
Chapter 5a:

Introduction to Actions to Reduce Community Air Pollution

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Community Air Quality Priorities

Through the development of the South Los Angeles (SLA) Community Emissions Reduction Plan (CERP) and based on sources of air pollution that are of concern to the community, the Community Steering Committee (CSC) identified the following air quality priorities (**Figure 5a-1**):

- Mobile Sources,
- Auto Body Shops,
- General Industrial Facilities,
- Metal Processing Facilities, and
- Oil and Gas Industry.

Figure 5a-1: Air Quality Priorities Identified by the SLA CSC



Mobile Sources



Auto Body Shops



General Industrial
Facilities



Metal Processing
Facilities



Oil and Gas
Industry

These air pollution sources are often near homes, schools, and other areas where the community can be exposed to harmful pollutants. To reduce air pollution from these sources, the CSC developed a set of actions to be implemented by government agencies in collaboration with community-based organizations, businesses, and other entities, as described in the following subchapters.

Subchapters 5b through 5f focus on each air quality priority identified by the CSC.

Authority (Jurisdiction) of Governmental Agencies and Ongoing Efforts

Multiple government agencies may be involved when addressing an air quality priority, as each agency has its own specific authority to protect the environment and community. Authority varies based on the source of the emissions such as mobile or stationary, pollutants such as greenhouse gas emissions, criteria pollutants, or toxic air contaminants (TACs), and the environmental media such as air, soil, solid waste. The South Coast Air Quality Management District (South Coast AQMD) has authority over stationary sources which are generally fixed facilities such as dry cleaners, refineries, power plants, factories, and metal processing facilities as well as indirect sources, fixed locations that are associated with mobile sources such as ports, railyards, and warehouses. California Air Resources Board (CARB) and United States Environmental Protection Agency (U.S. EPA) develop, implement, and enforce air quality regulations to reduce air pollution from mobile sources such as trucks, ships, and locomotives. South Coast AQMD, CARB, and U.S. EPA develop, implement, and enforce rules and regulations for sources which they have regulatory authority.

In areas where South Coast AQMD and CARB do not have direct authority, implementation of the Assembly Bill 617 (AB 617) program may include informing the CSC of ongoing efforts conducted by other responsible agencies. For example, the California Geologic Energy Management Division (CalGEM), a state agency, is developing a public health rule to update public health and safety protections for communities near oil and gas production operations, which includes prohibiting new oil wells within a certain distance of sensitive receptors. Local land-use agencies can establish long-term goals, ordinances, and policies for land use that can also have an impact on local air pollution (e.g., Los Angeles County Green Zones Program,¹ Los Angeles County Oil Well Ordinance,² prohibition of new oil and gas extraction³).

Beyond the CERP and CAMP requirements, AB 617 also requires that air districts expedite implementation of Best Available Retrofit Control Technology (BARCT) for facilities in the California Greenhouse Gas Cap-and-Trade program.⁴ South Coast AQMD's REgional CLean Air

¹ Los Angeles County Department of Regional Planning, Green Zones Program, <https://planning.lacounty.gov/greenzones#:~:text=initiated%20by%20the%20Board%20of,bear%20a%20disproportionate%20pollution%20burden>. The Los Angeles County Green Zones Program enhances public health and land use compatibility in the unincorporated communities that bear a disproportionate pollution burden.

² Los Angeles County Department of Regional Planning, Oil Well Ordinance, <https://planning.lacounty.gov/oilwell>. The Los Angeles County Oil Well Ordinance will update permit requirements and development operating standards for existing and new oil wells and accessory facilities in unincorporated LA County.

³ City of Los Angeles, LACityClerk Connect, Council File: 17-0447, <https://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=17-0447>. On January 26, 2022, the City of Los Angeles City Council passed a recommendation for the mayor to develop an ordinance requiring a new policy be drafted to prohibit new oil and gas extraction, make extraction activities a nonconforming use in all zones, ensure plugging and abandonment of wells, and conduct comprehensive site remediation.

⁴ 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,

Incentives Market (RECLAIM) program includes facilities within the California Greenhouse Gas Cap-and-Trade program. In 2017, the South Coast AQMD Governing Board directed staff to transition facilities out of the NOx RECLAIM program and begin to regulate those sources under a command-and-control approach. As a result, staff began to develop new or amend existing rules to update or add emission limits that reflects BARCT to ensure as facilities' transition out of RECLAIM there is a "landing rule" that regulates NOx emissions for each unit or process. The limits were determined based on a BARCT analysis, consistent with the Health and Safety Code, that evaluates not just technological feasibility but cost-effectiveness of controls to meet those emission limits. To date, BARCT emissions limits have been established for ten rules and staff is currently developing or amending four additional rules. More information on BARCT, RECLAIM facilities, and rule developments can be found in Appendices 2a: Community Profile and 5a: South Coast AQMD Regulatory Program and Ongoing Efforts.

Opportunities for Action

In addition to the ongoing efforts described above, the community co-leads guided the South Coast AQMD in collaboration with the CSC, to identify priorities to reduce air pollution in the SLA community. For each air quality priority, this CERP defines a path for further reductions of emissions and exposure through identifying goals with corresponding action(s), metric(s), timeline(s), and responsible entities. This path utilizes strategies, including rules and regulations,⁵ air monitoring, enforcement, incentives, collaborations, and information and outreach to achieve localized reductions, share emissions data, and provide other related information to address the community's concerns. Further, the CSC requested that the community be involved in implementing this CERP and suggested that agencies work with community-based organizations to invest in community projects. South Coast AQMD commits to working collaboratively with the CSC throughout CERP implementation. Additionally, the CSC has been listed as a responsible entity in several actions.

The goals, actions, and metrics are written to allow some flexibility during CERP implementation. If goals, actions, and metrics are overly specific, South Coast AQMD is restricted to what is written in the CERP during implementation and cannot adjust strategies to accommodate for new findings or innovative approaches. Although there is some room for flexibility, strategies cannot expand beyond the original scope and intent of the goals, actions, and metrics. For example, if the CERP specifies that incentives may be used to support zero-emission technologies, then incentive funds can only go to zero-emission technologies and funds cannot be used for lesser stringent technologies (e.g., near-zero emission technologies). Therefore, SLA may forego potential emission reductions if zero-emission technologies are not commercially available.

and it creates a powerful economic incentive for significant investment in cleaner, more efficient technologies. The Program applies to emissions that cover approximately 80 percent of the State's GHG emissions.

⁵ South Coast AQMD, Regulations, <http://www.aqmd.gov/home/rules-compliance/regulations#:~:text=At%20South%20Coast%20AQMD%2C%20a,and%20administered%2C%20and%20their%20impact>. At South Coast AQMD, a regulation is composed of rules, each of which deals with a specific topic within that regulation.

Emissions Reduction Targets

AB 617 requires emissions reduction programs, such as this CERP, to include emissions reduction targets.^{6,7} This CERP will project emissions reductions for nitrogen oxides (NOx) and diesel particulate matter (DPM) in tons per year (tpy). To accurately determine emissions reductions, a baseline is established based on the year prior to community designation⁸ (as described in Chapter 2d: Emissions and Source Attribution). **Table 5a-1: CERP Emissions Reduction Targets** includes an emissions baseline for 2019, projected future baseline emissions for 2026 and 2031, emissions reductions from this CERP in 2026 and 2031, and an overall percentage of emissions reductions from 2019.

Table 5a-1: CERP Emissions Reduction Targets

| Year | Emissions | NOx | DPM |
|-------------|---|-------|-------|
| 2019 | Baseline Emissions (tpy)** | 3,339 | 41.14 |
| 2026 | Projected 2026 Baseline Emissions (tpy)* | 2,179 | 18.22 |
| | Emissions Reductions from CERP (tpy) | 217 | 6.23 |
| | Overall Emissions Reductions from 2019 (%) | 41 | 71 |
| 2031 | Projected 2031 Baseline Emissions (tpy)* | 1,957 | 15.93 |
| | Emissions Reductions from CERP, by 2031 (tpy)** | 324 | 18 |
| | Overall Emissions Reductions from 2019 (%) | 51 | 105 |

* Emissions were developed and presented in tons per day unit in Chapter 3b and Appendix 3b.

** Estimated emissions reduction targets from this CERP, by 2031 include 324 tpy NOx and 18 tpy DPM from projected incentive projects (assuming a minimum of \$10 million invested for mobile source projects) and emissions reduction targets from CARB's statewide measures listed in Table 5a-3 "Estimated Emissions Reduction Targets for CARB Statewide Measures".

To address the CSC identified air quality priorities, the following rule developments or amendments with potential volatile organic compounds (VOCs), fugitive dust, metal particulate, and hexavalent chromium are listed in **Table 5a-2**, which also lists the associated air quality

⁶ California Health and Safety Code, Section 44391.2 (c)(3)

⁷ CARB, Community Air Protection Blueprint, Appendix C. Criteria for Community Emissions Reduction Programs, https://ww2.arb.ca.gov/sites/default/files/2018-10/final_community_air_protection_blueprint_october_2018_appendix_c.pdf

⁸ SLA is considered as a 2020-designated community, despite its delayed designation by CARB in February 2021.

priority, potential applicability, and the pollutants to be reduced. Estimating emission reductions from these proposed and proposed amended rules is too speculative at this point. South Coast AQMD will work with a Working Group that will include SLA CSC members as well as other stakeholders, such as other environmental and community groups, CSC members from other communities, businesses, and other agencies, that will provide input regarding the scope and possible amendments to address the actions in the CERP for the various rule topics. As the rule proposal is developed, the air quality benefits and emission reductions will be quantified, to the extent feasible. Quantifying emission reductions attributed to fugitive emissions are more challenging and may be qualitatively discussed.

Table 5a-2: South Coast AQMD Rule Developments with Potential Emission Reductions

| Proposed Rule (PR) or Proposed Amended Rule (PAR) | Air Quality Priority | Potential Applicability | Pollutant |
|--|-----------------------------|--|---|
| PR 403.2 | Mobile Sources | Activities conducted for large roadway projects | Fugitive dust |
| PAR 1151 | Auto Body Shops | Any facility using automotive coatings, including auto body shops | VOCs |
| PAR 1171 | Auto Body Shops | Any facility conducting solvent cleaning operations, including auto body shops | VOCs |
| PR 1426.1 | Metal Processing Facilities | Any facility conducting metal finishing operations not subject to Rule 1469 | Hexavalent Chromium |
| PR 1445 | Metal Processing Facilities | Any facility conducting laser arc cutting operations | Hexavalent chromium and toxic metal particulate |
| PR 1460 | Metal Processing Facilities | Metal recycling facilities and metal scrapyards | Particulate Matter |
| PAR 1148.1 | Oil and Gas Industry | Oil and gas production wells | VOCs |

Estimated Emissions Reductions from CARB Statewide Measures

CARB's statewide strategy provided in this CERP accounts for the combined effects of regulations currently under rulemaking for a future year. Potential emissions reductions from proposed

regulations for a specified year are applied to account for multiple regulations that may affect a specific source category. For example, if two regulations are applicable to the same source of emissions (e.g., trucks) then a new baseline is established by applying the statewide reduction factors from the first proposed regulation to the original baseline, and then reductions from the second regulation are calculated based on the newer established baseline.

It is important to note that most of these regulations are in early phases of development and their adoption and implementation timelines have not yet been established. Additionally, the statewide emission inventory used to estimate the potential emission reduction factors for these strategies are derived from draft regulatory inventories that will continue to be revised through the regulation development process. Once a statewide strategy or regulatory measure is adopted, emission reduction factors and related benefits will be updated to reflect the final inventory used in the regulation. Accordingly, the draft statewide emissions reduction estimates presented in this CERP should only be used as rough estimates that are subject to change in the future.

CARB has estimated the emissions reductions benefits for some of the proposed statewide measures as shown in **Table 5a-3**. The “Action Date” listed in **Table 5a-3** reflects the year of the anticipated adoption date by CARB’s Governing Board. As the primary state entity responsible for obtaining emission reductions from mobile sources, CARB’s proposed new measures assist the South Coast AQMD achieve the necessary emission reductions to attain federal air quality standards reflecting the combined reductions from the existing control strategy and new measures. If a particular measure does not achieve its expected emission reductions, CARB is still responsible to achieve the total aggregate emission reductions. CARB emission reduction commitments may be achieved through a combination of control measures, incentive funds, or other enforceable measures. In South Coast AQMD’s 2016 Air Quality Management Plan, CARB identified measures to achieve a 70 percent reduction (266 tons per day) in NO_x emissions from mobile measures by 2023, and an 80 percent reduction (295 tons per day) by 2031 in the South Coast.⁹

⁹ South Coast AQMD, 2016 Air Quality Management Plan, Appendix IV-B: CARB’s Mobile Source Strategy, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-iv-b.pdf>

Table 5a-3: Estimated Emissions Reduction Targets for CARB Statewide Measures[†]

| Proposed Statewide Measure | Action Date | Emissions Reductions Targets 2026/2031 (tpy) | | | | | | | |
|---|-------------|--|------------|------------|------------|------------|------------|------------|-----------|
| | | NOx | | VOC | | DPM | | PM2.5 | |
| | | 2026 | 2031 | 2026 | 2031 | 2026 | 2031 | 2026 | 2031 |
| Advanced Clean Fleet¹⁰ | 2023 | 5.3 | 24 | - | - | 0.0 | 0.0 | 0.1 | 0.6 |
| Advanced Clean Car II¹¹ | 2022 | 2.1 | 27 | 1.3 | 21 | 0.0 | 0.0 | 0.6 | 7.6 |
| Heavy-Duty Inspection and Maintenance¹² | 2021 | 122 | 140 | - | - | 1.0 | 1.0 | 1.0 | 1.0 |
| Small Off-Road Engine Amendment¹³ | 2021 | 19 | 60 | 144 | 416 | - | - | 1.4 | 3.9 |
| Transport Refrigeration Unit Regulation¹⁴ | 2022 | 3.5 | 8.5 | 0.4 | 1.1 | 1.3 | 2.8 | 1.2 | 2.6 |
| Total | | 152 | 259 | 146 | 438 | 2.3 | 3.8 | 4.2 | 16 |

[†] Emissions reduction targets based on estimates from CARB. Emissions reductions are subject to future assessment and regulatory analysis that may result in adjustments.

¹⁰ CARB, Advanced Clean Fleets, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>

¹¹ CARB, Advanced Clean Cars II, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>

¹² CARB, Heavy-Duty Inspection and Maintenance Program, <https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program>

¹³ CARB, Small Off-Road Engine (SORE), <https://ww2.arb.ca.gov/our-work/programs/small-off-road-engines-sore>

¹⁴ CARB, New Transport Refrigeration Unit Regulation in Development, <https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation>