
Appendix 2a:

Community Profile

Introduction

One of the requirements in California Air Resources Board's (CARB's) Community Air Protection Blueprint is a Community Emissions Reduction Plan (CERP)¹ which must include details related to the designated community, such as community attributes and public health challenges. This appendix presents data that is based on previous cumulative impact studies to describe the impact(s) of toxic air pollutants in South Los Angeles (SLA) and other environmental pollution and public health, social, and economic factors.

Public Health, Social, and Economic Data

Toxic air contaminants are one group of air pollutants that can affect public health on a local scale. A toxic air contaminant, as defined by Rule 1401,² is an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. Toxic air contaminants are listed in Table I of Rule 1401 and include certain metal particulates (e.g., hexavalent chromium, lead, arsenic, nickel), gaseous compounds (e.g., benzene, formaldehyde, perchloroethylene), and pollutants from diesel exhaust (e.g., diesel particulate matter (DPM)).

Understanding the air pollution sources in the community, what air pollutants come from the various types of emission sources, and the community's socioeconomic profile can help provide the types of actions needed for a CERP to address community concerns and provide the greatest health benefits. The Multiple Air Toxics Exposure Study (MATES) provides regional health risks from stationary and mobile sources throughout the South Coast Air Basin and CalEnviroScreen has geographic impacts from various pollution and population factors throughout California.

Multiple Air Toxics Exposure Study

In 1997, the South Coast Air Quality Management District (South Coast AQMD) initiated the MATES study as part of its Environmental Justice Initiatives.³ MATES uses air toxics monitoring, emissions inventories, modeling, and health risk assessment techniques to calculate the cancer risk due to selected toxic air contaminants ("air toxics cancer risk"). Since the first MATES study, there have been four updates which generally occur every seven years. The California Office of Environmental Health Hazard Assessment (OEHHA) develops guidelines for conducting health risk assessments and the methodology for estimating cancer risks. These cancer risks are presented in chances per million. For example, if the cancer risks were estimated to be 100 per million people, the probability of an individual developing cancer due to a lifetime of exposure would be one hundred in a million, or one in ten thousand. In other words, this estimates an

¹ CARB, Community Air Protection Program Blueprint, <https://ww2.arb.ca.gov/capp-blueprint>

² 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>

³ South Coast AQMD, MATES II, <http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-ii/mates-ii-contents-and-executive-summary.pdf>

additional 100 cases of cancer in a population of a million people over a 70-year lifetime. The MATES program helps South Coast AQMD understand the overall health risks from air toxics in communities across the region. To date, South Coast AQMD has conducted five studies. The MATES V⁴ Final Report was released in June 2021. MATES V includes two visualization tools that provide interactive information:

1. MATES V Data Visualization Tool⁵ and
2. MATES V Monitoring Dashboard.⁶

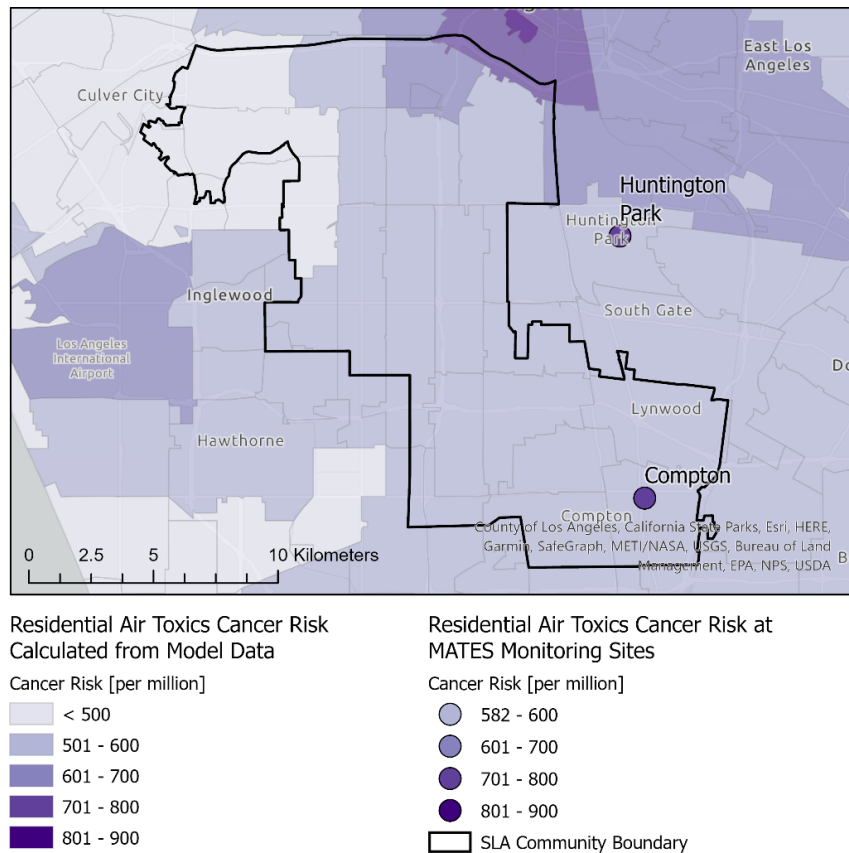
Figure A2a-1 shows air toxics cancer risk data for the South Coast Air Basin (Basin) and SLA based on MATES V data. The total average air toxics cancer risk in the SLA community is higher than the Basin-wide average, 455.8 cases in a million compared to 548 in a million. Additionally, the MATES V data shows that for both SLA and the Basin as a whole (including SLA), the air toxics risk is dominated by DPM, 66.3 percent in SLA and 67.3 percent in the Basin as a whole (including SLA).

⁴ South Coast AQMD, MATES V, <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>

⁵ South Coast AQMD, MATES V Data Visualization Tool, https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23?views=view_38

⁶ South Coast AQMD, MATES V Monitoring Dashboard, <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v/mates-v-air-monitoring-dashboard>

Figure A2a-1: Air Toxics Cancer Risk in SLA, Based on MATES V Data



CalEnviroScreen

CalEnviroScreen is a screening tool developed by OEHHA to identify California communities that are disproportionately vulnerable to and/or overburdened by multiple sources of pollution. For SLA’s recommendation and designation in the AB 617 program, South Coast AQMD used data from CalEnviroScreen 3.0.⁷ Data included in this CERP uses data from CalEnviroScreen 4.0,⁸ which was released in October 2021. CalEnviroScreen 4.0 has two main categories of data:

1. pollution burden and
2. population characteristics.

Pollution burdens include exposure and environmental effects indicators and population characteristics include sensitive population and socioeconomic factor indicators.⁹ Based on CalEnviroScreen, this community has public health factors, as well as social and economic factors, that make the community more vulnerable to the harmful effects of air pollution compared to

⁷ OEHHA, CalEnviroScreen 3.0, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>

⁸ OEHHA, CalEnviroScreen 4.0, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

⁹ OEHHA, CalEnviroScreen 4.0 Report, <https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf>

California as a whole (**Figure A2a-2** and **Figure A2a-3**). Specifically, the sensitive population indicators show that in comparison to statewide averages, this community has higher rates of emergency department visits for asthma (approximately 175 percent), cardiovascular disease (approximately 228 percent), and babies born with low birthweights (approximately 135 percent). When comparing social and economic factors to the statewide average, this community has higher rates of linguistic isolation (approximately 139 percent), poverty (approximately 151 percent), and housing burden (approximately 174 percent). Further, there are lower rates for education attainment (approximately 68 percent) and unemployment (approximately 81 percent) (**Figure A2a-4**).

Figure A2a-2: CalEnviroScreen 4.0 Map of SLA

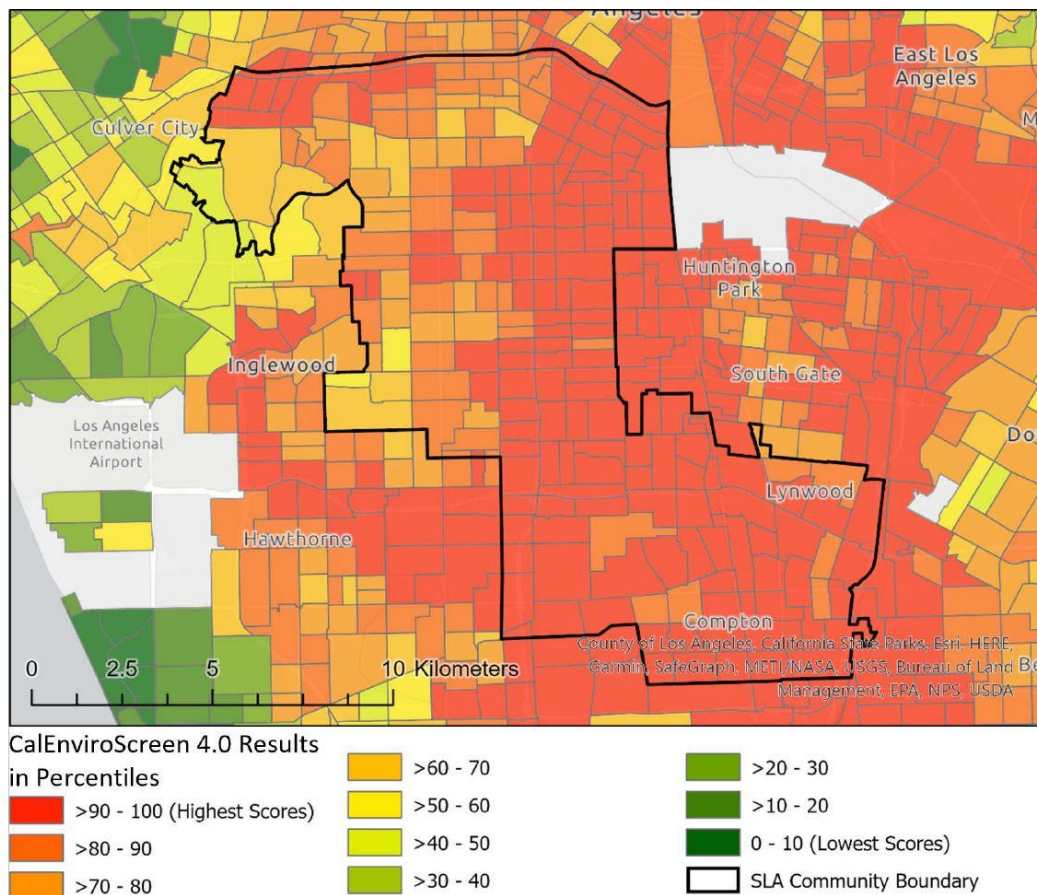


Figure A2a-3: Rates for Emergency Department Visits in SLA Compared to Statewide Averages

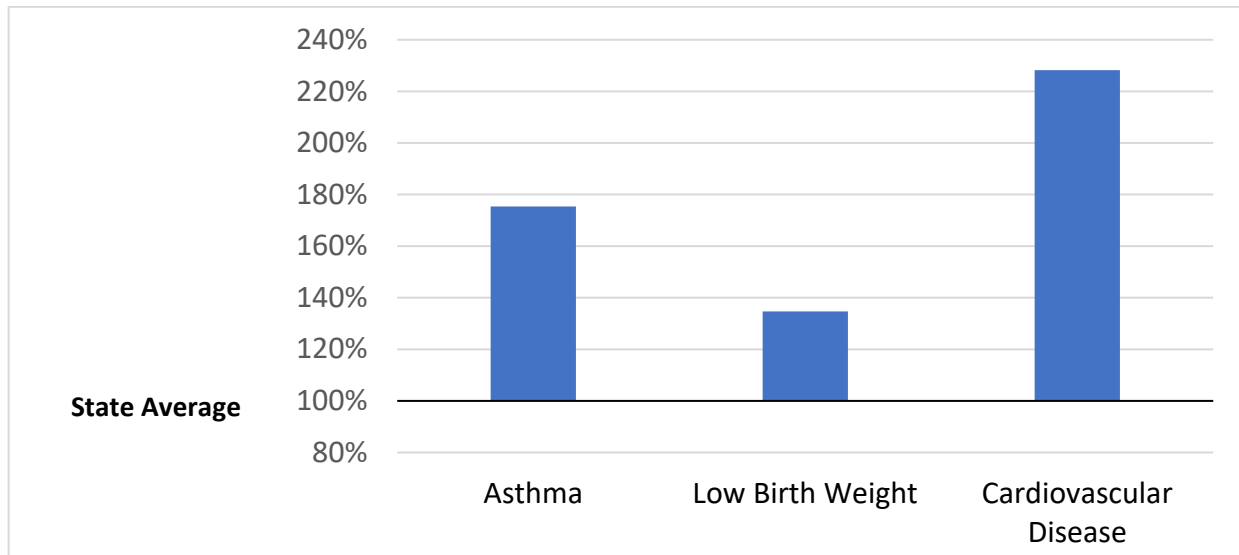
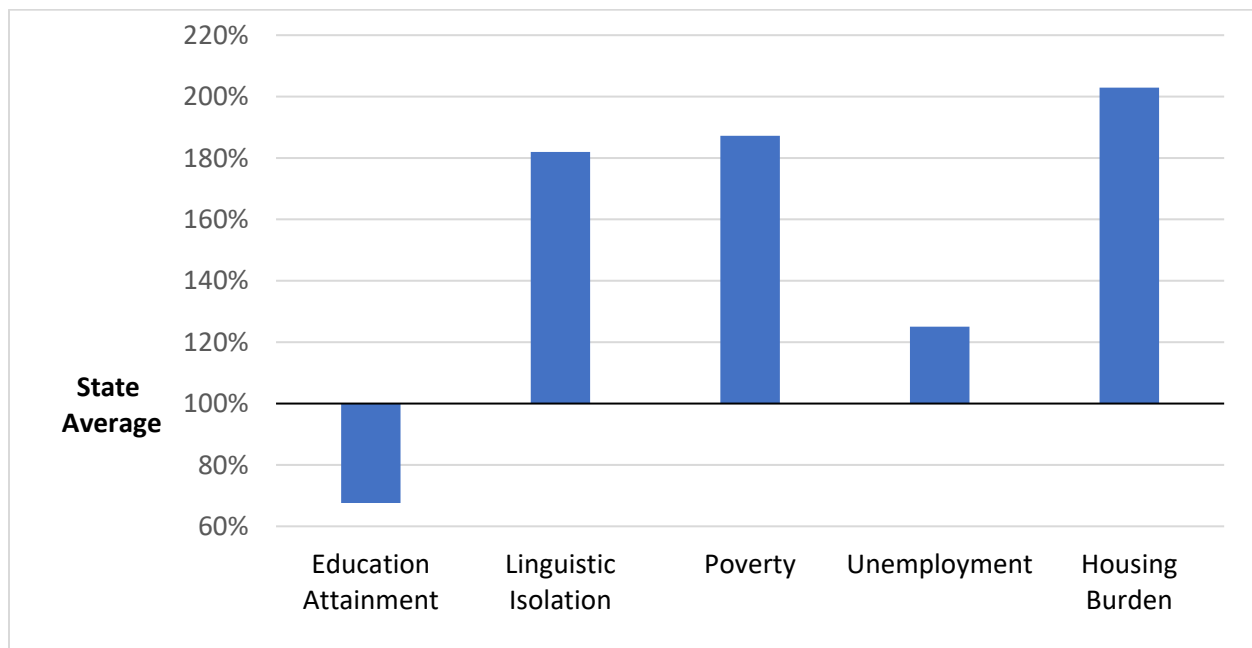


Figure A2a-4: Social and Economic Factors in SLA Compared to Statewide Averages^{10, 11}



¹⁰ The metric of Educational Attainment in CalEnviroScreen 4.0 is defined as the percent of people whose highest level of education is less than a high school education. A lower percentile score shown in the blue bar on the graph for this metric means the community has fewer people who have completed a high school education compared to the rest of the state of California.

¹¹ The metric of Linguistic Isolation in CalEnviroScreen 4.0 is defined as the percent of households where no one over age 14 speaks English well. A higher percentile score shown in the blue bar on the graph for this metric means there are more households that meet this definition compared to the rest of the state of California.

Key Stationary Sources of Pollution in the Community

The South Coast AQMD develops and enforces air pollution regulations to reduce emissions, improve air quality, and protect public health. Many South Coast AQMD rules apply to a specific category of equipment or processes (e.g., engines, boilers, heaters, turbines, etc.) or to a specific industry (e.g., power plants, refineries, etc.). **Table A2a-1** describes the number of facilities in this community that are subject to some key South Coast AQMD toxics rules as well as state and federal air pollution and toxic programs.

In accordance with CARB’s Blueprint, facilities located within the community with Risk Reduction Plans under the Assembly Bill 2588 (AB 2588) program¹² must be identified. At South Coast AQMD, the AB 2588 program is implemented through Rule 1402.¹³ **Table A2a-2**¹⁴ shows facilities within the SLA community that are currently in South Coast AQMD’s AB 2588 program and includes the facility name, address, and the most recent AB 2588 status.¹⁵ Currently, there are no AB 2588 facilities in the SLA community boundary that require risk reduction. Facilities in the AB 2588 program without risk reduction will have its prioritization level (High, Intermediate, or Low)¹¹ and what year the prioritization was conducted listed as the status (prioritization is based on reporting every four years). More information about AB 2588 may be found in Appendix 5a: South Coast AQMD Regulatory Program and Ongoing Efforts.

Table A2a-1: Stationary Sources in SLA, by Regulatory Program

Rule or Program	Program Description
Rule 1407 ¹⁶	Rule 1407 reduces emissions of arsenic, cadmium, and nickel from non-chromium melting operations.
Rule 1407.1 ¹⁷	Rule 1407.1 reduces emissions of toxic air contaminants from chromium alloy melting operations.
Rule 1420 ¹⁸	Rule 1420 reduces emissions of lead from facilities.

¹² South Coast AQMD, Air Toxics “Hot Spots” Program (AB 2588), <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588>

¹³ 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>

¹⁴ Facilities designated as high priority are required to submit Health Risk Assessments to assess the risk to their surrounding community based on their air toxics emissions. Facilities ranked as Intermediate priority are required to submit a complete toxics inventory once every four years. Facilities ranked as low priority are exempt from reporting.

¹⁵ Status as of March 2022.

¹⁶ South Coast AQMD, Rule 1407 – Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Chromium Metal Melting Operations, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1407.pdf>

¹⁷ South Coast AQMD, Rule 1407.1 – Control of Toxic Air Contaminant Emissions from Chromium Alloy Melting Operations, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1407-1.pdf>

¹⁸ South Coast AQMD, Rule 1420 – Emissions Standard for Lead, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1420.pdf>

Rule or Program	Program Description
Rule 1426 ¹⁹	Rule 1426 reduces emissions from facilities performing metal finishing ¹⁹ operations or chromic acid anodizing.
Rule 1469 ²⁰	Rule 1469 reduces hexavalent chromium emissions from chromium electroplating and chromic acid anodizing operations.
Rule 1469.1 ²¹	Rule 1469.1 reduces emissions of hexavalent chromium from spray coating and related operations
AB 2588 ²² and Rule 1402 ²³	<ul style="list-style-type: none"> • AB 2588, also known as the Air Toxics “Hot Spots” Act, is a statewide program that focuses on reducing air toxics pollution from facilities and requires facilities above certain levels to disclose and/or reduce risks. • Rule 1402 implements the AB 2588 program.
U.S. EPA Title V ²⁴	<p>The U.S. EPA Title V program is a federal law that requires major sources of air pollutants, and certain other sources, to:</p> <ul style="list-style-type: none"> ○ Obtain an operating permit, ○ Operate in compliance with the permit, and ○ Certify at least annually their compliance with permit requirements.
Rule 1466, ¹⁶ U.S. EPA Superfund Program, ²⁵ Department of Toxic Substance Control (DTSC) Brownfields ²⁶	<ul style="list-style-type: none"> • Rule 1466 minimizes the amount of off-site fugitive dust emissions containing toxic air contaminants by reducing particulate emissions in the ambient air as a result of earth-moving activities. • The U.S. EPA Superfund program conducts environmental clean-ups of some of the most contaminated land, and responds to environmental emergencies, oil spills, and natural disasters. • The DTSC Brownfields program conducts clean-ups of properties where the expansion, development, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

¹⁹ South Coast AQMD Rule 1426 – Emissions from Metal Finishing Operations, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1426.pdf>

²⁰ 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>

²¹ South Coast AQMD, Rule 1469.1 – Spraying Operations Using Coatings Containing Chromium, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1469-1.pdf>

²² South Coast AQMD, Air Toxics “Hot Spots” Program (AB 2588), <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588>

²³ 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>

²⁴ South Coast AQMD, Title V, <http://www.aqmd.gov/home/permits/title-v>

²⁵ U.S. EPA, Superfund, <https://www.epa.gov/superfund>

²⁶ DTSC, Latest Brownfields News, <https://dtsc.ca.gov/brownfields/>

Table A2a-2: Facilities in the AB 2588 Program within SLA

Facility ID	Facility Name	Facility Address	AB 2588 Program Status ¹² (Prioritization Year)
2619	Martin Luther King Jr. Medical Campus	12021 S Wilmington Ave Los Angeles 90059	Intermediate (2017)
18989	Bowman Plating Co Inc.	2631 E 126th St Compton 90222	High (2018)
35302	Owens Corning Roofing and Asphalt, LLC	1501 N Tamarind Ave Compton 90222	Intermediate (2019)
134112	Robertson's Ready Mix	301 W Rosecrans Ave Gardena 90061	Intermediate (2020)
144198	Designed Metal Connections	14800 S Figueroa St Gardena 90248	Intermediate (2020)
171326	Phillips 66 Pipeline LLC	13500 S Broadway Los Angeles 90061	Intermediate (2017)
184301	Sentinel Peak Resources California, LLC	5640 S Fairfax Ave Los Angeles 90056	Intermediate (2019)
188380	Valence Surface Technologies - Lynwood	2605 Industry Way Lynwood 90262	Intermediate (2018)
195459	WG Holdings SPV, LLC	142 W Rosecrans Ave Los Angeles 90059	Intermediate (2017)
800037	Demunno-Kerdoon DBA World Oil Recycling	2000 N Alameda St Compton 90222	High (2019)
800265	University of Southern California	McClintock W 34th Childs St Los Angeles 90089	Intermediate (2020)

Best Available Retrofit Control Technologies Requirement

In 2017, the South Coast AQMD Governing Board directed staff to transition facilities out of the REgional Clean Air Incentives Market (RECLAIM) program to a command-and-control regulatory approach requiring Best Available Retrofit Control Technology (BARCT) as soon as practicable. Additionally, among the requirements of Assembly Bill 617 (AB 617) is an expedited schedule for implementing BARCT for facilities in the California Greenhouse Gas Cap-and-Trade program.²⁷ Air

²⁷ CARB, Cap-and-Trade Program, <https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/about>. The Cap-and-Trade Program is a key element of California's strategy to reduce greenhouse gas (GHG) emissions. The Cap-and-Trade Regulation establishes a declining limit on major sources of GHG emissions throughout California, and it creates a powerful economic incentive for significant investment in cleaner, more efficient technologies. The Cap-and-Trade Program applies to emissions that cover approximately 80 percent of the State's GHG emissions.

districts are to develop, by January 1, 2019, an expedited schedule for the implementation of BARCT no later than December 31, 2023. Descriptions of NOx RECLAIM facilities that are subject to BARCT in the SLA community boundary may be found in **Table A2a-3**. More information about the RECLAIM transition and BARCT assessments are in Chapter 5a: Introduction to Actions to Reduce Community Air Pollution and Appendix 5a.

Table A2a-3: List of NOx RECLAIM Facilities within the SLA Community

Facility ID	RECLAIM Facility Name	Facility Address	Cap-and-Trade Facility (Yes/No) ²⁸
800037	DEMENNO-KERDOON DBA WORLD OIL RECYCLING	2000 N ALAMEDA ST, COMPTON, CA 90222	Yes
3029	MATCHMASTER DYEING & FINISHING INC	3700 S BROADWAY, LOS ANGELES, CA 90007	Yes
35302	OWENS CORNING ROOFING AND ASPHALT, LLC	1501 N TAMARIND AVE, COMPTON, CA 90222	No

²⁸ CARB, Pollution Mapping Tool for 2019 Cap-and-Trade Facility designation, https://ww3.arb.ca.gov/ei/tools/pollution_map/