-SMOG (1-800-288-7664) or file an online complaint at <https://www.aqmd.gov/home/air-quality/complaints>.**

Inspections are generally unannounced so that the inspector can observe a facility conducting normal operations. Inspections are conducted to evaluate the overall compliance status of the

facility or to focus on specific aspects of an operation to ensure the facility is following a specific rule or regulation. When on-site, inspectors will verify compliance with all rules, regulations, and permit conditions that are relevant to a facility.

If a facility is determined to be out of compliance with air pollution rules or regulations or permit conditions, inspectors will take necessary enforcement action to address the non-compliant activity. There are two types of enforcement actions:

1. A Notice to Comply (NC) may be issued for minor violations found during an inspection or to request additional information.
2. A Notice of Violation (NOV) may be issued for violations of rules or permit conditions. NOVs usually result in a penalty.

If a facility cannot immediately comply with air pollution laws, it may seek a variance from a rule requirement or permit condition by filing a petition and appearing before the South Coast AQMD Hearing Board.²⁶ In cases of ongoing noncompliance, a petition for an Order for Abatement may be brought against the facility, which will seek to require the company to take specific actions or cease operating in violation of South Coast AQMD rules or regulations. These processes serve to ensure that a facility returns to compliance expeditiously while minimizing air quality impacts.

Since auto body shops have been identified as a community priority, AB 617 CERP actions include enhanced enforcement efforts intended to address SLA community concerns directly, taking community input into account where appropriate. Enhanced enforcement efforts include the actions identified in Chapter 5c: Auto Body Shops.

Incentives

For information related to incentives, please refer to Appendix 5a: South Coast AQMD Regulatory Program and Ongoing Efforts.

²⁶ Please refer to Appendix 4 for more information regarding the South Coast AQMD Hearing Board.