From:	Paula Torrado
To:	Paul Rodriguez
Cc:	Nicole Silva; Kathryn Higgins; Ricardo Rivera; Uyen-Uyen Vo; Bernard Tolliver; Martha Dina Arguello; Gina Charusombat; Giovanna Tyndale; Jacquelyn Badejo; Linda Cleveland
Subject:	AB617 South LA CSC Co-leads 1st CERP Draft Comments/Feedbak
Date:	Thursday, March 17, 2022 4:57:12 PM
Attachments:	Ch5e_MetalsFacilities_Co-leads feedback.docx Ch6_CAMP_Co-leads Feedback.docx Ch5c_AutoBodyShops_Co-leads feedback.docx Ch5f_OilandGasIndustry_Co-leads Feedback.docx Ch5a_Intro_Co-leads Feedback.docx Ch5b_MobileSources_Co-leads Feedback.docx Ch3b_EmissionsSources_Co-leads Feedback.docx Ch3a_ComProfile_Co-leads Feedback.docx ExecSummary_Co-leads Feedback.docx Ch4_Enforcement_Co-leads Feedback.docx Ch1_Intro_Co-leads Feedback.docx Ch2_Outreach_Co-leads Feedback .docx Ch5d_GenIndustrialFacilities_Co-leads feedback (1).docx 2020 7 8 CMX Case Study v1.docx 2022 3 17 Sinsheimer comments on draft CERP.docx

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Good afternoon SCAQMD SLA AB617 team,

I hope you are well.

Please see attached the co-leads feedback for the CERP 1st draft chapter by chapter. There are comments on the side and in red are new suggestions and language added. There are also additional placeholders highlighted in red. Please review all, and we should aim at going through all comments during a CERP review session.

References we used for our comments:

- West Oakland CERP
- Wilmington CERP
- South Central LA Rooted Report - for community profile and introduction chapters
- SCLA-PUSH Report / Website
- 500Ft Tool
- Attached research memos from Dr Peter Sinsheimer on best practices for metals and dry cleaners, for CERP comments reference.

Let us know if you have any questions.

Kindly,

--
Paula Torrado Plazas,
Manager of Health and Environment Programs
Physicians for Social Responsibility-Los Angeles
[redacted]

1. Chapter 1: Introduction

Regulatory Background

Assembly Bill 617 (AB 617)[1] was signed into California law on July 26, 2017 and focused on addressing disproportionate impacts of local air pollution in environmental justice (EJ) communities. "Environmental justice" is defined as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."[2] The bill recognizes that while California has seen tremendous regional air quality improvement, some communities are still disproportionately impacted due to air pollution sources near residential areas. Major air pollution sources in EJ communities include mobile sources and industrial facilities. These communities also experience social and economic disadvantages that add to their cumulative burdens. The AB 617 program invests new resources and focuses on improving air quality in EJ communities.

AB 617 communities are designated by California Air Resources Board (CARB) and they specify the plan(s) for the community as either an emissions reduction program, air monitoring system, or both. To meet the emissions reduction program requirements, South Coast Air Quality Management District (South Coast AQMD) develops and implements Community Emission Reduction Plans (CERPs). For the air monitoring system requirements, South Coast AQMD develops and deploys Community Air Monitoring Plans (CAMPs). For communities with an emissions reduction program component, the local air district must develop and adopt a CERP in consultation with CARB, community-based organizations, affected sources, and local governmental bodies, which must be implemented within five years.[3] Additionally, air districts are required to provide an annual progress report to CARB[4] and if new information becomes available, the CERP may be evaluated and revised by CARB. For communities with an air monitoring system component, a CAMP must be developed and deployed within one year of community designation.[5]

An essential element of the program is partnership and collaboration with the community to address the community's air quality priorities and develop solutions and actions for the CERP and CAMP. The Community Steering Committee (CSC) is guided by the South LA Co-leadership model including PSR-LA, SCOPE, and Watts Clean Air in Collaboration. The CSC is a diverse group of people who live, work, own businesses, or attend school within the community, many of whom were trained as Air Quality Ambassadors through PSR-LA's Air Quality Academies as part of their SCLA-PUSH project. Additionally, local land-use agencies, public health agencies, regulatory agencies, and elected officials may have representation on the CSC. The CSC guides the development and implementation of the emissions reduction program and air monitoring system.

[1] California Health and Safety Code, Section 44391.2
[2] California Government Code, Section 65040.12
[3] California Health and Safety Code, Section 44391.2 (b)(2)
[4] California Health and Safety Code, Section 42705.5 (d)
[5] California Health and Safety Code, Section 42705.5 (b)

Commented [1]: If it is regulatory background, then maybe CapandTrade should be explained here - or at leas add a graphic timeline explaining how we got to AB617

Commented [2]: health, social, and economic

Commented [3]: is not new resources

Commented [4]: in consultation? or collaboration?

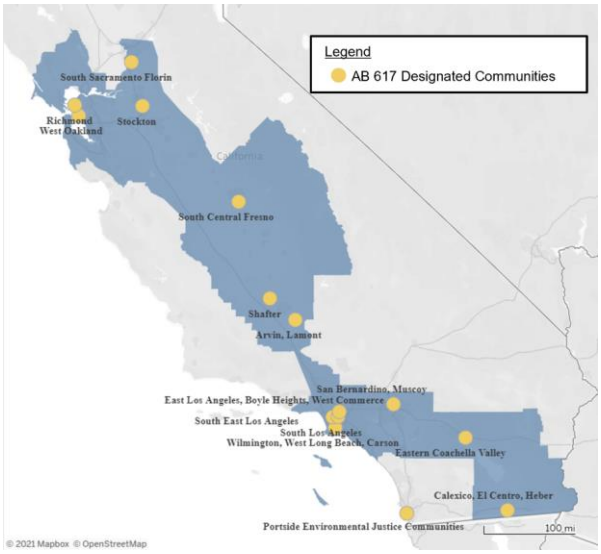
Commented [5]: should say collaboration. To me anything else would mean that we (co-leader/community) did not contribute. Just signed off.

Commented [6]: I agree!

Commented [7]: community members

Currently, statewide, there are 15 AB 617 communities designated by CARB (see **Figure 1-1**) and six of the 15 communities reside within the jurisdiction of the South Coast AQMD. In 2018 (Year 1), CARB designated three South Coast AQMD communities. In 2019 (Year 2), CARB designated two[6] additional communities in South Coast AQMD. On February 25, 2021 (Year 3[7]), South Los Angeles (SLA) was designated by CARB as an AB 617 community in South Coast AQMD to develop a community emissions program and an air monitoring system.[8,9] This major success would have not been possible without the support of our SCLA-PUSH project and their dedicated community based organizations and experienced community members and Air Quality Ambassadors, who are now leading and forming the SLA CSC.

Figure 1-1: AB 617 Designated Communities



THE SLA CERP

NEW HEADER: Purpose

This CERP is developed to achieve air pollution emission and exposure reductions within the SLA community and address this community's air quality priorities. This plan also describes the community

[6] Eastern Coachella Valley and Southeast Los Angeles were designated in 2019 to develop both a community emissions program and air monitoring system. https://ww2.arb.ca.gov/capp-communities

[7] South Los Angeles is designated as a "2020" or "Year 3" community despite the CARB Board meeting for community selection being held in 2021, https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/communities/south-los-angeles

[8] California Health and Safety Code, Section 44391.2 (c)(2)

[9] California Health and Safety Code, Section 42705.5 (d)

outreach conducted to develop this CERP and provides emissions and exposure reduction actions, an implementation schedule, and an enforcement plan (Chapter 4).

NEW HEADER: Scope

Based on the sources of air pollution impacting the community, the SLA CSC identified the following air quality priorities to be addressed by this CERP:

	Mobile Sources
Chapter 2	Auto Body Shops
Chapter 3	General Industrial Facilities
Chapter 4	Metal Processing Facilities
Chapter 5	Oil and Gas Industry

At its core, this CERP seeks to address these air quality priorities with actions that reduce air pollution emissions from sources within the community and reduce air pollution exposure for the people in the community. Actions in this plan include:

- Developing regulations to capture new sources of air pollution;
- enforcing rules to ensure compliance with existing regulations;
- providing incentives to accelerate the adoption of cleaner technologies;
- and conducting air monitoring to characterize emissions.

These efforts will provide critical information to help guide investigations and provide public information. As well, conducting outreach will provide useful information to support the public in making informed choices. Collaborative efforts with other regulatory agencies, community-based organizations, businesses, and other stakeholders will amplify the impact of these actions. Many of the actions included in this CERP will only be conducted during the five-year implementation timeframe of this plan, which begins at CERP adoption. However, there are some actions (e.g., regulation, ongoing enforcement activities, and certain incentive programs) initiated during the implementation timeframe that will continue to result in emission and exposure reductions beyond the five-year timeframe of this CERP. The focus of this plan is to improve air quality in the SLA community through concentrated efforts and community partnerships.

Other Environmental Community Concerns Identified

- Placeholder for additional community concerns
- Placeholder for 4 drivers of disparities in South LA

Commented [8]: https://southlaisthefuture.org/south-central-rooted/

The Steering Committee also identified sources of pollution and other environmental hazards that are not included in the CERP's scope. The CERP does not study or attempt to address the background or regional sources of pollution that all South LA communities face. The CERP also does not seek to address the burdens that residents of South LA shoulder because of poverty, lack of economic and educational opportunities, illegal dumping, and excessive noise, although some of these current conditions are

described in the Community Profile (Chapter 3) and are part of the cumulative burden in the Soth LA community that are linked to air pollution.

~~AB 617 Program Challenges~~

~~Over the past four years of implementing the AB 617 program, South Coast AQMD has experienced challenges and gained insight on working with the designated communities and addressing their concerns. One of the common challenges for all AB 617 communities continues to be the emissions reduction program development timeline; one year to develop and adopt an emissions reduction program limits the ability to build community trust, inform the community, and build consensus. Another challenge is the limited authority of air districts to sufficiently address all air quality related issues raised by the CSCs. Limited funding has also been challenging to sufficiently support the development, implementation, and deployment of community plans.~~

~~Community Emissions Reduction Plan Development Process and Emphasis on Community Input~~

Community Emissions Reduction Plan Development and Community Engagement

Community engagement and input to inform both the process and the actions in a CERP are a primary element of the AB 617 program. Public meetings, subcommittee meetings, conversations, and communications among CSC members, the community, South Coast AQMD, and CARB staff contribute to developing and implementing this CERP. Chapter 2 – Community Outreach, Community Steering Committee and Public Process describes the CSC and outreach efforts for CERP development.

About this Community

On January 14, 2021~~, South Coast AQMD initiated the Community Kickoff Meeting.~~ On January 14th, SCAQMD hosted a preliminary South LA AB617 informational session in preparation of the community

Commented [9]: Similar to West Oakland plan in page

Commented [10]: https://www.baaqmd.gov/~/media/files/ab617-community-health/west-oakland/100219-files/final-plan-vol-1-100219-pdf.pdf?la=en

Commented [11]: I think Chapter 3 (Community profile - should be chapter 2)

Commented [12]: These challenges focused only on the program implementation, we should also outlined challenges and lessons learned in our CSC process - add that on chapter 2

Commented [13]: Belongs in chapter 2

Commented [14]: Additional challenges:
-constrained timeline and capacity gaps
-communications and process transparency
-accountability

Commented [15]: This should be further described as part of chapter 2 for community engagement - a new section for Challenges and Lessons Learned

Commented [16]: Agreed

Commented [17]: in addition to lack of resources that adequately support co-leads engagement

Commented [18]: I don't think "input" fully describes the many hours community members have dedicated to this, is a vague word.

Commented [19]: I don't think this says much, its just fluff

Commented [20]: Not Accurate. This Jan 14th meeting was a pre-informational meeting because the SLA community was not officially selected until Feb 25th

Commented [21]: This is NOT true - On January 14TH SCAMD did an informational gathering for the South LA community

selection to inform the community about the program and the opportunities it brings to address air quality concerns.

On February 16th PSR-LA in collaboration with SCOPE and Watts Clean Air, the local air district and

January 2021	Community Kickoff Meeting
February 2021	CARB designated AB 617 Year 3 community
March - August 2021	Community Steering Committee (CSC) developed Community boundary finalized Air quality priorities identified
September 2021 - February 2022	Community subcommittees on air quality priorities and emissions inventory CERP development extension request submitted
March 2022	Preliminary Draft CERP released to CSC for review

CARB hosted an ***Air Quality Conference called "What's up with the air in South LA conference".*** There were 100+ attendees which included more than 60 community members, academic partners, city officials from LA Sanitation, LA Department of Health, and LA planning department, regulatory agencies representatives and board members from CARB and SCAQMD. The conference was held so community members in South LA could learn about Air Quality in South LA and the opportunity that AB617 brings to address air pollution and create spaces for meaningful community engagement. During this conference there was an opportunity for community members to directly ask questions to the regulatory agencies CARB and SCAQMD.

Commented [22]: https://www.youtube.com/watch?v=UpSAvGSqpSY

Commented [23]: for screenshots

On March 11th, SCAQMD hosted the official South LA Community kick off meeting in collaboration with PSR-LA, SCOPE, and Watts Clean Air who informed the development of the agenda and helped prepare community members for meaningful engagements.

~~Due to the COVID-19 pandemic, all meetings were held virtually via Zoom.~~

Commented [24]: This needs to be further expanded in the community outreach chapter 2

On February 25, 2021, SLA was designated by CARB as an AB 617 community. Since the designation, there have been a series of community meetings to develop the CERP and CAMP; see **Figure 1-2** for SLA's CERP development timeline.

Figure 1-2: South Los Angeles CERP Development Timeline

This community includes Compton, Lynwood, Watts, the unincorporated areas of Willowbrook and Westmont, and parts of Inglewood and Los Angeles (**Figure 1-3**).

Commented [25]: name all communities included in the boundaries

Figure 1-3: South Los Angeles Community Boundary

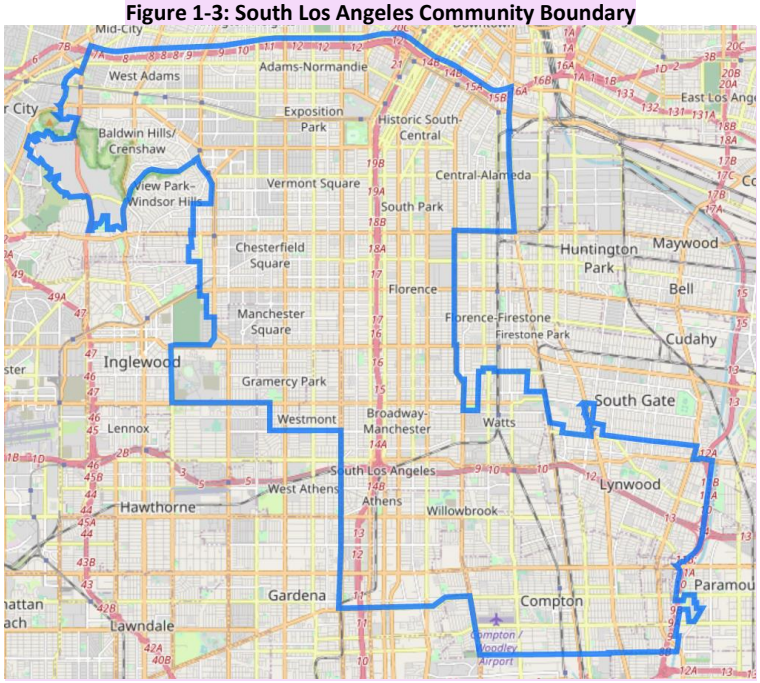
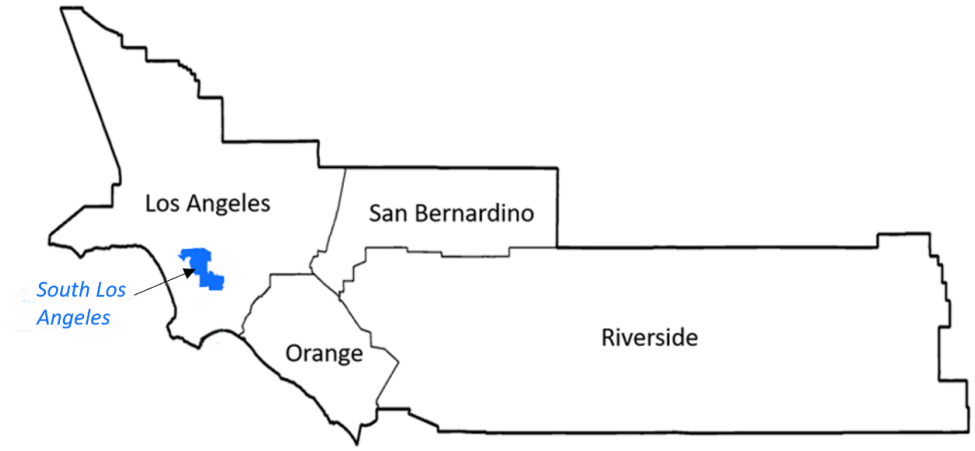


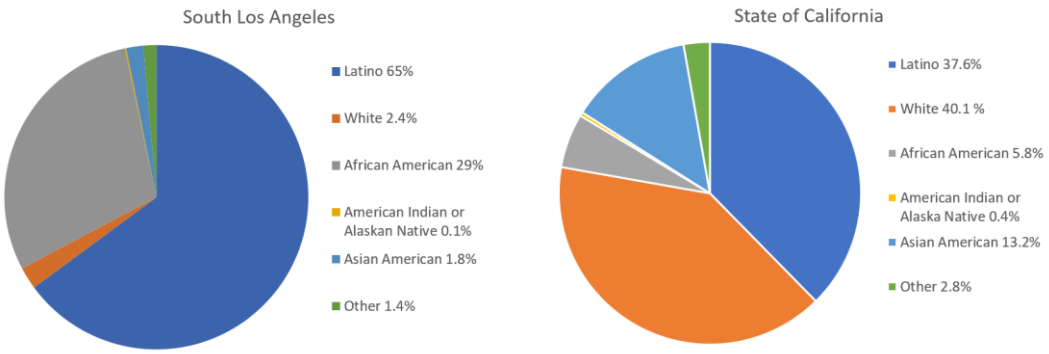
Figure 1-4: Location of the South Los Angeles Community within South Coast AQMD's Jurisdiction



Commented [26]: Should also go on community profile chapter 3

Commented [27]: This belongs in the Chapter 3 - community profile - it doesnt flow well here

~~**Figure 1-5: Population by Race/Ethnicity in South Los Angeles and the State of California, based on 2010 Census**~~

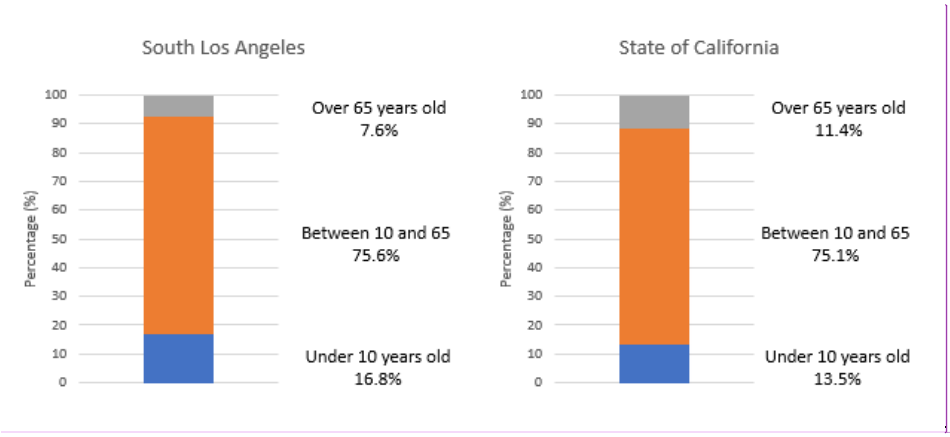


~~According to the 2010 Census, approximately 904,000 people live within the SLA boundary: approximately 65 percent are Hispanic or Latino, 29 percent are African American, and 2.4 percent are White (**Figure 1-5**).[10] Sensitive receptors are young children (under 10 years old) and older adults (over 65 years old) and can be more sensitive to air pollution's health effects. The population in this community~~

[10] Definitions of races are the same as version 3.0 of the California Communities Environmental Health Screening Tool (CalEnviroScreen 3.0), https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

~~is younger than the average California population, with about 16.8% of children under the age of 10 years and 7.6% adults over the age of 65 years versus the state which has 13.5% and 11.4%, respectively (**Figure 1-6**).~~

~~**Figure 1-6: Age Profile in South Los Angeles and the State of California, based on 2010 Census**~~



Commented [28]: Feels like this belongs in the Chapter 3 - community profile section instead

Chapter 2: Community Outreach, Community Steering Committee, and Public Process

Commented [1]: Community Engagement

Commented [2]: Should be move to Chapter 3

Introduction

Community engagement, outreach, and public process were crucial to developing the South Los Angeles (SLA) Community Emission Reduction Plan (CERP). Key features of the outreach efforts include partnering with Community Co-Leads, establishing a Community Steering Committee (CSC), monthly CSC meetings, CSC member testimonials, South Coast AQMD staff presentations, providing materials (in English and Spanish) via email and web page, and live-streaming all CSC meetings (with English and Spanish interpretation). Also, numerous interactions between CSC members, Community Co-Leads, and South Coast AQMD staff occurred in one-on-one and/or small group meetings, allowing for in-depth discussions on joint development and CERP creation.

Chapter 2 Highlights

- The Community Steering Committee (CSC) and Community Co-Leads worked with South Coast AQMD staff to develop the CERP
- Due to the COVID-19 Stay-At-Home Order, regularly scheduled CSC meetings used a virtual platform to engage with the CSC and public
- The Community Liaison served as the point of contact
- The CSC Charter was developed by the Community Co-Leads, with input from the CSC

SLA Community Co-Leads

South Coast AQMD is partnered with three community organizations serving as co-leads for the development and implementation of the AB 617 Program in the SLA AB 617 Community. The co-lead organizations are:

- Physicians for Social Responsibility-Los Angeles (PSR-LA);
- Strategic Concepts in Organizing and Policy Education (SCOPE); and
- Watts Clean Air and Energy Committee.

PSR-LA is an organization that advocates for policies and practices that improve public health, the elimination of environmental and nuclear threats, and seeks to address health inequalities. PSR-LA has over a decade of experience working in the South Central Los Angeles (SCLA) community on toxics, air pollution and climate change, land use and community development, and oil and gas extraction. PSR-LA brings the strength and credibility of health professionals to local organizing efforts and regulatory action and advocacy.

SCOPE brings over a decade of historical social justice work in South Los Angeles addressing issues of poverty, environmental racism, and chronic disinvestment using a bottom-up approach

to creating systemic change. SCOPE's proven model of community organizing is anchored by community residents engaging their neighbors to build a unified voice and advance a community led agenda. SCOPE builds grassroots power to create social and economic justice for low-income, women and women identifying, immigrant, black, and brown communities in Los Angeles. SCOPE organizes communities, develops leaders, collaborates through strategic alliances, builds capacity through training programs, and educates South LA's residents to have an active role in shaping policies that affect the quality of life in the region.

Watts Clean Air and Energy Committee empowers the Watts and surrounding South Los Angeles community/communities to achieve environmental justice by improving air quality and helping the community gain access to careers in the growing green energy industry. With daunting data on the rise in the era of competition between public utilities, the three founders knew that disadvantaged communities were in need of active community education and engagement around the larger picture of global warming, including air, energy and the value of natural resources.

Community Liaisons

A Community Liaison from the South Coast AQMD served as the point of contact to communicate with members of the CSC and members of the public to address concerns regarding logistics and development of both the CERP and Community Air Monitoring Plan (CAMP) (**FIGURE 2-1**). The Community Liaison ensured communication throughout the CERP development process and worked with community members to identify the best ways to make information accessible and user-friendly.

'The South Coast AQMD Community Liaison for SLA is Bernard Tolliver (btolliver@aqmd.gov), formerly, the liaison was Evangelina Barrera. Additionally, Nicole Silva (nsilva@aqmd.gov) serves as the South Coast AQMD point of contact for CERP-related discussions.

FIGURE 21: SOUTH COAST AQMD STAFF ASSISTING CSC MEMBERS AND THE PUBLIC VIA ZOOM

Community Steering Committee (CSC)

The main role of the CSC is to provide input and guidance in the process as well as to propose community driven solutions and actions for the community plans (i.e., CERP and CAMP). The CSC is composed of stakeholders with community knowledge to help drive community action and to develop the CERP and CAMP. The CSC creates a way to incorporate community expertise and direction in developing and implementing clean air programs in each community.

Commented [3]: community leadership

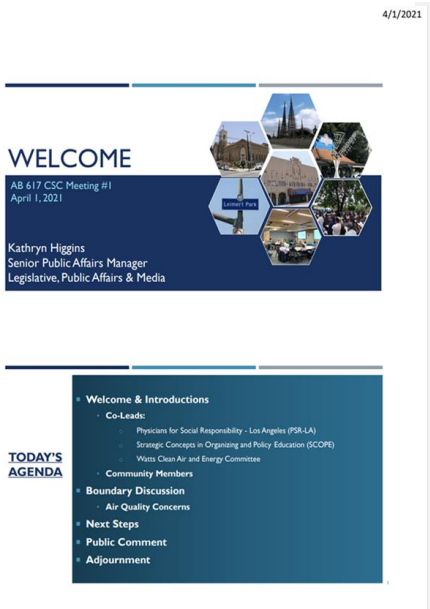
The SLA Community Co-leads developed a community outreach strategy to recruit community members and establish the SLA CSC. The SLA Co-leads brought a wealth of community contacts and active civic leadership to the outreach work and leveraged their existing relationships in the community.

PSR-LA's Community Air Protection SCLA-PUSH project in the community had already established trusted community leaders, which ensured the outreach process was successful because of their reputations and hard work. Many of the community members part of the CSC, are PSR-LA's SCLA-PUSH trained South LA air quality ambassadors.

Community co-leads also leveraged existing relationships within South LA to bring in community leaders to the CSC. Community partnerships to establish the CSC included:

- Esperanza Community Housing
- Standing Together Against Neighborhood Drilling-LA (STAND-LA)
- Watts Rising
- Brotherhood Crusades
- Slate Z
- SAJE
- Holman United Methodist Church
- Redeemer Community Partnership

FIGURE 2-2: COMMUNITY STEERING COMMITTEE FIRST MEETING SLIDES



Community co-leads know that the South LA community has a rich history of organizing and mobilizing for social justice and that collaborations among community based organizations are imperative to ensure inclusivity of all what South LA is. These partnerships meant expanded outreach and recruitment for the CSC. In addition, these organizations now have representatives in the SLA CSC and bring community expertise ranging from housing justice, transportation justice, environmental justice, community organizing, and civic leadership.

The CSC for SLA was initially formed in January and March of 2021. Beginning on April 1, 2021, monthly virtual meetings were held via Zoom. (**FIGURE 2-2**). Virtual meetings were held due to

Commented [4]: not accurate - CSC was formed in April , first kick off meeting was March 11th

the COVID-19 pandemic and the resulting executive orders from the Governor[1]. Spanish interpretation occurs during each virtual meeting, including teleconference capability for both English and Spanish lines, and meeting materials are provided in both languages.

~~Staff will continue to seek recommendations and feedback from the CSC during CERP implementation and adjust the outreach approaches to be more effective.~~

The SLA CSC has 46 primary members and two alternate members representing active residents, community organizations, and businesses. Twenty-six are primary members who reside within the community (resident percentage on the CSC is 54 percent), three primary members and two alternate members represent agencies, schools/universities, or offices of elected officials who serve this community,[2] two primary members represent businesses or labor organizations, ten primary members represent community organizations, and five primary members are co-leads. The roster is available at: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/south-la/roster.pdf.

CSC Charter

~~A charter was developed jointly by South Coast AQMD staff and~~ The SLA Community co-leads developed the CSC charter in collaboration with SCAQMD for the CSC and a draft was presented to members at the first meeting on April 1, 2021. CSC members were invited to comment and provide feedback before the charter was announced as final at the CSC meeting on July 22, 2021. The final charter is provided on the webpage: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/south-la/sla-charter.pdf.

~~Committee Presenters~~

~~A critical aspect of the CERP is development and implementation through collaboration with committee members and the agencies, organizations, businesses, or other entities that they represent. Committee members were invited to share their work that is complementary to the actions being developed in the CERP, such as programs carried out by their organization that help address air quality issues in the community.~~

Community Meetings

CARB designated the SLA community for the AB 617 program in February 2021. The community co-leads and South Coast AQMD hosted community meetings on a regular basis via virtual meetings. This included kick-off meetings, a series of CSC meetings and Subcommittee meetings. Subcommittee meetings focused on specific topics, such as Oil and Gas and Mobile

[1] Governor Newsom issued Executive Order N-25-20 on March 12, 2020, and Executive Order N-29-20 on March 17, 2020.

[2] Per discussion with CARB staff, members representing agencies, schools, universities, hospitals, and offices of elected officials are not included in the calculation of resident percentage on the CSC.

Commented [5]: needs to be in a separate section in this chapter

Commented [6]: needs to be somewhere else

Commented [7]: not accurate, the Co-leads developed the charter with input from SCAQMD

Commented [8]: I think is important to differentiate this, because the co-leads labor and work on this is missed in the document overall, so we should highlight co-leads work overall

Commented [9]: what is this? presenters of what? does this mean community co-leads?

Sources, where CSC members participated in breakout room discussions to provide input on potential CERP actions.

South LA AB617 Community Informational Meeting ~~Kick-Off Meeting~~

The South LA Community Informational Meeting ~~Community Kick-Off Meeting for the S~~LA was held virtually on January 14, 2021. During this meeting, staff presented information about the AB 617 program, and explained the critical role of the CSC in the development and implementation of the CERP and CAMP. Collectively the Community Co-leads organized a total of 50 community residents to attend this meeting, so community members could learn about the next steps in the South LA AB617 official selection.

FIGURE 2-3*:* KICK-OFF MEETING

South LA Air Quality Conference: What's Up with the Air in South LA

On February 16th PSR-LA in collaboration with SCOPE and Watts Clean Air, the local air district and CARB hosted an ***Air Quality Conference called "What's up with the air in South LA conference".*** There were 100+ attendees which included more than 60 community members, academic partners, city officials from LA Sanitation, LA Department of Health, and LA planning department, regulatory agencies representatives and board members from CARB and SCAQMD. The conference was held so community members in South LA could learn about Air Quality in South LA and the opportunity that AB617 brings to address air pollution and create

spaces for meaningful community engagement. During this conference there was an opportunity for community members to directly ask questions to the regulatory agencies CARB and SCAQMD.

South LA AB617 Community Kick Off Meeting

On March 11th, SCAQMD hosted the official South LA Community kick off meeting in collaboration with PSR-LA, SCOPE, and Watts Clean Air who informed the development of the agenda and helped prepare community members for meaningful engagements. During this initial meeting, community members were invited to fill out forms to express their interest in becoming a CSC member and were then notified by email or phone if they were selected to be a member or an alternate. Co-leads provided feedback on the final CSC roster.

Commented [10]: March 11th - Kick off meeting

Official First SLA AB617 CSC First Meeting

On April 1st, SCAQMD and the Community co-leds hosted the first CSC meeting with the official members' roster during which the co-leads were formally introduced and the CSC members had an initial discussion regarding the SLA community boundaries.

NEW HEADER: Community Engagement Timeline

Commented [11]: Needs to be updated - and can be reformatted to look like a timeline instead

January 2021	Community Kickoff Meeting
February 2021	CARB designated AB 617 Year 3 community
March - August 2021	Community Steering Committee (CSC) developed
September 2021 - February 2022	Community subcommittees on air quality priorities and emissions inventory
March 2022	Preliminary Draft CERP released to CSC for review

LOOKING AHEAD

Add projections for the future

CSC Meeting Facilitation

The Community co-leads decided to hire professional facilitators to support each Steering Committee meeting to address any power imbalance between the Air District and the

community. The facilitators' role was to maintain a positive working environment among meeting participants throughout the Plan development process. Facilitators that are trusted by the community are critical in alleviating community co-leads concerns that government entities, such as the Air District, have too much power in the CERP planning process. Having neutral facilitation fostered inclusivity and full participation by community members. The facilitators also structured each meeting to include a question and answer period to encourage public comments throughout the planning process. In addition, the facilitators guided the Steering Committee toward consensus on the CERP

Commented [12]: from West Oakland plan

Commented [13]: Agree. And the public voice should be recorded and considered whether a CSC member or not.

CSC meetings are facilitated by La Mikia Castillo of Castillo Consulting Partners (CCP). Castillo Consulting Partners is a community-based consulting firm that is dedicated to empowering diverse leaders to use their voices for systemic change.

CCP attended and facilitated CSC monthly meetings, and supported co-lead weekly meetings. CCP took a community driven approach to enhance ongoing participation and diverse perspectives from CSC members to develop the CERP for South LA. CCP prioritizes facilitating dialogue and shared decision-making between CSC members and agency staff as the group moves through the development process with the approach to ensure accountability of South Coast AQMD and community partners. CCP approaches all of the CSC meetings facilitation through a community-driven lens, which requires being prepared to engage in restorative practices, as needed, and proactively seek out ways to minimize/prevent power imbalances and enhance community participation.

Community Meetings Best Practices and Challenges

Due to the COVID-19 pandemic, all meetings were held virtually via Zoom.

As best practices

- language justice
- interpretation
- inclusive engagement and participation
- breakout sessions

Challenges

- on going pandemic impacts
- challenges of digital divide, zoom fatigue, etc.
- District organizational change

Social Media

All CSC meetings were live-streamed using Facebook Live (**FIGURE 2-4**). The links to the live-stream recording were also posted on the South Coast AQMD community webpage

(www.aqmd.gov/ab617/SLA), so that members who could not attend or view the meeting live could view the recorded video of the meeting. All CSC meetings are publicized on Instagram, Twitter, and Facebook, and are available in English and Spanish. Each video received more than 100 views.

FIGURE 2-4: SCREEN SHOT OF FACEBOOK LIVE RECORDING OF SLA CSC

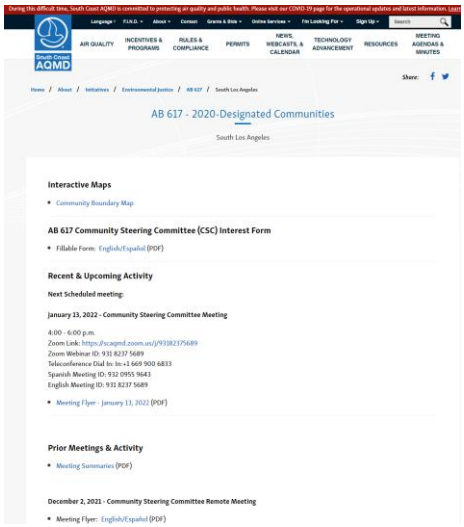
Community Webpage

A community webpage (**FIGURE 2-5**) was created for the SLA community. The webpage includes information about upcoming meetings, meeting materials (flyers, agendas, presentations, handouts, live stream links, and meeting summaries). Additionally, the SLA community page includes interactive maps, the CSC roster, and the CAMP and CERP documents. All flyers, agendas, social media posts, presentations, and handouts to the CSC were made available in

English and Spanish. Webpage: http://www.aqmd.gov/nav/about/initiatives/environmental-justice/ab617-134/south-la.

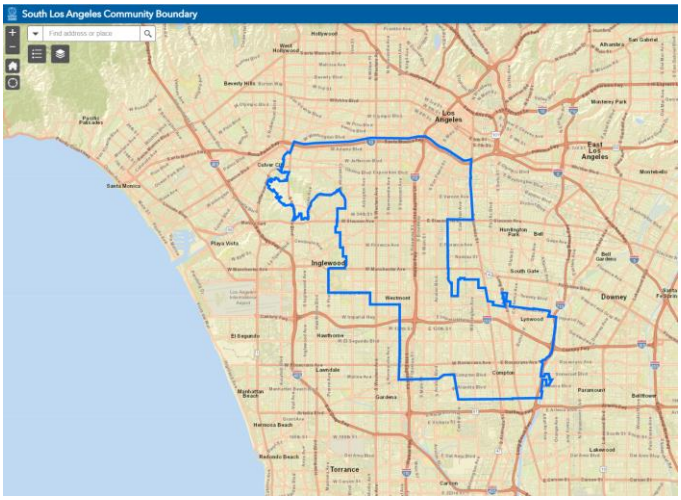
The interactive maps on the webpage presented data about the community. **FIGURE 2-6** is an example of an interactive map that was created for the SLA community. These interactive maps provide data on land use, locations of facilities, schools, hospitals, daycare centers, and the air

FIGURE 2-5: COMMUNITY WEBPAGE FOR THE SLA COMMUNITY



quality concerns identified by the CSC and members of the public. This information was provided to help inform air quality priorities for the CERP for SLA.

FIGURE 2-6: MAP SHOWING THE SLA COMMUNITY BOUNDARY



Additional Community Engagement

Commented [14]: need to also include co-leads efforts here

~~In addition to establishing the CSC and convening monthly meetings,~~

Community co-leads also engaged in additional community outreach activities to ensure community members were informed of the AB617 process.

PSR-LA through the SCLA-PUSH project hosted several trainings, informational webinars, and conducted periodic phonebanking and outreach to ensure community members and CSC members were equipped with the tools to actively participate in the CSC meetings. Through this training and outreach capacity, PSR-LA has outreached to at least 100 community members in addition to leveraging existing relationships with community based organizations to keep them informed.

SCOPE

Watts Clean AIr through the SCLA-PUSH project, educational and interactive engagements, presentations to all players (residents, community groups, clergy/congregations, city/county/state/federal departments, schools, etc) and the use of multifaceted communications has facilitated awareness, support and surveyed input as we have leveraged other work to represent the whole of community with relative items such as water, soil, agriculture, education/workforce development, capacity building, etc to attempt an exhaustive effort of community engagement. Our stretch covers the entire South LA CSC boundary.

South Coast AQMD staff also participated in one-on-one or small group meetings with members, and attended meetings led by various community organizations. These meetings provide committee members an opportunity to communicate directly with staff and for staff to answer questions and clarify information requested from CSC members. Staff were able to gain a better

understanding of the unique issues faced by each community by attending and participating in meetings led by community organizations.

Broader public engagement is important to the AB 617 program. Every CSC meeting agenda includes an opportunity for committee members to suggest agenda items to collaborate on agendas for upcoming meetings. Staff reviews comments after each CSC meeting and responds as needed. (**FIGURE 2-7**).

FIGURE 2-7: COMMUNITY MEMBERS ARE INVITED TO SHARE COMMUNITY INFORMATION ON AIR POLLUTION CONCERNS

~~Throughout the development of the CERP, community liaisons and various staff met with community members, environmental justice organizations, industry, and other stakeholders to provide assistance and prompt response to concerns raised about the CSC process.~~ Community liaisons also attended meetings from local organizations, environmental justice groups, and city and county governments to promote participation in the development and implementation of the CERP. ~~Staff attended meetings hosted by other entities in this community to give presentations on AB 617 CERP development and had more than 35 in-person, phone, and virtual meetings with committee members to discuss the CSC process and seek input on CERP actions.~~

South Coast AQMD staff will continue to work with the CSC to implement the CERP actions and provide periodic community updates on implementing the plan. Community engagement is essential to the success of the CERP and the AB 617 program as a whole, and all parties are committed to building and improving upon existing outreach efforts.

Commented [15]: I don't remember this actually happening

Commented [16]: if its co-leads yes, but not csc members

Commented [17]: repetitive

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Chapter 3a: Community Profile

Introduction

This community profile describes the characteristics of South Los Angeles (SLA) and the sources of air pollution that impact the community, which is crucial to addressing the air quality priorities outlined in Chapter 5 – Actions to Reduce Community Air Pollution.

Community Boundary and Air Quality Priorities

During monthly Community Steering Committee (CSC) meetings, CSC members, members of the public, California Air Resources Board (CARB), and South Coast Air Quality Management District (South Coast AQMD) staff worked together to shape the elements and actions of this Community Emissions Reduction Plan (CERP). Topics discussed with the CSC include:

- What should be the community boundary?
- What air quality concerns does the community have?
- What are the top air quality priorities that the community would like to address through this CERP?
- What should the goals for the air quality priorities include?
- What priority actions should be included in this CERP?
- Does the CSC have additional feedback on the Preliminary Draft CERP?

figure : South Los Angeles Community Boundary

This community includes Compton, Lynwood, Watts, the unincorporated areas of Willowbrook and Westmont, and parts of Inglewood and Los Angeles

It is important to note that South LA community boundaries have historically been established arbitrarily by city jurisdictions, and do not reflect the residents' own conception of their community. By community standards, South LA also includes the communities of Watts, Compton, Lynwood, Leimert Park, Crenshaw, Jefferson Park, West Adams, Athens, Westmont, Willobrook. The South LA community boundaries are intersected by high volume highways including the I-10, I-105, I-110, the 405, and the 91 Freeway.

Commented [1]: name all communities or boundaries.

Commented [2]: It is important to note that South LA community boundaries have historically been established arbitrarily by city jurisdictions, and do not reflect the residents' own conception of their community. By community standards, South LA also includes the communities of Watts, Compton, Lynwood, Leimert Park, Crenshaw, Jefferson Park, and West Adams. The South LA community boundaries are intersected by high volume highways including the I-10, I-105, I-110, and the 405.

Commented [3]: Athens, Westmont, Willowbrook

Commented [4]: 91Frreway

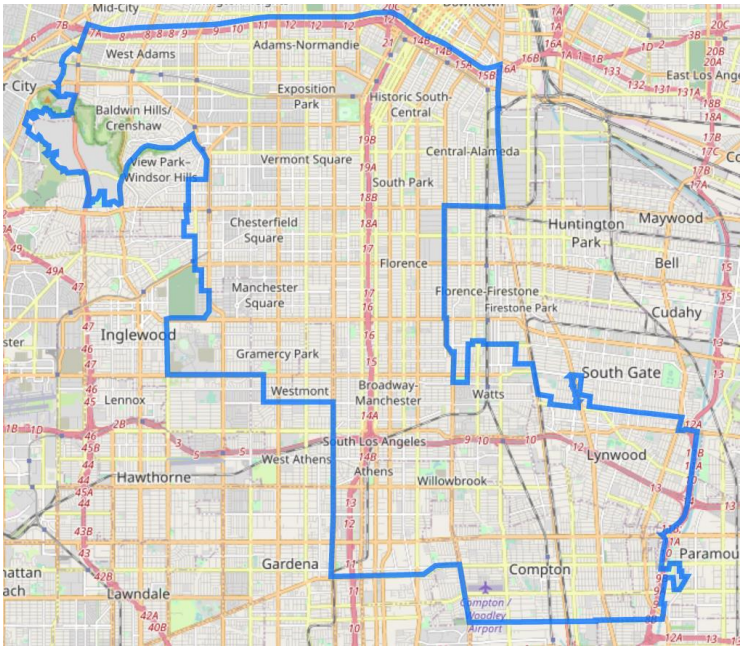


Figure 1-4: Location of the South Los Angeles Community within South Coast AQMD's Jurisdiction

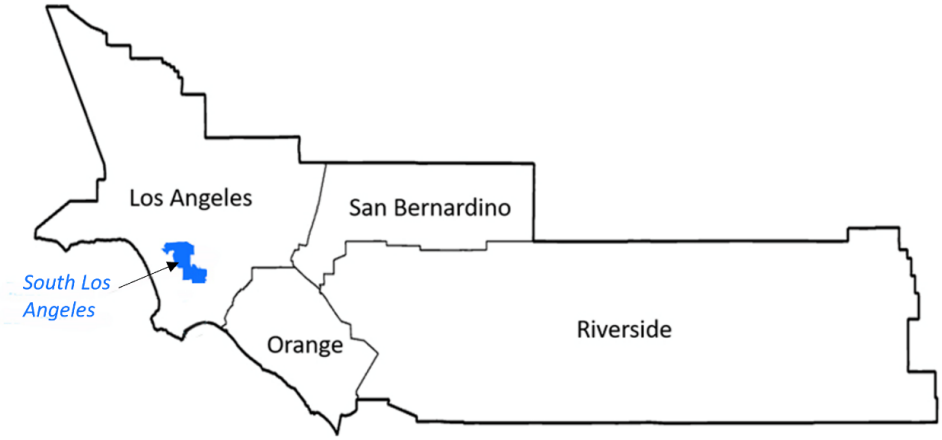
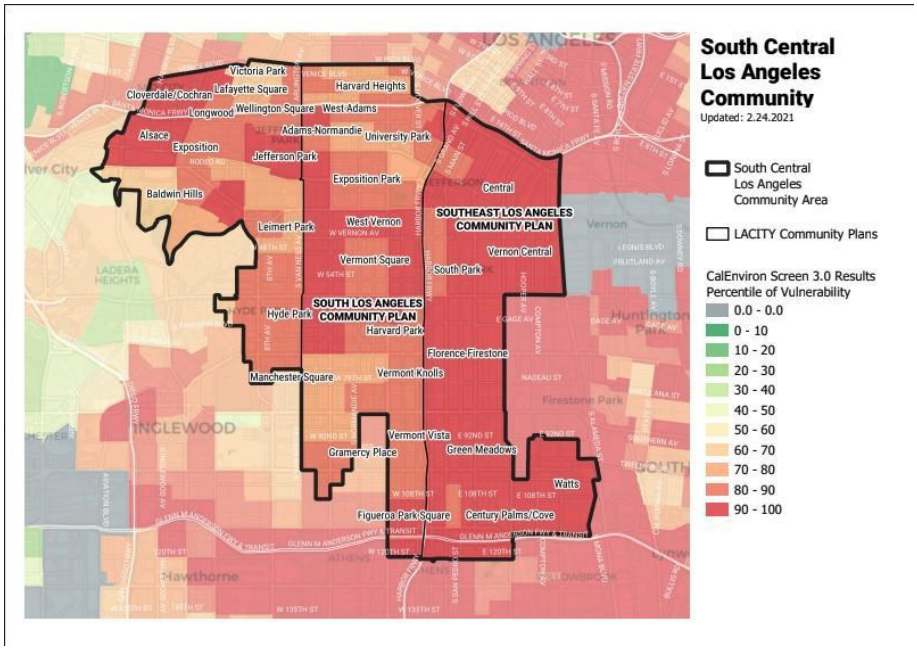


Figure 3a-1: South Los Angeles Community Boundary

Update map to include CES:



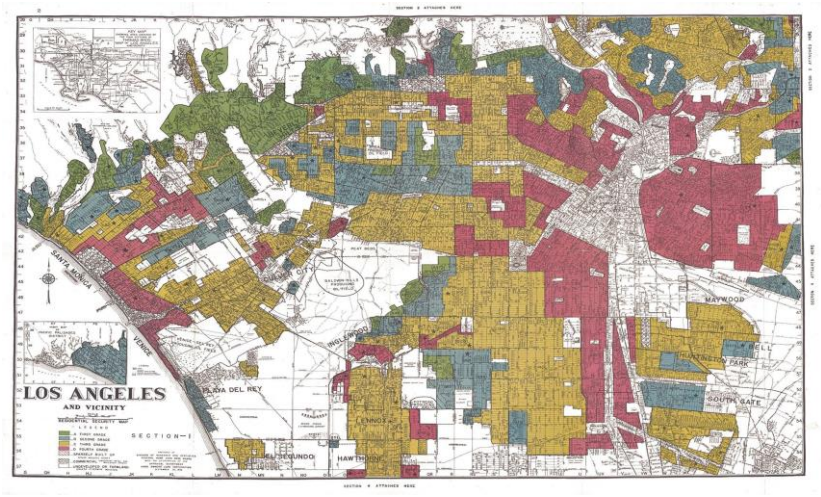
The community boundary to represent the SLA community selected by CSC members is important as it will be the area of focus for the community plans (CERP and Community Air Monitoring Plan (CAMP)) (Figure 3a-1). The SLA community boundary focuses on places in the community where residents live, work, attend school, and spend most of their time.

It is important to note that South LA community boundaries have historically been established arbitrarily by city jurisdictions, and do not reflect the residents' own conception of their community. By community standards, South LA also includes the communities of Watts, Compton, Lynwood, Leimert Park, Crenshaw, Jefferson Park, and West Adams. The South LA community boundaries are intersected by high volume highways including the I-10, I-105, I-110, and the 405.

South LA History and Background

South Los Angeles is the traditional land of the Tongva and Gabrielino peoples, original caretakers of the Tongva land (The LA Basin). South LA is a historic Black community that has a rich history shaped by immigration, shifts in labor markets, and housing policy that have led to economic displacement and gentrification. Social forces, discriminatory practices such as redlining and environmental racism, immigration, changing heritage, and community fights for justice have shaped the broader narrative of South LA. The South LA community is now predominantly Black and Brown and low-income with a variety of backgrounds and stories.

History of redlining in South LA



Early 20th century: Discriminatory real estate practices such as redlining cemented a pattern of exclusionary development that allowed for White home ownership in suburban neighborhoods of Los Angeles, while concentrating industrial activity in nonWhite and immigrant neighborhoods, including in and around South LA. During this time of rapid growth, several national firms established plants: Goodyear, Firestone, Phelps Dodge, and U.S. Steel.

These environmental racist planning practices left a legacy of staggering environmental health and justice problems that are impacting the community on a daily basis, including the co-location of industrial facilities, continued oil extraction, poor air, contaminated land, and poor urban infrastructure. Today, the South LA community continues to battle ongoing environmental injustices, while demonstrating tremendous power through impactful activism and community-wide mobilizations. The following brief timeline of the history that led up to the launch AB617 reflects the two sides of the environmental justice struggle: the legacy of poor air quality and environmental racism on the one hand, and energetic and impactful South LA movement building on the other.

Add timeline

Commented [5]: the Wilmington CERP had a great timeline on page 37 that visually explained the CERP process and how that relates to the CSC. This would be a helpful input for community members who are reading this document

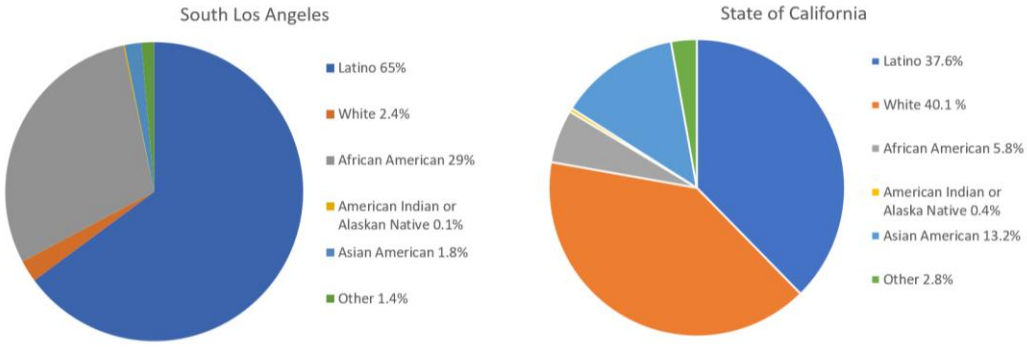
South LA Today

South LA is home to more than half a million people in about 30 square miles of land. These communities face multiple, synergistic and cumulative stressors, and hazardous exposures that, when combined with existing vulnerability, lead to adverse health consequences.

Population Characteristics

Approximately 40% Black or African American and 60% Non-Black and Black Hispanic or Latino.
Predominantly low income community

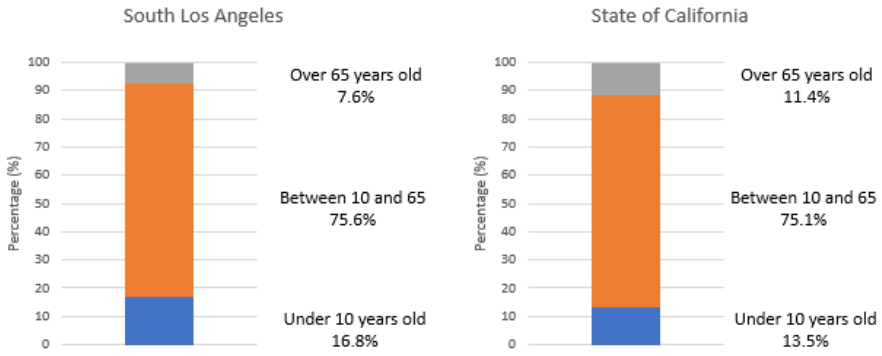
Figure 1-5: Population by Race/Ethnicity in South Los Angeles and the State of California, based on 2010 Census



According to the 2010 Census, approximately 904,000 people live within the SLA boundary: approximately 65 percent are Hispanic or Latino, 29 percent are African American, and 2.4 percent are White (Figure 1-5).[1] Sensitive receptors are young children (under 10 years old) and older adults (over 65 years old) and can be more sensitive to air pollution's health effects. The population in this community is younger than the average California population, with about 16.8% of children under the age of 10 years and 7.6% adults over the age of 65 years versus the state which has 13.5% and 11.4%, respectively (Figure 1-6).

Figure 1-6: Age Profile in South Los Angeles and the State of California, based on 2010 Census

[1] Definitions of races are the same as version 3.0 of the California Communities Environmental Health Screening Tool (CalEnviroScreen 3.0), https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



Air Quality Profile

South Central Los Angeles communities are breathing some of the most polluted air in California and the country. Approximately half of census tracts in the community score in the 93rd percentile for Particulate Matter 2.5, and the remaining score in the 82nd percentile. The majority of the community scores in the 79th percentile for diesel and 53rd percentile for ozone.2 While state databases, alongside numerous studies, reveal the presence of all six criteria air pollutants regulated by the EPA in South Central LA (i.e., particulate pollution, ground-level ozone, lead, carbon monoxide, nitrogen oxides and sulfur oxides),

Pollution Sources/Pollutants of concern

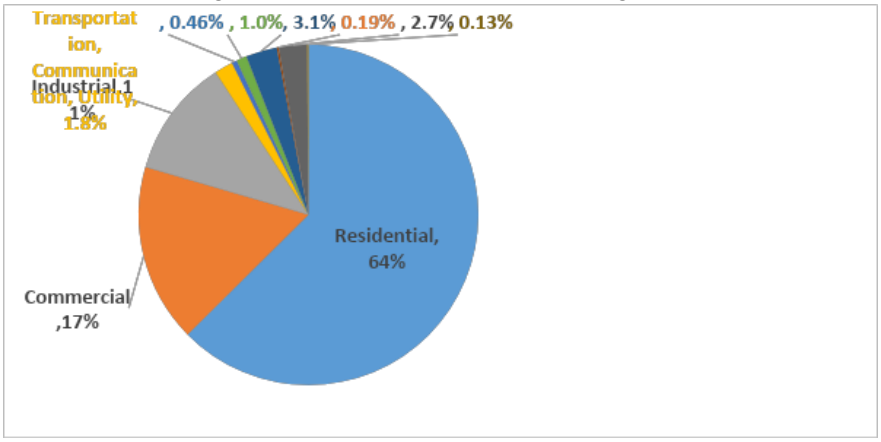
Add CalEnviroScreen Maps with air quality data

Community Land Use Profile

The SLA community boundary includes a land area of 63.5 square miles; about 64% of this land area is used for residential living, 17% is zoned for commercial uses, 11% is zoned for industrial uses, and 1.8% is used for freeways, roadways, and utilities and communications services (Figure 3a-2).[1]

[1] Land use refers to how certain areas of land are classified for development and use. Land use data is often used for city or county planning, such as the placement of housing developments and transportation hubs. Land use data is derived from the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy, which is based on 2012 data.

Figure 3a-2: Land Use Profile in South Los Angeles*



* Values may not sum to 100% due to rounding.

Air quality is intrinsically linked to land-use patterns where the designation of land often dictates the type of industry located there. Historically city planning did not prioritize the separation of hazardous land uses from sensitive populations. As such, the result is clusters of incompatible land uses that are disproportionately concentrated in South LA. In 2013, more than 21,000 Southeast LA residents lived within 500 feet of a major truck route and other unwanted land uses, such as manufacturing, oil refining and chemical plants.

Add infographic of a list of key stationary sources with associated pollutants of concern, and assigned regulatory program

Commented [6]: make sure the assigned regulatory programs have descriptions so it doesn't just say "rule_"

Add Map of mobile sources of concern - highlighting the major high volume highways, and if known add major truck routes that are criss-crossing the community, and also railyards.

After finalizing the community boundary, the CSC discussed their air quality concerns and identified a set of air quality priorities. The CSC built consensus to determine the top air quality priorities and the actions necessary to address them. The top air quality priorities for the SLA community are:

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

The actions to address each air quality priority are described in Chapter 5.

Add a Map for each pollution source of concern - identified by CSC.

Health Profile

- Add health indicators
- Asthma rates
- Cardiovascular
- Cancer risk - Mates IV
- Add CalEnviroScreen Health maps

Cumulative Burden

South LA census tracts consistently and overwhelmingly score in the top 5-10% of the most vulnerable communities, according to CalEnviroScreen 3.0

- Add maps

Community Impacts from the Community Perspective

While this section provides an overview of the SLA community, the community members make this community unique and distinct. Community members bring intimate familiarity with their community and the air quality concerns that affect their neighborhood. Below is a community voice that describes their community.

Community Co-leads
PSR-LA

"To transform the legacy environmental racism in the community of South LA, we must focus on delivering real emissions reductions and aim at moving upstream policy solutions that prioritize improving the quality of lives for South Los Angeles residents, we must also transform the practices of the agencies meant to clean our air.
-Martha Dina Arguello, PSR-LA AB617 CSC Co-lead

"South LA communities continue to experience the health impacts of legacy air pollution and cannot wait any longer for real solutions that tackle the root causes of pollution burden and get to tangible emissions reduction . We need to start moving community driven solutions that are rooted in the Environmental Justice and precautionary principles and can support a just transition towards clean production for a thriving and healthier South LA"
- Paula Torrado Plazas, PSR-LA SLA AB617 CSC Co-lead

"My community is in jeopardy of extinction. Our children are experiencing health disparities at an alarming rate. Governmental agencies are always testing, running experiments in our neighborhoods and not providing solutions to the issues that are discovered. Just giving themselves ammunition for the next grant opportunity. Our lives are not valued. It's always about the quick fix or finding room for the next bandaid. EJ advocacy has turned into one big joke for the systemic systems that are ingrained into society Lord help us! Just tired of our Community being lab rats."
-Linda Cleveland, Watts Clean Air and Energy Committee, AB617 CSC Co-Lead

"Climate change is real and the sooner we incorporate citizen science and engagement, coordinated strategies and inclusive timelines and efforts across intergovernmental relations and communication, and fill the gaps of process, technology and access to ground truthing and resources that mirror best practice, only then will communities become a healthy biodiverse ecosystem where the human right to breath air can live and increase the quality of life for residents."
-Jacquelyn Badejo, Watts Clean Air and Energy Committee, AB617 SLA CSC Co-lead

"The South Los Angeles community should have the opportunity to breath clean free air. So as a resident, a business, and a church, we have the responsibility to clear the air. Let's live futuristic in a healthier and safe environment."

- Pastor Patricia Strong-Fargas, Resident of South Los Angeles

Chapter 3b: Emissions and Source Attribution

Introduction

Chapter 3B Highlights

- Information about the sources of air pollution in this community is presented in a "source attribution" analysis
- Diesel particulate matter is currently the main air toxic pollutant in this community, and it comes mostly from on-road and off-road mobile sources
- Other key air toxic pollutants in this community are 1,3-butadiene and benzene
- In future years, diesel emissions will decrease substantially due to ongoing and newly proposed regulations, but these emissions continue to be the main driver of air toxics cancer risk in this community

The Community Emission Reduction Plan (CERP) identifies air quality priorities based on community input and evaluation of technical data on emission sources in the community. The CERP defines actions and strategies to reduce the emissions and exposure burden from sources of criteria air pollutants and toxic air contaminants. To accurately determine emission reductions from these actions and strategies, a baseline reference needs to be established. The baseline reference can be achieved through an emissions inventory that includes an accounting of sources and their resulting emissions. This rigorous accounting of sources, their emissions and their contribution to cumulative exposure burden is what the CARB guidelines identify as a source attribution analysis. Per the direction of CARB guidelines, source attribution is required to meet the following AB 617 statutory requirements:

California Health and Safety Code § 44391.2 (b) (2) directs CARB to provide "[a] methodology for assessing and identifying the contributing sources or categories of sources, including, but not limited to, stationary and mobile sources, and an estimate of their relative contribution to elevated exposure to air pollution in impacted communities…"

The emissions inventory presented here is consistent with CARB recommendations for conducting a source attribution analysis. This approach is considered best for the South Los Angeles (SLA) community based on the availability of data and resources. Also, it includes an emphasis on identifying sources within the community. More information on source attribution methods is included in the Source Attribution Methodology report.[1] The most recent

[1] Methodology for Source Attribution Analyses for the first year AB 617 Communities in the South Coast Air Basin (Technical Report), 2019, http://www.aqmd.gov/docs/default-source/ab-617-ab-134/technical-advisory-group/source-attribution-methodology.pdf

Commented [1]: overall this is a very confusing chapter that does not flow well. seems like all sources are cramped together in long paragraphs and is really hard to follow. sources attribution should be separated by specific sources and then by pollutants. comparisons made pollutant to other pollutant are not clear. the future emissions projections graphs are not intuitive. technical language needs to be explained. programs, legislations, rules, and reports referenced here need to be further explained. Also, the lack of graphics and visuals makes this an even harder read. Refer to west Oakland plan pages 55 to 65

Commented [2]: I am not sure about the statement in the 3rd bullet, how do we know they will decrease and by how much? it seems vague to add that without knowing the baseline

Commented [3]: clarify how much (if any) of this emissions inventory uses measurements of air pollution

Commented [4]: Agreed to all of the comments.

Commented [5]: is this necessary to add?

Commented [6]: I don't understand this statement.

comprehensive air quality and toxics modeling analysis in the region was conducted as part of the fifth Multiple Air Toxics Exposure Study (MATES V)[2] released in August 2021.

This study showed Diesel Particulate Matter (DPM) was the air pollutant that contributed most to air toxics cancer risks in the South Coast AQMD.

There are areas within the SLA community with significantly higher air toxics cancer risks compared to the average of the Basin. Air toxics cancer risks in SLA range from about 435 per million to about 700 per million, while the average across the Basin is about 455 per million.

Can this be broken down into sections - mobile sources, and stationary sources emissions? its a difficult read as it is.

Sources of air pollution

- Mobile sources
- Stationary sources

Permitted facilities:

- Auto Body Shops
- General Industrial Facilities
- Metal Processing Facilities
- Oil and Gas Industry

Pollutants of Concern and Community Impacts Background

- Criteria air pollutants
  - PM - PM 2.5, PM10, and DPM
  - NOX
  - Ozone
- Air Toxics
  - BTEX
  - VOC's
  - Hexavalent Chromium
  - Lead

Commented [7]: Highlight this more - make it into a graphic that is more visual

Commented [8]: and show the Mates vs the CalEnviro Screen DPM maps of South LA

Commented [9]: a map with details about why (more freeways & trucks? big facilities?) would be helpful to illustrate this point

Commented [10]: I think this needs to further explained - more visually explained perhaps with a graphic -what is a cancer risk of 435 per million mean - perhaps make a comparison or show what an "acceptable risk" is 1 in 1,000,000

Commented [11]: further explain mobile sources and CARB's authority

Commented [12]: further explained permitted facilities and local air districts' role

Commented [13]: explain each further, and with graphics

Commented [14]: explain EPA NAAQS

Commented [15]: and thresholds for each

[2] The Multiple Air Toxics Exposure Study V (MATES V), August 2019, http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v

New Header: Emissions Sources Attribution Background

- Add table distinguishing Mobile sources / stationary sources in SLA

New Header: Mobile Sources Emissions Attribution

The SLA community contains many known sources of air pollution, including the I-10, I-110, I-105 and I-710 freeways and the Alameda Corridor rail line. The community also includes a wide range of industrial facilities, including those that conduct metal processing, surface coatings, auto body shops, and warehousing that attracts heavy-duty truck traffic. The source attribution analysis (discussed in the next section) highlights that in the year 2019, DPM had the highest contribution to the community's overall air toxics inventory. On-road and off-road mobile sources were the predominant sources of DPM, with the major contributors being off-road diesel equipment, heavy duty trucks, and trains.

In this community, 1,3-butadiene is the second largest contributor, which is largely emitted from gasoline-powered mobile sources and from the chemical and plastics industry. Projected emissions in future years show decreases in DPM emissions, although DPM continues to be the main contributor to the cancer risk.

In this community, on-road mobile sources are the largest emitters of NOx, with heavy-duty trucks being the largest contributor. Off-road mobile sources are the second largest contributor to NOx and include off-road equipment and trains.

Mobile sources contribute to the remaining third of the VOC emissions, with light-duty vehicle exhaust and evaporative emissions being the largest contributor.

The following sections provide more details on the main sources of criteria pollutants and air toxics in the community.

Base Year Emissions Inventory and Source Attribution

A variety of sources contribute to the emissions of criteria pollutants in the SLA community (**Figure 3b-1**, **Figure 3b-2**, **Figure 3b-3**). ~~Emissions of nitrogen oxides (NOx) are related to combustion sources and are an important contributor to the regional formation of ozone and particulate matter with a diameter of 2.5 micrometers or smaller (PM2.5).~~

New Header: Stationary Sources Emissions Attribution

Commented [16]: explain nuisance that the emissions inventories are self reported by industries which can contribute to data gaps and it does not include permitted small sources of pollution that are not required to report emissions - which can contribute to missed data and mischaracterization of air pollution levels.

Commented [17]: similar to West Oakland CERP - page 47 - 50 https://www.baaqmd.gov/~/media/files/ab617-community-health/west-oakland/100219-files/final-plan-vol-1-100219-pdf.pdf?la=en

Commented [18]: add images of these

Commented [19]: also break down paragraphs, some are really long and important information is lost

Commented [20]: I think it would be helpful if "on-road" and "off road" were defined with specific examples

Commented [21]: make this pop up more - a graphic

Commented [22]: Why? if this is not going to be further explained, then better not to add it

Commented [23]: moved this to the mobile sources attribution section

Commented [24]: moved this up

Commented [25]: I think it might make for an easier read if the sources each had their own section instead of having them all in this one large section. That way, each source has a little more focus and gives more space for specific data

Commented [26]: I don't understand this title

Commented [27]: move this up to the section Pollutants of Concern and Community Impacts Background

Stationary sources of NOx are mainly from fuel combustion in industrial activities and for space and water heating at commercial businesses and homes.

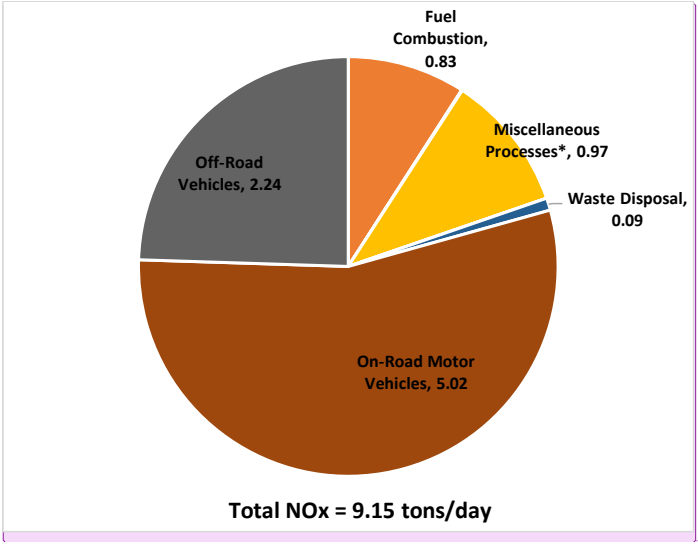
Area sources[3] contribute to two thirds of volatile organic compound (VOC) emissions. VOCs include a broad array of different pollutants, some of which are toxic, but also broadly contribute to regional ozone and PM2.5 formation. Solvent evaporation (mostly from consumer products and architectural coatings), and emissions from processes related to cleaning and surface coatings are the largest contributors in the SLA community.

Commented [28]: what are these? explain or add visuals

Area and stationary point sources are also the largest contributors to PM2.5 emissions. Commercial cooking, fuel combustion in residential, commercial and industrial sectors, and manufacturing are the major stationary sources. PM2.5 is also emitted from vehicle exhaust and tire and brake wear. Paved road dust is also related to vehicles traveling on roads but is considered as a stationary area source and included in the "Miscellaneous" category.

Commented [29]: visuals

Figure 3b-1: Contribution of Major Source Categories to Nitrogen Oxides (NOx) Emissions in the SLA Community in 2019 (tons/day)

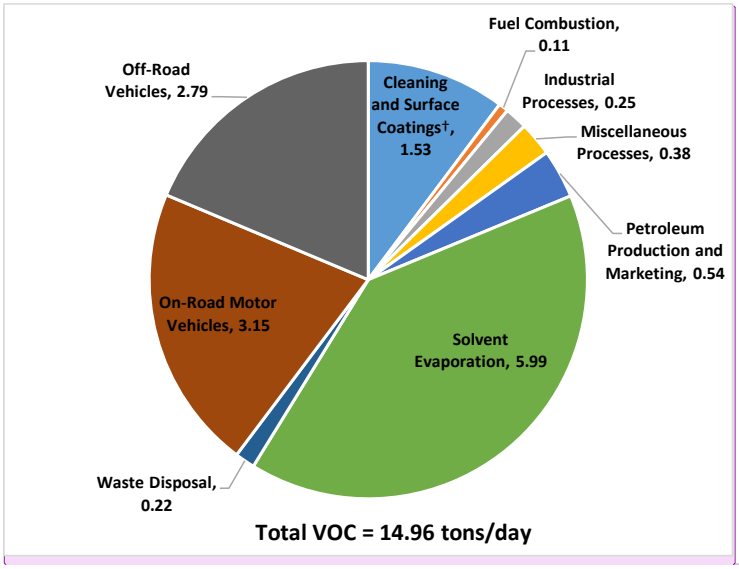


Commented [30]: Maybe a bar graph will be easier to understand

*Miscellaneous Processes include non-combustion sources (e.g., road and construction dust)

[3] Area sources includes emission sources used in many unspecified locations across a community, like residential fuel combustion (like natural gas-fired water heaters, stoves, or gas-power lawn and garden equipment, etc.) and consumer products (for example personal care products like hairspray), etc.

Figure 3b-2: Contribution of Major Source Categories to Volatile Organic Compound (VOC) Emissions in the SLA Community in 2019 (tons/day)

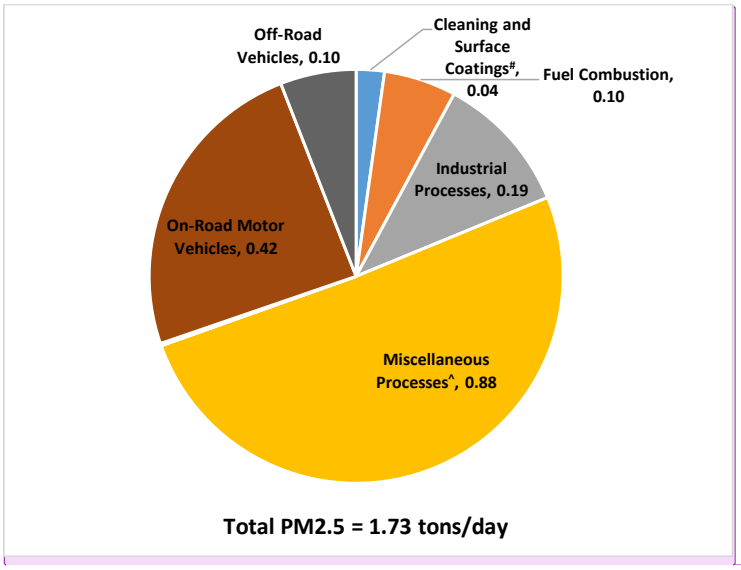


†Cleaning and surface coatings includes laundering, degreasing, coatings and related process solvents, and adhesives and sealants. Solvent evaporation is about 95% consumer products, and the rest is architectural coatings and other smaller sources.

Commented [31]: this visual and the following visual regarding PM2.5 emissions should be side-by-side

Commented [32]: bar graph

Figure 3b-3: Contribution of Major Source Categories to Particulate Matter 2.5 (PM2.5) Emissions in the SLA Community in 2019 (tons/day)



#PM2.5 from cleaning and surface coatings include auto body shop type of sources (e.g., auto refinishing and metal coatings).
^Miscellaneous processes include non-combustion sources like road and construction dust.

New header: Toxic Air Contaminants Emissions

Toxic air contaminant emissions from the largest point sources in the community were compiled from the emissions reported by facilities to South Coast AQMD's Annual Emissions Reporting program. Toxic air contaminant emissions from all other stationary, area, on-road, and off-road sources were calculated using chemical speciation profiles applied to Total Suspended Particulate matter (TSP) and Total Organic Gas (TOG) emissions. Details on the chemical speciation profiles are described in the Source Attribution Methodology report[4].

In total, 21 toxic air contaminants were analyzed and included in this report. This list of toxic air contaminants is consistent with the list of toxic air contaminants that facilities are required to report under the South Coast AQMD Annual Emissions Reporting (AER) and AB2588 Air Toxics Hot Spots programs, except chlorofluorocarbons and ammonia. Chlorofluorocarbons are not considered to have toxic effects on human health, whereas ammonia is included in the criteria air pollutant inventory due to its importance as a PM precursor.

[4] Methodology for Source Attribution Analyses for the first year AB 617 Communities in the South Coast Air Basin. Available at: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/technical-advisory-group/source-attribution-methodology.pdf

Commented [33]: bar graph

Commented [34]: include a map or some kind of accounting of these sources. how many, where, what kind, etc.

Commented [35]: This is a highly limited dataset, which includes only large facilities and emitters. Based on AQMD's own facility permitting data, we know there are dozens of smaller facilities (e.g. auto body shops, electroplating facilities) and several larger facilities (e.g. metal recycling facilities) which are not required to report emissions to AQMD. This lack of data, and the significant limitations of using only AER data to estimate air toxic levels, needs to be highlighted in this section.

Commented [36]: Add maps of these facilities. Add maps in general. It would be helpful to know where AQMD estimates emissions are coming from/concentrated, compared to community concerns & permitting data. It would also be useful to compare those maps now to maps produced at the conclusion of AB617 emissions reductions activities, to show whether/how emissions were reduced

Commented [37]: what is this? further explain it in with accessible language

Commented [38]: if you are citing programs/ legislation then further explain them, think of your audience - community member wont know what this is - make this CERP as accessible as possible

Commented [39]: why is this important?

The contribution from major emission categories to toxic air contaminant emissions in the SLA community are presented in **Figure 3b-4**. Note that the emissions in the figure are weighted based on the inhalation toxicity of each toxic air contaminant relative to diesel PM (DPM), following the methodology described in the Source Attribution Methodology report.[4]

For example, the cancer potency of hexavalent chromium is approximately 464 times higher than the cancer potency of DPM per unit of mass. Thus, hexavalent chromium emissions are multiplied by 464 to estimate the cancer potency-weighted emissions of hexavalent chromium. The units in the toxicity-weighted DPM-equivalent emissions are expressed in pounds per day (lbs/day). This weighting approach enables a comparison of the contribution of each toxic air contaminant to overall toxicity using a consistent scale.

Figure 3b-4 indicates that DPM is the largest contributor to the overall air toxics cancer risk in the community, followed by 1,3-butadiene, benzene, formaldehyde and hexavalent chromium.

Figure 3b-4 also indicates the major source categories from which the five toxic air contaminants originate.

Most of the DPM is emitted from mobile sources (on-road and off-road vehicles). Also, mobile sources are the major contributor to all the other major toxic air contaminants: 1,3 butadiene, benzene, formaldehyde and hexavalent chromium.

Plastic production in the chemical industry is another major contributor to 1,3-butadiene, whereas fuel combustion in industrial, commercial, and residential sectors contribute to benzene and formaldehyde emissions.

Industrial activities related to laundering, degreasing and coatings contribute to emissions of methylene chloride, perchloroethylene and cadmium, represented in the 'Other' category in **Figure 3b-4**. A detailed emission inventory by major source category is provided in the Appendix 3b: Source Attribution Analysis.

Commented [40]: what is this report that you keep referring to, seems important but i dont understand it

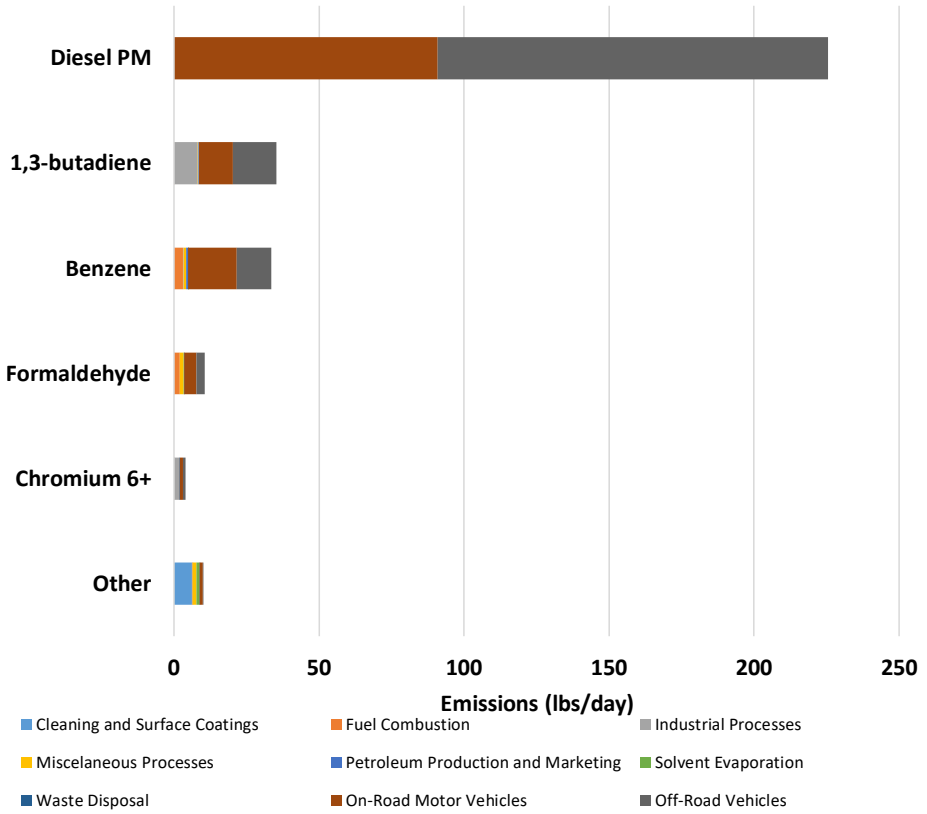
Commented [41]: I really dont understand this

Commented [42]: make this a graph - and explain what Hexavalent chromium is - if you are introducing new terms into the CERP then always explain them

Commented [43]: is this important for the CERP? lets avoid such technical details - how can you summarize this in community accessible language, if you cant, then is not needed

Commented [44]: broken down parragraphs

Figure 3b-4: South Los Angeles Community Toxic Air Contaminants Emissions (toxicity-weighted diesel equivalent) in 2019



Commented [45]: Fix chart

Future Year Emissions Inventory and Source Attribution

Future emissions of criteria pollutants and toxic air contaminants in the SLA community are projected using the best available information for population growth, economic growth and emission adjustments that reflect the ongoing implementation of existing regulations. The estimates shown here do not reflect the potential impact of any new programs or measures not yet approved, and/or included in the CERP for SLA. The community includes a variety of facilities subject to rules targeting toxic emissions. Furthermore, on-road DPM emissions from heavy-duty diesel vehicles in this community are subject to California Air Resources Board's Truck and Bus Regulation.[5] Off-road diesel equipment is also subject to state regulations that will reduce DPM and NOx emissions and the South Coast AQMD has also developed and implemented various regulations and programs to reduce NOx and VOC emissions from stationary and mobile sources. A detailed emission inventory by major source category for future years is provided in the Appendix 3b.

Figure 3b-5 presents the projected trend in major criteria air pollutant emissions (NOx, VOC and PM2.5) in the SLA community from 2019 to the two milestone years, 2026 and 2031. NOx emissions in the community are expected to decrease substantially between 2019 and 2031, due to the existing regulations and programs for mobile and stationary sources. The emission reduction commitments under the South Coast AQMD RECLAIM program that covers the largest stationary NOx sources are expected to bring a significant amount of NOx reductions as well. VOC emissions are also expected to decrease between the years 2019 and 2031, mostly due to cleaner vehicle emissions. Unlike NOx and VOC emissions, PM2.5 emissions remain virtually unchanged during the period from 2019 to 2031, reflecting that growth in population and economic activities offsets the reductions in on-road and off-road mobile sources due to regulations.

Trends for toxic air contaminant emissions are shown in **Figure 3b-6**.

- Diesel PM continues to dominate the toxic air contaminants emission inventory in future years, despite a significant reduction in DPM from heavy-duty trucks.
- DPM is expected to decrease by 61% from 2019 through 2031.
- The second largest contributor to air toxics is 1,3-butadiene, with emissions anticipated to decrease due to reductions from vehicles.
- Benzene and formaldehyde emissions are also expected to decrease throughout the 12-year period due to overall emission reductions from vehicles
- Hexavalent chromium emissions decreases from 2019 to 2031 are expected due to a decrease in vehicle emissions that is partially offset by a slight increase in industrial emissions.
- Emissions of perchloroethylene, methylene chloride and cadmium are not expected to change much.

It is important to note that many of the South Coast AQMD regulations addressing toxic metal emissions from industrial facilities (e.g., South Coast AQMD Rule 1407.1 and Rule 1469) include

[5] CARB Truck and Bus Regulation, https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation/about

Commented [46]: is this referring to future emissions without the CERP?

Commented [47]: what is this, what does it do, how does it work?

Commented [48]: redflag - this program is failing for the south coast it operates similarly to cap and trade and turns into potentially more emissions, is an industry hand out, and does little to address local impacts and improve air quality.

Commented [49]: how?

Commented [50]: so no projected reductions? make it more clear and less fluff

Commented [51]: explain why

Commented [52]: fewer vehicles? new technology?

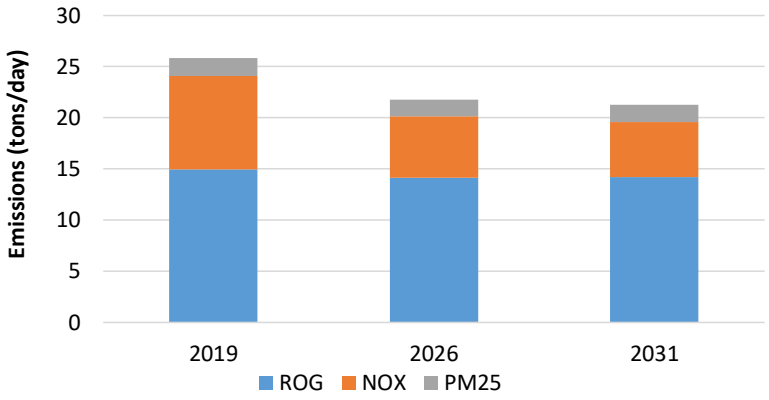
Commented [53]: new tech?

Commented [54]: where does this estimate come from?

Commented [55]: these rules need to be summarized or defined

requirements to reduce fugitive metal toxic particulate emissions from these facilities. Fugitive metal particulate emissions can make up the majority of the toxic metal emissions from a metal processing facility but are often difficult to quantify due to a lack of accepted emission estimation methods. Therefore, while the inventories shown here may not illustrate an overall decrease in toxic metal emissions, the regulations are expected to result in overall decreased emissions due to reductions in fugitive emissions. The analysis presented in this section is a regional analysis evaluating total toxic air contaminant emissions. This analysis is different than a localized health risk assessment which takes into account specific parameters about the emission sources within a facility and the proximity and types of receptors around the facility.

Figure 3b-5: Community Total Emission Trends for NOx, VOC, and PM2.5 (tons/day) for the Year of 2019, 2026, and 2031



Commented [56]: which facilities?

Commented [57]: Does this paragraph need a new header for fugitive emissions?

Commented [58]: could be more visually appealing with the numerical data listed in the graph. For example have the number 15 in the 2019 blue section - this could be done for all of the graphs

Figure 3b-6: Total Emission Trends for Toxic Air Contaminants in SLA (Cancer Potency-Weighted Diesel-Equivalent Emissions, lbs/day) for the Year of 2019, 2026, and 2031

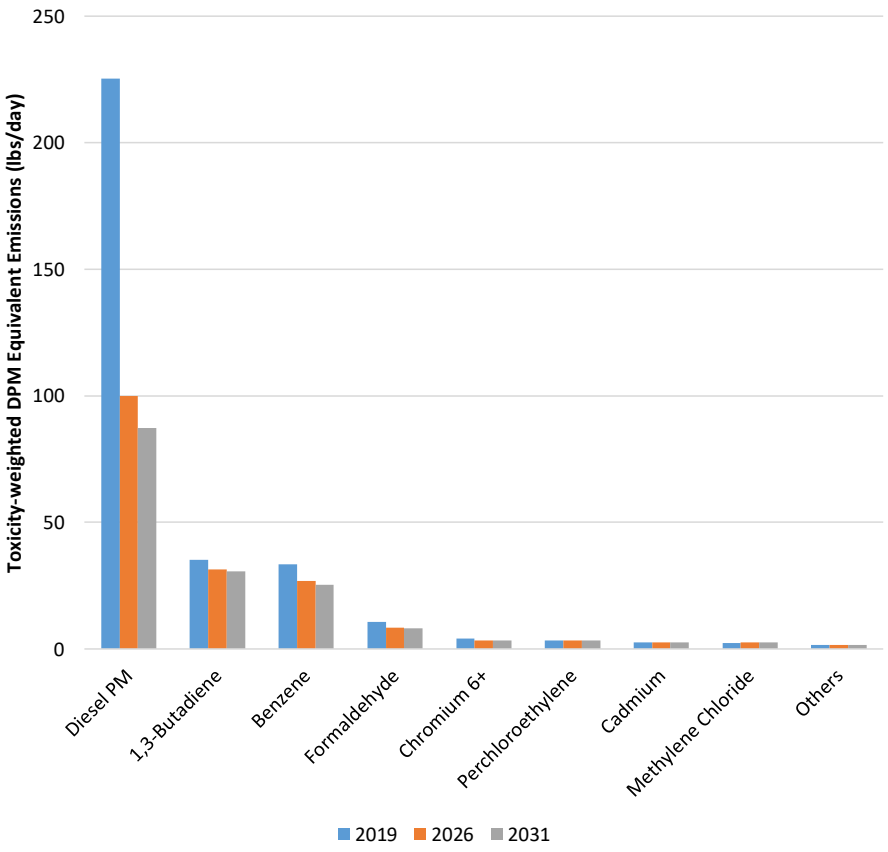
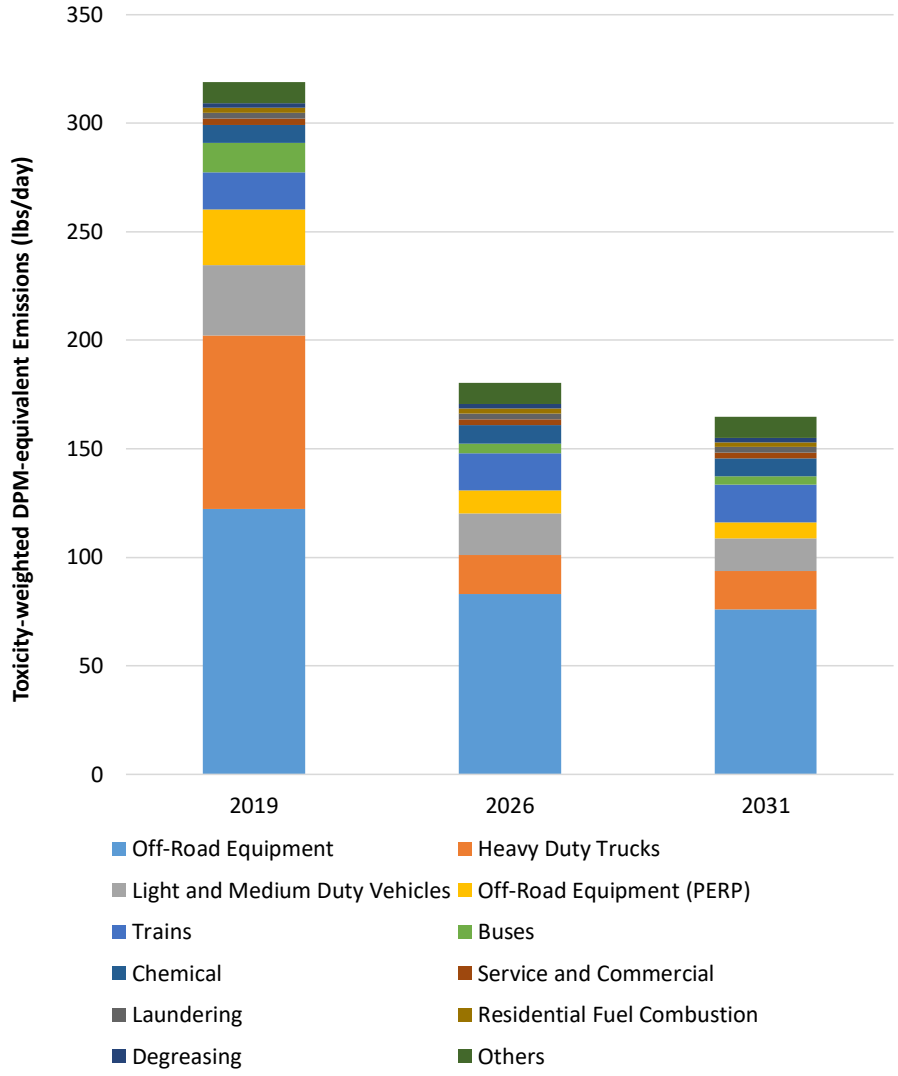


Figure 3b-7 presents the total toxic air contaminant emissions by the major emission categories for the three years of interest. The overall toxicity-weighted emissions decrease between 2019 and 2031. In particular, emissions from diesel heavy-duty trucks and off-road equipment are expected to decrease substantially over the 12-year period, reducing the overall toxic air contaminant emissions. While emissions of toxic air contaminants from mobile sources are expected to decrease over time, emissions from stationary sources in large facilities can still affect the nearby population, if these emissions are not remediated.

Figure 3b-7: Toxic Air Contaminant Emissions from All Sources in the SLA Community, Shown by Major Categories



Commented [59]: This is just not true, given AER includes only large facilities

Summary

The main sources of air pollutant emissions in the SLA community are on-road vehicles, trains, off-road equipment, and industrial activities.

Commented [60]: this should be stated in the introduction somewhere

NO_x emissions in this community are dominated by mobile sources – both on-road and off-road – which account for 79% of the total emissions in 2019. Heavy-duty truck traffic and off-road equipment are the largest sources for NOx. Stationary sources contribute to 21% of NOx emissions in this community, mostly from fuel combustion in the residential, commercial, and industrial sectors.

VOC emissions are dominated by area sources, with consumer products such as evaporation from solvents and cleaning supplies being the largest source. Passenger vehicles and off-road equipment such as lawn mowers and other small gasoline engines, are the largest contributors to VOC emissions from on-road and off-road sources, respectively.

Unlike NOx and VOC, sources of PM2.5 emissions span through a wide variety of activity sectors, which include commercial cooking, light- and medium-duty automobiles, fuel combustion, paved road dust, and wood and paper industries.

Toxic air contaminant emissions in the SLA community are dominated by diesel particulate matter (DPM). Major sources of DPM in this community are off-road equipment, heavy-duty trucks, trains, and buses. 1,3 butadiene is the second largest toxic air contaminant based on cancer potency-weighted emissions, and the major sources are gasoline combustion in on-road and off-road vehicles and plastic production. Other significant toxic air contaminant species includes benzene and formaldehyde, which are mostly emitted from mobile sources. Hexavalent Chromium, which is mostly emitted from metal processing facilities, is identified to have the fifth highest contribution to the community's total cancer-potency weighted toxic air contaminant emissions.

1. Future NOx emissions in the community are expected to decrease due to the existing regulations and programs on mobile and stationary sources.
2. VOC emissions are also expected to decline, although they will decline at a slower rate compared to NOx.
3. The increase in the VOC emissions is driven by the growth in consumer products and small off-road equipment, both of which are tied with population growth. In particular, emissions in consumer products are expected to increase significantly.
4. On the other side, most NOx emissions are from on-road and off-road mobile sources, which have regulations in place to reduce emissions in future years.
5. Emissions of DPM from heavy-duty trucks are also expected to decrease due to ongoing implementation of regulations (e.g., Truck and Bus regulation, In-Use Off-Road Diesel-Fueled Fleets regulation) and incentive programs to expedite turning over to cleaner trucks.
6. Emissions of 1,3-butadiene, benzene, formaldehyde, and hexavalent chromium are also expected to decrease due to overall reductions of vehicle emissions.
7. Despite the projected reductions in DPM over the next decade, DPM continues to be the main contributor to air toxics cancer risk in this community.

Commented [61]: would like a map to illustrate where

Commented [62]: again, map these data

Commented [63]: We need real projections on how much these pollutants will decrease

Chapter 4: Enforcement Overview and History

Introduction

This chapter describes the enforcement history and overall approach to enforcement by South Coast Air Quality Management District (South Coast AQMD) and California Air Resources Board (CARB). In addition, the Community Emissions Reduction Plan (CERP) includes focused enforcement actions, which are described in Chapter 5: Actions to Reduce Community Air Pollution. Both CARB and South Coast AQMD regulate and enforce air pollution laws and have the authority to conduct inspections of air pollution sources, and issue violations that can lead to penalties.[1]

Chapter 4 Highlights

From 2018 through 2021, in the South Los Angeles (SLA) area, CARB conducted over 300 inspections and addressed approximately 60 complaints; and South Coast AQMD conducted approximately 765 inspections and responded to approximately 3,034 complaints.

Both CARB and South Coast AQMD have designed their programs to most effectively address sources within their respective jurisdictions.

The enforcement approach for SLA utilizes specialized program structures, outreach efforts in the community, use of technology, and interagency partnerships which can lead to increased compliance and further emission reductions.

An air pollution source can be a specific piece of equipment or a process, a business, a government agency, or any other entity that creates air pollution. CARB is primarily responsible for enforcement of trucks, buses, and other mobile sources, while South Coast AQMD is primarily responsible for enforcement relating to stationary sources (e.g., facilities).[2] Additionally, South Coast AQMD has jurisdiction over indirect sources, which are fixed locations that attract mobile sources such as a shopping center, warehouse, or port.

New header: Enforcement goals and background

Include the following:

- Enforcement background
  - Permitted Sources
  - Inspections
  - Compliance
    - NOC/NOVs

[1] More information about penalties will be provided in the Enforcement Appendix 4.

[2] In some cases, CARB may have agreements that give local air districts delegated authority to enforce a particular CARB rule. For example, South Coast AQMD has an agreement with CARB to be able to enforce CARB's greenhouse gas standards.

Commented [1]: overall feedback: missing inspections rate and how it leads to enforcement, how the process of inspections to enforcement work, more information on NOC/NOVs vs complaints and inspections is needed to better understand the state of enforcement in SLA

Commented [2]: I understand the numbers in bullet 1 are important, but I feel like these don't really say much - like what do these numbers mean is that good in terms of inspections, what are we aiming for in terms of inspections in a year and if there were 300 inspections how many of those led to enforcement, how many NOC/NOVs would be a better highlight. and I also don't know what "responding" to 3k+ complaints mean, what are those complaints and what are those responses. Again the numbers don't say much.
Also, the second bullet does not say anything to me that is worth highlighting.

Commented [3]: A chart may be easier to read - to show different authorities/enforcement application

Commented [4]: I think it could be beneficial to have a section discussing the overall goal of the enforcement program the history of both CARB and AQMD's history of enforcement so community members can distinguish between what CARB does and what AQMD does, before jumping into the "complaints" section - Giovanna

- SCAQMD vs CARB enforcement programs
- Mobile Sources Enforcement
- Stationary Sources

Table 4-1: South Coast AQMD Summary of Compliance Activities by Community Concern from 2018 through 2021[3]

Community Concern	# of Facilities	# of Inspections[4]	# of Complaints[5]	# of Notices of Violation (NOVs)	# of Notices to Comply (NCs)
Oil and Gas	19	41	80	13	11
Mobile Sources (Truck Idling)	N/A	0	17	0	0
General Industrial[6]	353	413	50	153	168
Auto Body Shops	89	57	8	12	68
Metals	69	197	3	26	65

South Coast AQMD enforces CARB's truck idling rule. **Table 4-1** describes South Coast AQMD's compliance activities in SLA. For mobile sources, the focus of South Coast AQMD's efforts within SLA has been to respond to idling complaints. While South Coast AQMD has not received a significant number of idling truck complaints in SLA, there were 17 complaints received between 2018 through 2021. While compliance with the idling rules tends to be high, all South Coast AQMD AB 617 Community Steering Committees (CSCs) consistently identify idling trucks as a source of air pollution concern within their community. Therefore, South Coast AQMD is committed to increasing enforcement efforts on idling trucks within these communities. In order to identify idling locations of concern, the CSC can help by sharing those locations with South Coast AQMD via telephone at 1-800-CUT-SMOG and by helping both South Coast AQMD and CARB with community outreach about CARB's idling rules.

Complaints

Air pollution concerns received directly from community members by way of public complaints are a very important source of information for South Coast AQMD. All complaints are assigned to an inspector for investigation, with priority for ongoing issues that are impacting the public.

[3] For the purposes of this chapter, the timeframe of "2018 through 2021" includes January 1, 2018, through December 31, 2021.

[4] These include staff-initiated inspections and surveillance, but not responses to facility notifications or complaints.

[5] Complaints where the source was confirmed to be a community concern.

[6] Includes inspections at Chemical, Dry Cleaners, Gas Stations, Manufacturing, Other Industrial, and Utility facilities.

Commented [5]: explain each of these further before jumping into compliance activities

Commented [6]: can this table be further explained? like what do these numbers mean. if there are 80 complaint for oil and gas and only 11 NOC's and NOVs then what is happening to enforcement? and only 41 inspections for the entire spam of 3 years, that is a real low inspections percentage for an industry as big as oil and gas, so what does this mean - a low inspections rate ?

Commented [7]: can this table be further explained? like what do these numbers mean. if there are 80 complaint for oil and gas and only 11 NOC's and NOVs then what is happening to enforcement? and only 41 inspections for the entire spam of 3 years, that is a real low inspections percentage for an industry as big as oil and gas, so what does this mean - a low inspections rate ?

Commented [8]: can this table be further explained? like what do these numbers mean. if there are 80 complaint for oil and gas and only 11 NOC's and NOVs then what is happening to enforcement? and only 41 inspections for the entire spam of 3 years, that is a real low inspections percentage for an industry as big as oil and gas, so what does this mean - a low inspections rate ?

Commented [9]: can this table be further explained? like what do these numbers mean. if there are 80 complaint for oil and gas and only 11 NOC's and NOVs then what is happening to enforcement? and only 41 inspections for the entire spam of 3 years, that is a real low inspections percentage for an industry as big as oil and gas, so what does this mean - a low inspections rate ?

Commented [10]: can this table be further explained? like what do these numbers mean. if there are 80 complaint for oil and gas and only 11 NOC's and NOVs then what is happening to enforcement? and only 41 inspections for the entire spam of 3 years, that is a real low inspections percentage for an industry as big as oil and gas, so what does this mean - a low inspections rate ?

Commented [11]: this is not enough, and places the burden on the community to get this complaints out so enforcement can happen. Perhaps yes community outreach combined with more regular inspections and incentives for retrofit technologies for fleet and school buses.

Commented [12]: I think this needs to be renamed. Maybe community feedback or something. It has a negative connotation with just calling it "complaints"

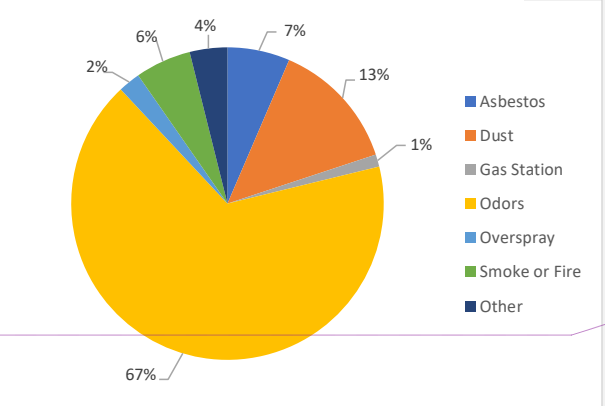
Commented [13]: They are called public complaints, so its okay if they have a negative connotation

Table 4-2 provides a summary of the complaints received within SLA and the surrounding community.

Table 4-2: Summary of Complaints Received within SLA and the Surrounding Community[7] from 2018 through 2021

Complaint Type	Number	Notice of Violation Issued	Notice to Comply Issued	Referred to Another Agency	No Enforcement Action Taken[8]
Asbestos	229	7	49	4	169
Dust	477	28	32	5	412
Gas Station	45	0	2	7	36
Odors	2369	284	27	12	2046
Overspray	81	1	6	4	70
Smoke or Fire	205	15	4	1	185
Other	138	9	6	7	116
Total	3544	344	126	40	3034

The most common type of complaints, as **Figure 4-1** indicates, are odor complaints. Due to the fleeting nature of odors, inspectors may not always be able to verify an odor or detect a source; and while this can be a frustration for community members, staff urges members of the community to call in a complaint on each occurrence. This strengthens the investigation and increases the likelihood that a source will ultimately be identified.



Commented [14]: maybe "amount" instead of "number"

Commented [15]: can this table be further explained? seems like its a high amount of complaints compared to number of NOC/NOVs - I wonder also how does this stand when compared to inspections - meaning how many inspections are conducted compared to complaints, to see if communities are being heard.

Commented [16]: seems like this is very oversimplified here, is not just that community members are frustrated, is that the systems of complaints is not working if enforcement is not happening . see table above - there are so many complaints compared to the number of enforcement actions.

Commented [17]: not sure that this is true, see above table.

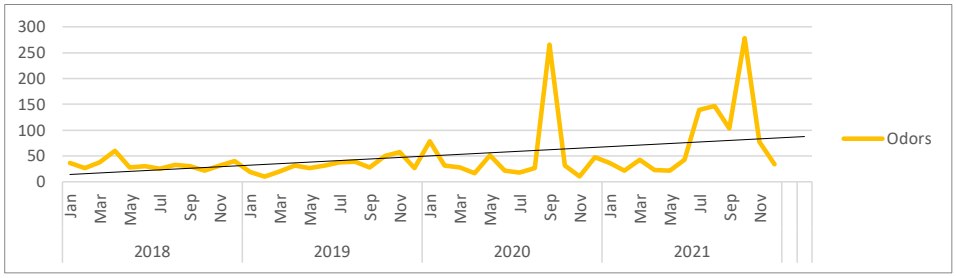
[7] The complaint information is based on the following Zip Codes: 90003, 90037, 90059, 90061, 90062, 90222, 90011, 90262, 90007, 90008, 90018, 90089, 90044, 90016, 90305, 90047, 90221, 90002, 90043, 90220, 90015, 90001, 90248, 90056, 90021, 90303, 90247, 90230, and 90058.

[8] "No Enforcement Action Taken" means that the complaint investigation has concluded but did not result in the issuance of a Notice of Violation or other formal enforcement action. For example, an alleged air pollution source may have been operating in compliance at the time of the inspection or the event underlying the complaint was no longer occurring.

Odor complaints have trended upwards over the years, potentially due to increased outreach efforts by South Coast AQMD and increased awareness by community members. However, as **Figure 4-2** indicates, complaint totals are often impacted by large odor events such as the spill of mercaptan (an odorant used for natural gas) that took place in Gardena in September 2020[9] and the Dominguez Channel Odor Event in October 2021.[10]

Commented [18]: does this mean that large odors events are making community members complain more? if that is the case, then just say that more clearly

Figure 4-2: Odor Complaints by Month within SLA



An important part of AB 617 is increasing community awareness of the tools that are available. Reporting complaints to both South Coast AQMD and CARB enables members of the public to play an active role in addressing air pollution concerns in their community. Both agencies rely on community input for identifying additional locations and sources of concern. Listed below are the best ways to contact South Coast AQMD and CARB:

Commented [19]: I think this needs to be more SLA centered, we have heard from CSC members - like Hugo Garcia - the frustrations community faces with reporting complaints, so I feel like this needs to be more transparent, nuisance, and reflective of what the CSC members have expressed

CARB
Mobile Sources & Idling Trucks

Online:
About the Environmental Complaint System

By Phone:
1(800)-END-SMOG
(1-800-363-7664)

South Coast AQMD
Facilities & Idling Trucks

Online:
File an Online Complaint

By Phone:
1(800)-CUT-SMOG
(1-800-288-7664)

[9] For more information regarding South Coast AQMD's investigation, please visit https://www.aqmd.gov/docs/default-source/news-archive/2020/NOVs-for-chemical-spill-compton-sept11-2020.pdf.

[10] For more information regarding the South Coast AQMD's investigation, please visit http://www.aqmd.gov/docs/default-source/news-archive/2021/5novs-for-elevated-hydrogen-sulfide-levels-dec3-2021.pdf.

When reporting air pollution complaints, it helps when you can share the Four W's:

What	Where	When	Who
What are you reporting? Odor, smoke, burning, idling truck?	Where did it occur? As specific of a location as possible	When did it occur? Date/time, and is it ongoing?	Who caused it, if you know?

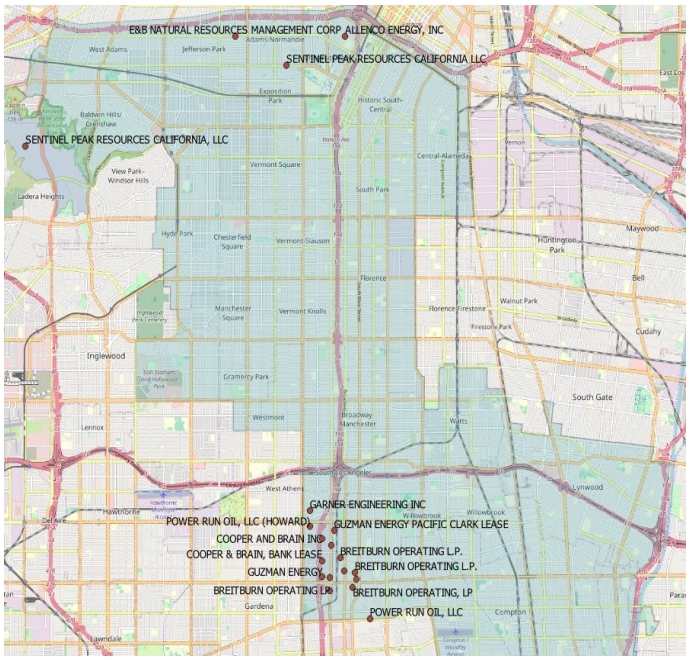
Typically, videos and photos cannot be the basis for South Coast AQMD and CARB to take enforcement action, but they can be helpful to the investigation. Of course, please always make sure that you are being safe.

- Oil and Gas Industry

Oil and gas facilities extract crude oil from underground and may also store the oil on-site. These facilities generally have permits for oil extraction, storage tanks, and wastewater equipment.

Commented [20]: add pictures of this

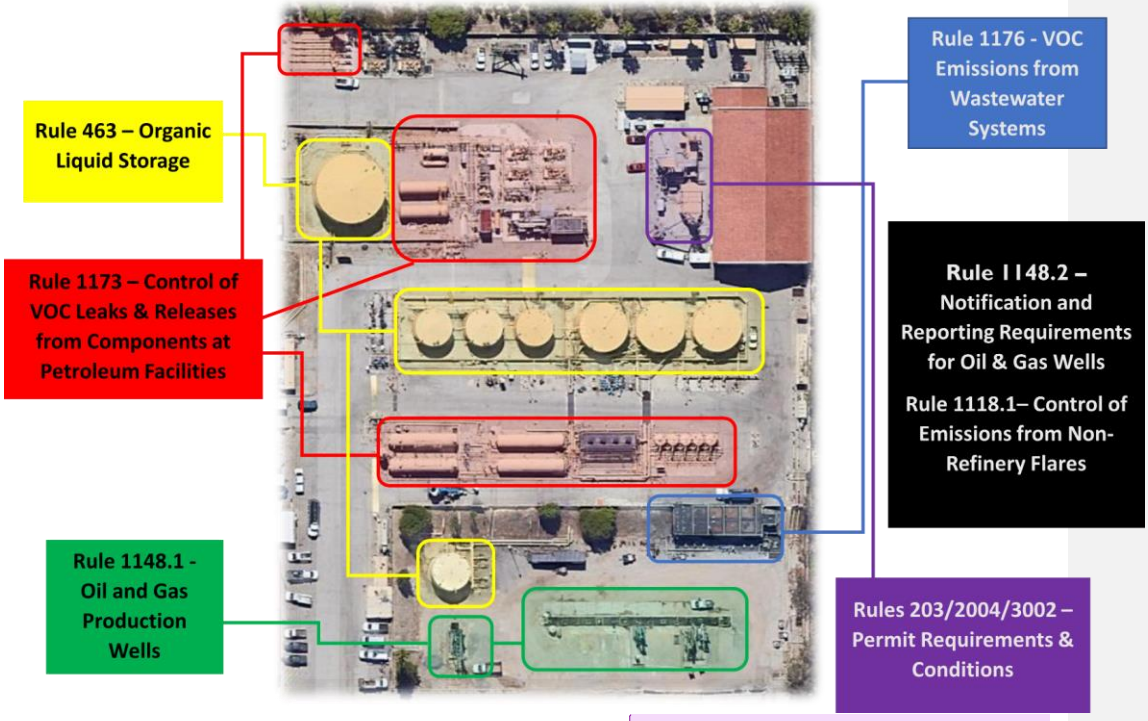
Figure 4-3: Map of Oil and Gas Facilities with Active South Coast AQMD Permits



Oil wells are inspected by South Coast AQMD's Energy Team. The Energy Team enforces the applicable regulations (**Figure 4-4**) using specialized equipment such as Optical Gas Imaging

cameras, T[illegible] these sites focus on i[illegible] detected

Figure 4-4: Rules Applicable to Oil and Gas Sites



inspectors take enforcement action, if appropriate. For example, the majority of the NOVs referred to in **Table 4-1** were issued for violations of the emissions standards set forth in Rule 1173. Please see **Figure 4-3** and **Figure 4-4** for locations of these facilities and the South Coast AQMD rules that apply to them. While the majority of South Coast AQMD's authority at these facilities is focused on criteria pollutants and toxics, the agency also actively enforces CARB's methane regulations.

Commented [21]: make this stand out more -it gets lost in the paragraph

○ General Industrial

General Industrial is a broad category which covers community concerns that do not fit neatly into other categories identified by the CSC. **Figure 4-5** and **Figure 4-6** provide an overview of facilities within this air quality priority. General Industrial facilities have permitted equipment based on the particular process(es) at issue, such as storage tanks, baghouses, boilers, and heaters.

Commented [22]: add pictures of these

Generally, inspections of these facilities would be conducted by South Coast AQMD's Industrial, Commercial, and Government Operations Team; however, specialized teams may conduct inspections for certain sources, such as gas stations.

Figure 4-5: Breakdown of Number of General Industrial Facilities with SLA

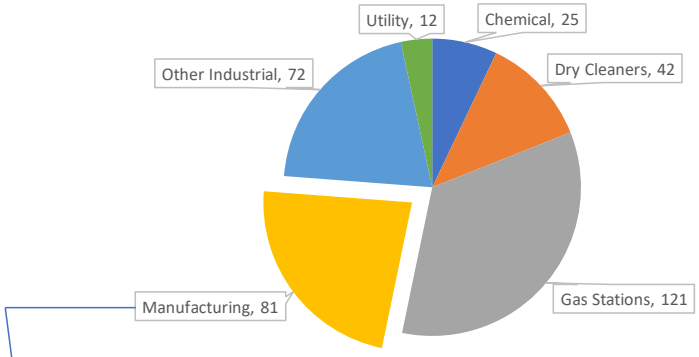
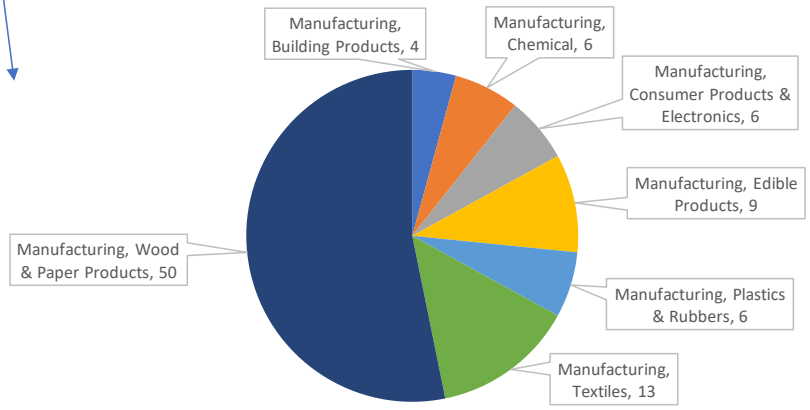


Figure 4-6: Breakdown of General Industrial Manufacturing Category within SLA



Commented [23]: can this be a bar graph/or a map or another visual representation?

Since this category can contain a variety of facility types, CSC input provided on this topic will be crucial in prioritizing South Coast AQMD inspections. The numbers and rules cited for NOVs within this category vary widely and may not be indicative that a particular industry is "better" or "worse" than another, since the rules and permit conditions that apply may be different. Therefore, the CSC input on this topic will give community level insight to focus enforcement efforts within this category.

Metals

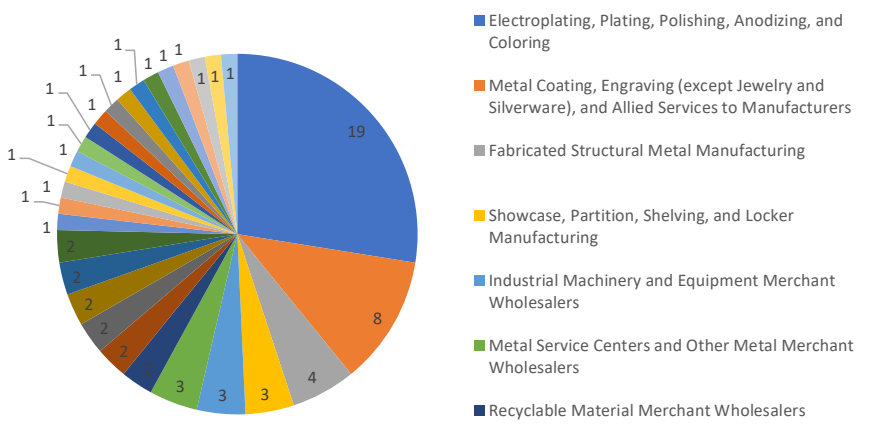
Metal facilities are those which work with or process metals. They can have permits for plating, coating, melting, or other metal working processes (**Figure 4-7**).

Figure 4-7: Pouring Molten Metal into Molds

These facilities are mainly inspected by two South Coast AQMD teams, depending on the source type: Industrial, Commercial, and Government Operations and Toxics and Waste Management.

Figure 4-8 showcases the current distribution of metal processing facility types within the community. This distribution helps to inform the CSC on the sources within their community and enables the CSC to prioritize efforts towards those sources which are of greatest concern to them and to other members of the community.

Figure 4-8: Distribution of Metals Facility Types within SLA[11]



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When considering priorities, it is important to consider that South Coast AQMD prioritizes inspections using various criteria, including the type of pollutants potentially emitted by a facility. For example, chrome plating facilities are generally inspected once per quarter, due to the higher risk that emissions of hexavalent chromium can pose. The full list of facilities and their categories will be listed in Appendix 4.

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Auto Body Shops

Auto Body Shops are facilities that conduct automotive repair and refinishing (**Figure 4-9**). These facilities are inspected by South Coast AQMD's Industrial, Commercial, and Governmental Operations team.

Within the SLA community boundary, South Coast AQMD identified approximately 90 facilities with permitted automotive-type paint spray booths, 60 percent of which were inspected within the last five years.

Commented [26]: these facts should stand out more on their own

Commented [27]: 60% inspected in the last five years, so how many inspections per year?

As to the violations cited in **Table 4-1**, the majority of violations issued to auto body shops are for:

[11] A full breakdown of other categories not listed in this figure will be provided in Appendix 4.

- (1) operating a paint spray booth without a valid permit and
- (2) storing or using non compliant coatings or solvents on-site.

These facilities use VOC-containing paints and solvents, and their permit conditions generally set a limit on usage of these materials. However, concerns from members of the community are often focused on odors which are not directly addressed by South Coast AQMD rules and permit conditions for these facilities. The primary regulatory approach to take enforcement action on odors from an auto body shop is through Rule 402.[12] Therefore, receiving complaints from community members about particular auto body shops causing odor issues is crucial in addressing these concerns.

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Commented [31]: I don't understand this, it says odors complaints are not addressed by SCAQMD rules, but then it says that odor complaints from community members ae encouraged?

Mobile Sources

CARB is primarily responsible for enforcement of air quality regulations relating to trucks, buses, and other mobile sources, while South Coast AQMD is primarily responsible for enforcement relating to stationary sources (e.g., facilities). Therefore, the focus of South Coast AQMD's efforts around mobile sources within SLA has been to enforce CARB's truck idling regulation and respond to idling complaints.

Figure 4-10: Distribution of Complaints by CSC Identified Concern within SLA

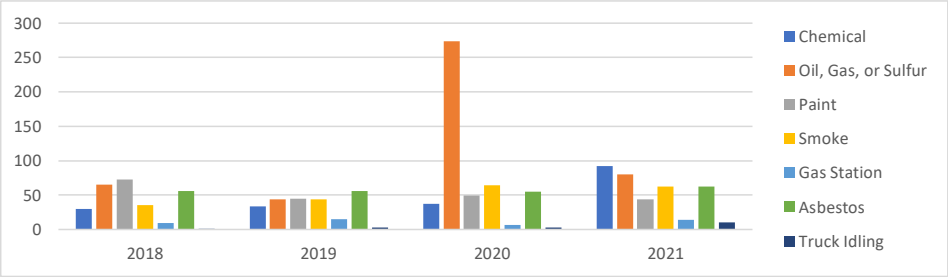

Figure 4-10 above, shows the number of complaints received from 2018 through 2021; the complaints are categorized by complaint type which were CSC-identified areas of concern. Further, as **Figure 4-10** shows above, while South Coast AQMD has not received a significant number of idling truck complaints, the CSC has identified idling trucks as a significant source of air pollution within their community. Therefore, South Coast AQMD is committed to increasing enforcement efforts on idling trucks within the community, which involves enforcing CARB's

[12] South Coast AQMD, Rule 402 – Nuisance, http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf

diesel truck idling regulation.[13] This effort will require CSC input on locations with idling concerns as well as outreach to the community via South Coast AQMD's complaint response program.

○ CARB Enforcement Activity in South Los Angeles

CARB has authority to reduce emissions of air pollutants ranging from criteria air pollutants, like smog-forming oxides of nitrogen (NOx) and VOCs, to toxic air contaminants, like diesel particulate matter and greenhouse gases (e.g., methane). CARB is charged with enforcing its regulations applicable to mobile sources, consumer products, and other area-wide categories, fuels, and climate programs. CARB is also charged with overseeing the implementation of local air district permit and enforcement programs implementing requirements that apply to stationary industrial pollutant sources. In addition, CARB has direct enforcement authority over climate programs, many of which impact stationary sources directly or indirectly.

Diesel Vehicle Enforcement

CARB regulations establish stringent emission requirements that new diesel vehicles must meet. These requirements include installation of diesel particulate filters which remove more than 98 percent of toxic diesel particulate matter when properly functioning; and 90 percent of smog forming NOx. In addition, because diesel engines and heavy-duty vehicles and equipment are designed to last decades, CARB's diesel fleet regulations require operators to replace older, higher polluting vehicles and equipment with lower pollutant vehicles, equipment, and technologies to provide emission reductions as quickly as possible. These regulations apply to operators of on-road diesel vehicles such as trucks, and off-road diesel vehicles and equipment including construction and cargo handling equipment, commercial harbor craft, and other sources. As a result of these programs, CARB has greatly reduced diesel particulate and NOx emissions by over 90 percent in communities statewide.

Through its interaction with community members, CARB has heard the concerns of the community regarding diesel powered vehicles and equipment.

Areas of concern CARB heard were:

- issues with heavy-duty diesel vehicle idling,
- the operation of trucks in and around warehouses,
- compliance with state heavy-duty diesel vehicle regulations, and
- the operation of oil and gas extraction facilities in the community.

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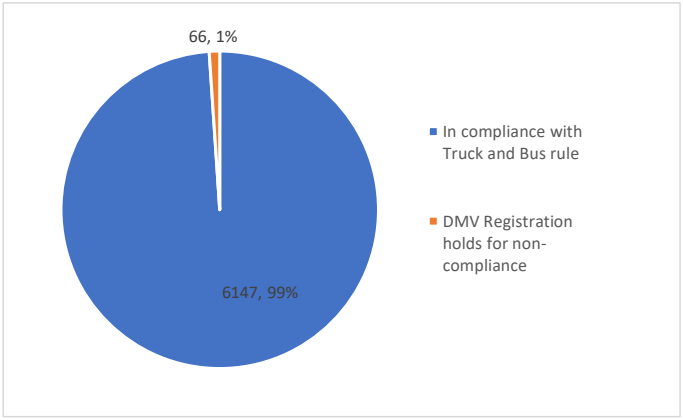
[13] CARB's truck idling regulation expressly allows enforcement by local air quality regulators.

Figure 4-11: Programs CARB Enforces

In this section, CARB presents the history of enforcement activity related to the relevant enforcement programs in the SLA community from 2018 to 2021. See **Figure 4-11** for a breakdown of CARB's enforcement activities in SLA from 2018 – 2021. More details on general locations by year and by category within SLA's boundary can be found in CARB's Enforcement Data Visualization System (EDVS).[14]

Figure 4-12: Compliance with CARB's Truck and Bus Rule for Registered Trucks and Buses in SLA



Nearly all trucks and buses in California are already, or will be, required to have a certified 2010 or newer model year

[14] Since CARB cannot present personal information and these inspections are related to vehicles that are mobile, the best way to see the inspections and compliance status of vehicles traversing and servicing the SLA community is in CARB EDVS. Currently EDVS is updated annually. CARB intends to begin updating this quarterly beginning this year. A guide on how to use EDVS is here: https://ww2.arb.ca.gov/resources/fact-sheets/enforcement-data-visualization-system-fact-sheet

engines by the end of 2023 to comply with CARB's Truck and Bus rule to legally operate in California.[15] In fact, California is entering its third year where the California Department of Motor Vehicles (DMV) is holding registration for some trucks and buses that are not in compliance with CARB's Truck and Bus rule as a requirement of Senate Bill 1. Due to CARB regulation implementation and enforcement, the compliance rate statewide for the rule was 98 percent in 2020. **Figure 4-12** is based on California DMV registration data. In SLA it was 99 percent, meaning that of the 6,213 heavy-duty trucks and buses registered in SLA, 6,147 were in compliance with the Truck and Bus rule in 2020. The other 66 had registration holds placed on them, which meant they could not legally be driven in California.

[15] CARB, The Truckstop – Truck and Bus Regulation, https://ww2.arb.ca.gov/sites/default/files/truckstop/tb/truckbus.html

Table 4-3: CARB Inspections in SLA from 2018-2021 for Truck Idling, Off-Road Equipment, and Transportation Refrigeration Units (TRUs)

	Idling	Off-road Equipment	TRUs
2018			
Inspections	16	14	0
Non-compliant	6	4[16]	0
Compliance rate	63%	71%	-
2019			
Inspections	2	79	0
Non-compliant	1	16[16]	0
Compliance rate	50%	80%	-
2020			
Inspections	48	6	7
Non-compliant	2	4[16]	5
Compliance rate	96%	33%	29%
2021			
Inspections	90	0	2
Non-compliant/ Pending	3	1[16]	1
Compliance rate	97%	0%	50%
2018 – 2021 Total			
Inspections	156	100	9
Non-compliant/ Pending	12	25[16]	6
Compliance rate	92%	75%	33%

CARB's idling rules cover commercial vehicles, like trucks and buses, school buses, and off-road equipment. In general, there is a 5-minute idling limit statewide, but the rule allows vehicles and equipment to idle for longer periods under specified conditions, like when trucks are lined up waiting to get into a warehouse.

CARB conducted 156 idling inspections in SLA from 2018 – 2021. Twelve of those were out of compliance. The overall compliance rate of 92 percent is relatively high, but lower than the statewide average of 98 percent compliance. So more inspections and other strategies will be useful to help deter illegal idling in the community.

The off-road diesel regulation applies to many types of heavy-duty diesel vehicles that aren't typically driven on the road, but rather used in construction and at oil and gas facilities. Looking at off-road fleet compliance in SLA from 2018 – 2021, CARB inspected a total of 100 off-road

[16] These are non-emissions violations for lack of, or improper, labeling.

pieces of construction equipment. Twenty-five of these were out of compliance with the labeling requirement of the regulation, but were compliant with emission and technology requirements of the rule.

Transportation refrigeration units (TRUs) keep goods cooled (or heated) in cargo containers during transport and are regulated by CARB under the TRU regulation. CARB conducted nine of those inspections between 2018 and 2021 in SLA and found six violations, all of which were for labelling and not non-compliance with engine technology or emission requirements. CARB's TRU rule typically has lower compliance rates, and so identifying areas where TRUs operate in SLA, and conducting inspections to enhance compliance could reduce emissions in the community.

Oil and Gas

In addition to CARB's mobile source regulations, CARB also enforces rules related to the extraction, refinement, and distribution of fuels. The California Oil and Gas Regulation (COGR) that was adopted in 2017 is intended to reduce fugitive and vented methane emissions from new and existing oil and gas facilities. In addition, methane releases may be accompanied by emissions of other organic compounds that cause odor.

CARB did not conduct inspections at oilfields (active or idle wells) or drilling sites in SLA between 2018 – 2021, because CARB had a memorandum of understanding with the South Coast AQMD to conduct these inspections.

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CARB is now starting to support the South Coast AQMD on enforcement of this regulation. However, based on input from the CSC, including what was learned on a tour of the Murphy Drill Site last year, CARB will develop a plan, in collaboration with the community and the South Coast AQMD to:

- inspect oil and gas facilities in SLA for compliance with local and state regulations,
- and determine if regulations might be strengthened to better protect the community.

During the inspections, CARB will look at all sources of pollution located at these facilities, including stationary, portable, and mobile. CARB uses inspection equipment like mobile monitoring, optical gas imaging cameras, toxic vapor analyzers, infrared optical gas detectors, and eagle gas monitors as well as drones. CARB will document the results of the inspections and summarize what was learned in a report back to the community.

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Community Concerns

CARB receives and responds to concerns identified by the community. This process is very important because CARB is likely unaware of the concern that is affecting the community. In addition to the programs described in CARB's discussion above, CARB will act on all complaints it receives. CARB received 60 complaints in the SLA community between 2018 – 2020, about three-quarters of the complaints CARB received between 2018 and 2020 were for 46 smoking vehicles.

This means people saw a vehicle with smoke coming out of the exhaust pipe, and that the vehicle is likely in violation of CARB's smoke opacity rule.

Table 4-4: Complaints Received by CARB from SLA zip codes between 2018 and 2020[17]

Complaint Type (Program Type)	Number	Action Taken[18]
Idling (Idling)	2	1 enforcement action taken, 1 under investigation
Light-duty vehicles	2	2 referred to appropriate agency or group within CARB
Smoking vehicle	46	10 enforcement action taken, 35 under investigation, 1 not actionable
Solid waste collection vehicle	1	Under investigation
Tampering	1	Under investigation
Transport Refrigeration Unit	1	Not actionable
Truck and Bus	7	2 enforcement action taken, 3 under investigation, 2 not actionable

While CARB did not receive any complaints for oil and gas during that timeframe, CARB accepts and addresses all air quality complaints as they come into the system, including mobile sources and oil and gas facilities (**Table 4-4**).

Enforcement Considerations

An effective enforcement program must be flexible and adaptable to address the needs of the communities. Part of being adaptable is the ability to identify and address gaps in the enforcement process, such as previously unknown facilities or new pollutants of concern. As revealed over the course of the public process for CERP development, one such gap has been a lack of communication with members of the community, who have firsthand experience with local emissions sources and whose input can be extremely valuable to enforcement efforts.

Enforcement mechanisms are designed to promote and, if necessary, compel compliance by regulated sources. As discussed above, after South Coast AQMD inspectors investigate complaints and/or conduct facility inspections, they can issue NCs or NOVs. While a NC will generally require further action by a source, NOVs are referred to the Office of the General Counsel, where agency attorneys negotiate potential civil penalties. If no settlement is reached, a civil lawsuit can ultimately be filed in superior court. Ongoing noncompliance, however, may lead to a petition for an Order of Abatement before the South Coast AQMD Hearing Board, which would have the authority to require a facility to take specific actions to achieve compliance. CARB

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[17] There may be some overlap between complaints with the Southeast Los Angeles AB 617 community.

[18] Enforcement action means a violation occurred and CARB worked with the violator to resolve it. Under investigation means the investigation is on-going. Not actionable means there was incomplete information to take action, or the vehicle was in compliance. Referred to another agency means the complaint was assigned to the appropriate agency for resolution.

and South Coast AQMD have each had a presence in this community, which has led to various enforcement actions against local facilities.[19]

In summary, the compliance process seeks to ensure that all rules and regulations are followed through a fair and robust enforcement program, resulting in reduced air pollution emissions. Adaptability is crucial, whether in the programs overall, or in day-to-day operations, to ensure that community concerns are addressed quickly and that enforcement action is taken when violations are identified.

Both CARB and South Coast AQMD enforcement teams will continue to search for innovative strategies, lead in community transparency, and take swift action to address non-compliance.

[19] Additional details on South Coast AQMD and CARB enforcement actions will be provided in Appendix 4.

Chapter 5a: Introduction to Actions to Reduce Community Air Pollution

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:

- mobile sources,
- auto body shops,
- general industrial facilities,
- metal processing facilities,
- and oil and gas facilities.

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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, community-based organizations, businesses, and other entities, as described in the following subchapters.

Commented [2]: why implemented by community based organizations? this is the whole responsibility of the local district and CARB to implement these actions, not on CBO's

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

Ongoing Efforts

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Multiple government agencies may be involved when addressing an air quality priority, as each agency has its own specific authority, or jurisdiction, to protect the environment and community. Authority is dependent on the specific aspects of a facility, including the equipment, materials used, pollutant, operations, processes, hazardous waste, health impact, and type of environmental impact.

The South Coast Air Quality Management District (South Coast AQMD), 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 and locomotives and stationary sources such as dry cleaners, refineries, power plants, factories, and metal processing facilities. Additionally, South Coast AQMD and CARB may be developing new requirements that would further reduce air pollution from sources prioritized by the community.

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Commented [5]: "may" be ? what does that mean?

In areas where South Coast AQMD and CARB do not have direct authority (jurisdiction), implementation of the 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., LA County Green Zones Program[1], LA County Oil Well Ordinance[2], prohibition of new oil and gas extraction[3]).

One of the requirements of AB 617 is that air districts must expedite implementation of Best Available Retrofit Control Technology (BARCT) for facilities in the California Greenhouse Gas Cap-and-Trade program. South Coast AQMD's REgional CLean Air Incentives Market (RECLAIM) program includes facilities within the California Greenhouse Gas Cap-and-Trade program. In 2017, South Coast AQMD began this process and, to date, has established BARCT emissions limits for ten rules and is currently developing or amending four additional rules. There are three RECLAIM facilities in the SLA community boundary.

Commented [6]: This was so confusing. I don't know what you are trying to say here. perhaps explain each program and how those are related to BARCT

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Commented [8]: which rules? list them out? provide context, and what did these rules do?

Opportunities for Action

In addition to the ongoing efforts described above, South Coast AQMD, in collaboration with the CSC, identified goals 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,[4] 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.

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Commented [10]: the community projects is a real opportunity for action and we should further expand on this what those would look like and how it would support the community

Emissions Reduction Targets

[1] The LA County Green Zones Program enhances public health and land use compatibility in the unincorporated communities that bear a disproportionate pollution burden. More information can be found at: https://planning.lacounty.gov/greenzones#:~:text=Initiated%20by%20the%20Board%20of,bear%20a%20disproportionate%20pollution%20burden

[2] The LA 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. More information can be found at: https://planning.lacounty.gov/oilwell

[3] 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. More information can be found at: https://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=17-0447

[4] At South Coast AQMD, a regulation is composed of rules, each of which deals with a specific topic within that regulation. More information can be found here: http://www.aqmd.gov/home/rules-compliance/regulations#:~:text=At%20South%20Coast%20AQMD%2C%20a,and%20administered%2C%20and%20their%20impact

AB 617 requires emissions reduction programs, such as this CERP, to include emissions reduction targets.[5,6] 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 designation[7] (as described in Chapter 3b – Emissions Inventory 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)	TBD	TBD
	Overall Emissions Reductions from 2019 (%)	TBD	TBD
2031	Projected 2031 Baseline Emissions (tpy)**	1,957	15.93
	Emissions Reductions from CERP, by 2031 (tpy)***	TBD	TBD
	Overall Emissions Reductions from 2019 (%)	TBD	TBD

* Estimated emissions reduction targets will be finalized as part of the Final CERP presented to Governing Board on June 3, 2022.

** 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 TBD tpy NOx and TBD tpy DPM from projected incentive projects.

Commented [11]: can this be summarized in percentages? like how much emissions reductions are expected by 2026 - 30% ? might be easier to read than Tons/year,

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

Commented [12]: It could be helpful to understand how emissions reductions targets are set for transparency as well. Maybe, the point could be made that the combined targets set a higher standard (or whatever framing makes sense) for emissions target and an example with numbers could be put in a callout box, so people can read if they want to know or just skip over it.

[5] California Health and Safety Code Section 44391.2 (c)(3)

[6] CARB, Community Air Protection Blueprint, https://ww2.arb.ca.gov/sites/default/files/2018-10/final_community_air_protection_blueprint_october_2018_appendix_c.pdf

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

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-2: Emissions Reduction Targets for CARB Statewide Measures for the 2026 and 2031 milestone years for the SLA community. The "Action Date" listed in **Table 5a-2** reflects the year of the anticipated adoption date by CARB's Governing Board.

Table 5a-2: 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 Fleet[8]	2023	5.3	24	-	-	0.0	0.0	0.1	0.6
Advanced Clean Car 2[9]	2022	2.1	27	1.3	21	0.0	0.0	0.6	7.6
Heavy-Duty Inspection and Maintenance[10]	2021	122	140	-	-	1.0	1.0	1.0	1.0
Small Off-Road Engine Amendment[11]	2021	19	60	144	416	-	-	1.4	3.9
Transport Refrigeration Unit Regulation[12]	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.

Commented [13]: same as above, can these be summarized in %?

[8] CARB, Advanced Clean Fleet Rules, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets

[9] CARB, Advanced Clean Car 2, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program

[10] CARB, Heavy-Duty Inspection and Maintenance, https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program

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

[12] CARB, Transport Refrigeration Unit Regulation, https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation

Chapter 5b: Mobile Sources

Community Concerns

During the Community Steering Committee (CSC) meetings, the co-leads lead discussions with CSC members to identify air quality concerns and actions for the Community Emissions Reduction Plan (CERP). One of the concerns raised by the South Los Angeles (SLA) community is mobile sources, in particular, emissions from vehicles and equipment at construction sites. Concerns from vehicles include emissions and adverse health impacts from heavy duty diesel trucks, trains, buses, and automobiles due to neighborhood traffic, freeway rush hour traffic, truck and bus maintenance in residential neighborhoods, movement of goods at warehouses, and the proximity of truck routes and idling trucks to residential areas and schools. The community also expressed many questions about the existing inspection programs and what is included in the term "in compliance" given the level of problems the community was experiencing with mobile source pollution.

Add pictures

The concerns the community expressed with construction sites are primarily emissions from diesel construction equipment and potential exemptions for operations and projects.

The CSC identified mobile sources as an air quality priority because of the volume and frequency of vehicles and trains that travel through SLA. This community is bounded by Interstate 10 (I-10) to the north, Interstate 710 (I-710) and the Alameda Corridor to the east, and State Route 91 (SR-91) to the south, with Interstate 105 (I-105) and Interstate 110 (I-110) crossing through the community boundary (**Figure 5b-1**). Various types of mobile sources, including light, medium, and heavy-duty vehicles travel along these routes and expose residents to harmful air pollutants. Additionally, the I-710, I-110, and Alameda Corridor are vital transportation routes for goods movement out of the Ports of Los Angeles and Long Beach, which are the busiest container ports in the United States.[1]

[1] Industrial Warehousing in the SCAG Region, https://scag.ca.gov/sites/main/files/file-attachments/task2_facilityinventory.pdf?1604268149

Commented [1]: do subchapters for mobile sources - one for neighborhood traffic

Commented [2]: community concerns also included - further definition of mobile sources and compliance and inspections programs for truck idling

Commented [3]: Ice cream trucks too were identified as a concern

Commented [4]: incentives for small businesses and vendors to retrofit their trucks

Commented [5]: emissions exemptions or regulatory exemptions?

Commented [6]: Some large scale long term construction projects are not fully regulated , nor are the emissions from them accounted for given the lack of local monitoring and or reporting. We should ask them to include a section that explains how construction is addressed in their regulation. i

Commented [7]: and the Slauson Corridor

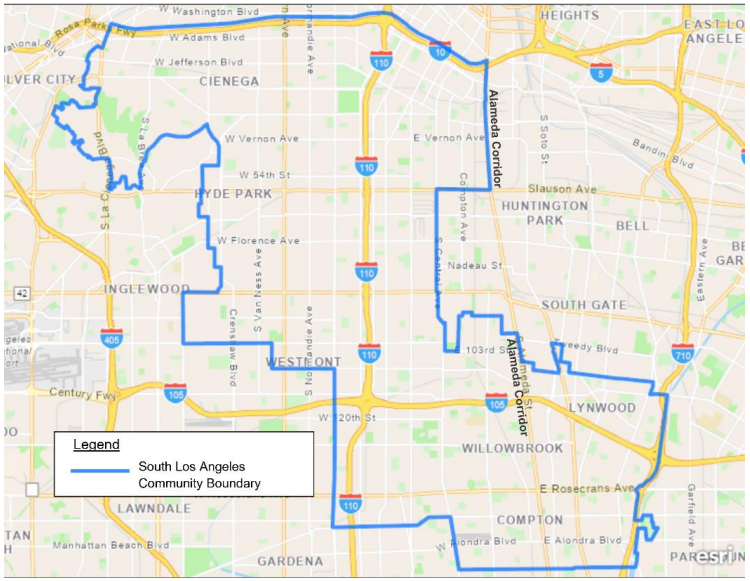
Commented [8]: highlight the highways in the map so those can be clearly identified

Regulatory Background

The California Air Resources Board (CARB) primarily regulates mobile sources. Local air districts and other agencies may be given authority to enforce CARB's mobile source regulations. For example, the Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling,[2] also known as the "No-Idling Regulation," may be enforced by police officers and air districts. To support AB 617's broader effort, CARB also oversees and approves use of the Community Air Protection (CAP) Incentives,[3] which provide mechanisms to expedite air quality benefits to impacted communities for a variety of project types including commercially available cleaner technology trucks, electric school buses for low-income schools, and locomotives.

[2] CARB, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling

[3] CARB, Community Air Protection (CAP) Incentives, https://ww2.arb.ca.gov/our-work/programs/community-air-protection-incentives



Actions to Reduce Emissions or Exposure

For mobile sources, the CSC requested additional enforcement of mobile source regulations and outreach efforts to inform the community about and increase availability to incentives programs, such as affordable alternative energy vehicles for the community. Mobile source categories of concern identified by the CSC include: heavy duty diesel trucks, trains, buses, and automobiles due to neighborhood traffic, freeway rush hour traffic, truck and bus maintenance in residential neighborhoods, movement of goods at warehouses, and the proximity of truck routes and idling trucks to residential areas and schools.

The CSC requested the following goals for mobile sources in SLA:

A. Reduce exposure to emissions from warehouses and idling of buses and trucks.
B. Reduce students' exposure to air pollution, especially mobile source emissions at schools.
C. Inform the community, businesses, and industries of CARB's mobile source regulations, best practices, and incentive programs.

D. Incentivize funding opportunities for cleaner mobile source technologies (e.g., lower emitting trucks) within the community (e.g., schools, small businesses, independent truck owners and operators).

E. Reduce emissions at construction sites.

The CSC developed the following CERP actions to address community concerns regarding the five CERP goals. **Table 5b-1** below summarizes goals, actions, metrics, and provides a timeline to achieve emissions or exposure reductions from mobile sources in SLA.

Table 5b-1: Actions to Reduce Emissions from and Exposure to Mobile Sources

Goal	Action(s)	Responsible Entity(ies)	Metric(s)	Timeline	
				Start	Complete
A: Warehouses and Idling	• Conduct truck and bus inspections at locations of concern identified by the CSC • Conduct outreach to warehouses regarding South Coast AQMD Rule 2305 requirements to reduce the impact of truck traffic • Enforce ISR and conduct frequent warehouses inspections • Distribute outreach materials to the community on mobile source regulations and how to file a complaint with CARB • Install "No Idling" signs in CSC-identified locations and create "Children Breathing No Idling Zones" for schools • Increased enforcement of CARB's Truck and Bus 2 and Idling Rules to reduce diesel emissions (including during non-business hours)	CARB South Coast AQMD	• Number of truck and bus inspections in CSC-identified locations • Number of materials distributed to warehouses • Number of outreach events or materials distributed to the community • Number of signs installed	3rd quarter, 2022	2nd quarter, 2027

Commented [9]: add ice cream/food trucks

Commented [10]: - Increased enforcement of CARB's Truck and Bus2 and Idling3 Rules to reduce diesel emissions (including during non-business hours)
• Accountability for truck owners and truck drivers, when trucks violate CARB idling regulations

Commented [11]: Conduct idling sweeps (which may require coordination with local law enforcement), focusing on high priority areas

Commented [12]: enforcement of the ISR rule

Commented [15]: Maybe also, number of warehouses who indicate understanding of rule requirements and if applicable share support needed to comply with the rule

Commented [13]: Also I recall a community member mentioning outreach to truck unions trying to get at strategies that work directly with workers/managers

Commented [16]: Maybe also, number of feedback forms collected from the community to assess ease of use or concerns with the complaint filing system?

Commented [14]: to help protect children from harmful diesel emissions

	• Accountability for truck owners and truck drivers, when trucks violate CARB idling regulations • Conduct idling sweeps (which may require coordination with local law enforcement), focusing on high priority areas • Conduct and coordinate idling truck inspections with the California Highway Patrol • Based on findings from idling sweeps, the CSC identified Community Priorities List, and additional community observations/input from CSC meetings, • CARB will adjust enforcement in the community to address the identified concerns and report back to the CSC bi-annually for future adjustments				
B: School Air Filtration	• Work with local school districts and CSC members to identify and prioritize schools for air filtration systems • Install air filtration systems according to prioritization list and identified funding source criteria • work with school district to inspect filtration systems and ensure these are well kept and maintained	South Coast AQMD	• Number of identified funding sources for school air filtration systems • Total incentive dollars allocated for air filtration systems • Provide prioritization list to receive air filtration systems • Number of schools that install air filtration systems[4]	1st quarter, 2023	2nd quarter, 2027

Commented [17]: what about retrofit buses for schools?

Commented [18]: The goal for this is to reduce student's exposure to mobile sources pollution, how are school air filtration systems reducing exposure , what about recess time, and outside pick up time? This action is not consistent with the goal, so it should add retrofit buses

[4] Total number of schools to receive air filtration systems is dependent on total AB 617 CAP Incentives allocated or identification of other funding sources for installation of air filtration systems in SLA.

Agencies collaboration	• Work with the local city or county agencies to evaluate potential **designated truck routes away from sensitive receptors** (e.g., schools, residents) and identify resources to enforce these route • Work with school districts to identify funding, projects, and collaborations opportunities to retrofit school buses/electrify buses in areas of concern, or collaborate in projects/funding for community projects such as "safer routes to schools" • Work with local agencies to provide data on locations within the community with high truck pollution impacts • • Identify the appropriate agency (e.g., Los Angeles Department of Transportation) to collaborate on assessing the feasibility of physical interventions to prevent truck traffic from entering residential neighborhoods				
C: CARB Resource Outreach	• Conduct outreach to the community on CARB's mobile source regulations, best practices, and incentive programs (e.g., provide materials to independent owners or operators and students to share with families) • Conduct focused enforcement of CARB's TRU Regulation, Drayage Truck Regulation, and Truck and Bus Regulation	CARB South Coast AQMD	• Identify outreach opportunities • Number of outreach events or materials distributed	4th quarter, 2022	2nd quarter, 2027

D: Mobile Source Incentives	• Create a tool for communities to easily see who and where current incentives are being provided • Develop a hyper local incentive program for cleaner mobile source technologies (e.g., lower emitting trucks) within the community (e.g., schools, small businesses, independent truck owners and operators) • Identify additional and new incentive funding opportunities to replace and accelerate adoption of cleaner heavy-duty trucks (including drayage trucks), prioritizing zero emission technologies when technologically feasible and commercially available, and near-zero emission technologies until that time • Target incentive funds for local small businesses and independent owner/operator (e.g., Voucher Incentive Program) • Identify funding and community project opportunities to support communities transition to electric cars, through trade in programs, and increase the number of options for electric plug-ins for cars by collaborating with the City and CBO's.	South Coast AQMD	• Number of identified funding sources for cleaner mobile source technologies • Total incentive dollars allocated for cleaner mobile source technologies • As needed, develop and submit AB 617 Project Plan(s)[5]	1st quarter, 2023	2nd quarter, 2027
E: Construction Sites Enforcement	Explore new rules for Construction sites and explore focused enforcement at construction sites of concern, as identified by the CSC, to verify compliance with South Coast AQMD rules	South Coast AQMD CARB	Number of enforcement updates to the CSC	4th quarter, 2022	2nd quarter, 2027

Commented [19]: expand to communities

Commented [20]: for all construction sites

Commented [21]: how if some of these operations are exempted?

[5] CARB, Community Air Protection (CAP) Incentives, https://ww2.arb.ca.gov/our-work/programs/community-air-protection-incentives

	Enforce new rules rules for all construction sites, not just those of concern				

Chapter 5c: Auto Body Shops

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 identified auto body shops as an air quality concern for this community. During the CSC meetings, concerns were raised regarding the volume and activities of both permitted and unpermitted auto body shops and their proximity to residences, schools, and public gathering areas. The CSC has 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. CSC members identified facilities and operations conducted at vacant lots on Central Avenue, Florence Avenue, Western Avenue, Jefferson Boulevard, Manchester Avenue, and the Slauson Corridor as a few locations of concern. CSC members believe that these small businesses are likely unaware of existing regulatory requirements, best management practices to reduce pollution burden, and the health impact of their operations on the community.

Commented [1]: Add the Slauson Corridor

Commented [2]: from 500 ft /SCLA-PUSH

Regulatory Background

South Coast AQMD's permitting program was established to implement the requirements of the federal and state Clean Air Act (CAA), and applicable air quality rules and regulations by specifying operating and compliance requirements for stationary sources that emit air contaminants. Based on the South Coast AQMD permitting database, there are approximately 89 permitted[1] auto body shops within the SLA community boundary. Permitted auto body shops must comply with the requirements in the permit issued by South Coast Air Quality Management District (South Coast AQMD) as well as any applicable South Coast AQMD rules.

Commented [3]: A map with these would be helpful

Commented [4]: SCLA-PUSH data on unpermitted or missing auto body shops in official regulatory agencies data sets

In addition, PSR-LA through their ground-truthing efforts community data collected suggested that facilities-of-concern may be underestimated because these facilities are at times misidentified, misclassified, or simply missing in official databases. To address this data set challenge, PSR-LA conducted a rigorous data vetting process that included a detailed review of the SCAQMD facilities classifications, virtual Ground-Truthing Walks, and google map searches of existing facilities to identify missing or misclassified facility data. The vetting process revealed that approximately 20 facilities-of-concern were misclassified by SCAQMD. Out of the 11

[1] Any equipment that emits or controls air contaminants (such as nitrogen oxides or reactive organic gases) requires a permit from South Coast AQMD prior to construction, installation, or operation unless it is specifically exempted from the permit requirement by South Coast AQMD per 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

"unclassified facilities," 3 were undoubtedly auto body shops (i.e., Hello Auto Body, Jimenez Body Shop, and Fine Line Body Shop, INC).Data collected by South LA Co Lead also identified non permitted auto body facilities.

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. Coating application equipment, emissions from automotive coating, and solvent cleaning materials and their related operations conducted by auto body shops may be subject to South Coast AQMD's Rules, such as Rules 481,[2] 1151,[3] 1168,[4] and 1171.[5] If vehicles are not present but coating applications are being conducted to metal parts, auto body shops may be subject to Rule 1107.[6] CARB's Consumer Products Regulation[7] may apply to the products used at auto body shops. Some of these products may cause odors and emit air pollutants, including volatile organic compounds, and may include toxic air contaminants. The emissions and odors may come from solvents evaporating from paint and solvent application, cleaning of parts, and improper storage. Auto body shops may also conduct operations such as sanding and grinding, which can emit fine dust. Auto body shops subject to CARB's Criteria Pollutant and Toxics Emissions Reporting (CTR) regulation will begin reporting emissions to South Coast AQMD in spring of 2025.[8]

Actions to Reduce Emissions or Exposure

During development of this CERP, the CSC requested that both outreach and enforcement be conducted at auto body shops to inform these businesses of operational requirements mandated by various government agencies with authority over this industry, such as South Coast AQMD, local land-use agencies, and local fire departments. The CSC requested the following goals for auto body shops in SLA.

A. Inform the community of applicable rules and regulations, monitoring and enforcement efforts, and the permitting process as they relate to auto body shops.
B. Identify facilities of concern, conduct enforcement activity, and conduct outreach on best management practices at these facilities.

[2] South Coast AQMD, Rule 481 – Spray Coating Operations, http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-481.pdf
[3] 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
[4] South Coast AQMD, Rule 1168 – Adhesive and Sealant Applications, https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1168.pdf
[5] South Coast AQMD, Rule 1171 – Solvent Cleaning Operations, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1171.pdf
[6] South Coast AQMD, Rule 1107— Coating of Metal Parts and Products, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1107.pdf
[7] CARB, Consumer Product Regulation, https://ww2.arb.ca.gov/our-work/programs/consumer-products-program
[8] CARB, Criteria Pollutant and Toxics Emissions Reporting, https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting

Commented [5]: describe these rules in the document, not just a footnote

Commented [6]: Include improvement and enforcement of SCAQMD rules for auto body shops, including Rule 1151: Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operation and Rule 1171: Solvent Cleaning Operations.

Commented [7]: best practices from EPA List for auto body shops to generate a list of equipment and operations that can potentially reduce adverse health impacts related to auto body shops air emissions and the extent to which these best practices lists can be integrated into the two above SCAQMD rules.

Commented [8]: https://www.epa.gov/collision-repair-campaign/about-collision-repair-campaign#overview

C. Make referrals from auto body shop inspections to the appropriate agencies to ensure these facilities follow rules and regulations from other agencies, in particular those related to soil contamination, hazardous waste disposal, land-use, and noise pollution.
D. Inform auto body shops of best practices and applicable rules and regulations, and provide information on South Coast AQMD's Small Business Assistance program.[9]
E. Conduct air measurement surveys to identify facilities with potential elevated emissions and to characterize these emissions.
F. Ensure facilities are properly classified and verify compliance with applicable rules and regulations.

Additional information regarding Rule 1151 and Rule 1171:

Table XX EPA Best Practices for Auto Body Shops Listed by EPA's Collision Repair Campaign

Category	Benefits
NESHAP Requirements	
Painter training and certification	• Improves techniques, reduces paint usage and emissions
Ventilated spray booths with filters that are at least 98% efficient	• Removes paint overspray from the air • Less contact with hazardous coating materials
High transfer efficiency (high volume/low pressure) guns such as (HVLP) spray runs	• Less toxic chemical exposure to painters • Less hazardous emissions to the environment • Dollar saving in paint costs for the shop
Prohibit clean spray guns by spraying solvent through the gun, creating an atomized mist	• Minimizes contact with hazardous solvents • Minimizes emissions of hazardous chemicals into the air
Record keeping	• Increases compliance with emission reduction requirements
Best Practices	
Use vacuum sanding or wet sanding	• Uncontrolled dust likely containing toxic materials creating adverse emissions and worker exposure • Properly maintained vacuum sanders control 93-98% of dust • Vacuum sanders can pay for themselves over time by eliminating expensive re-paints, shortening cleanup time, and extending sandpaper life

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

Performing solvent wipe downs in a ventilated booth or prep station	• Solvents evaporate off surfaces wiped down and dried off creating adverse emissions, occupational exposure
Use automated gun cleaners	• Increases mileage from cleaning solvents • Reduces emissions and occupational exposure • Reduces shop waste
Use low VOC solvents	• Reduces VOC emissions
Use low VOC or water-based cleaners	• Reduces or eliminates VOC emissions
Use low VOC or water-based primers	• Reduces or eliminates VOC emissions
Use low VOC or water-based base coats	• Reduces or eliminates VOC emissions
Use of extremely low VOC products for clear coats	• Reduces VOC emissions
Mixing paint in a well ventilated mixing room	• Reduces emissions and occupational exposure
Using computerized paint mixing systems	• Reduces waste by increasing efficiency paint generated
Store and reuse left-over primers and base coats	• Reduces waste
Keep all containers shut when not in use	• Reduces emissions and occupational exposure
Use gasket-sealed spring-loaded covers on solvent storage containers and waste drums	• Reduces emissions and occupational exposure
Designate a health and safety manager	• Increases efficiency of emissions control interventions
Establish a respiratory filter change out program	• Reduces occupations exposure
Make Material Safety Data Sheets available to shop workers	• Increases worker awareness of toxicity of chemicals leading to greater care in chemical use
Follow OSHA guidelines regarding Personal Protective Equipment	• Reduces occupational exposure

Overlaying these best practices onto two SCAQMD rules showed that while some of these best practices were integrated into these rules, other best practices were not. As discussed above, auto body shops in the greater Los Angeles region are required to comply with SCAQMD rules and should integrate the following practices, as part of the permitting process for auto body shops.

Table XX Degree of Integration of EPA Auto Body Shops Best Practices into SCAQMD Rule 1171

EPA Best Practice	Degree of Integration
Use of low VOC solvents	Yes
Use of automated gun cleaners	No. Listed but not required
Perform solvent wipe downs in a ventilated booth or prep station	No

Use of low VOC or water-based cleaners	Yes: to low VOC cleaners No: to required use of water-based cleaner if viable
Keep all containers shut when not in use:	Yes
Use gasket-sealed spring-loaded covers on solvent storage containers	No

Table XX Degree of Integration of EPA Auto Body Shops Best Practices into SCAQMD Rule 1151

EPA Best Practice	Degree of Integration
Use vacuum sanding or wet sanding	No
Use low VOC or water-based primers	Yes: to low VOC primers No: to required use of water-based
Use low VOC or water-based base coats	Yes: to low VOC primers No: to required use of water-based
Use of extremely low VOC products for clear coats	Yes
Mixing paint in a well ventilated mixing room	No
Store and reuse left-over primers and base coats	No
Keep all containers shut when not in use	No
Use gasket-sealed spring-loaded covers on waste drums	No

The CSC developed the following CERP actions to address community concerns regarding the six CERP goals. **Table 5c-1** below summarizes goals, actions, metrics, and provides a timeline to achieve emissions or exposure reductions from auto body shops in SLA.

Commented [9]: ensure actions for autobdy shops include amendments of rules 1151 and 1171 to integrate EPA best practices for auto body shops to reduce emissions, and include enforcement of this rules via the permitting process,

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Table 5c-1: Actions to Reduce Emissions from and Exposure to Auto Body Shops

Goal	Action(s)	Responsible Entity(ies)	Metric(s)	Timeline	
				Start	Complete

A: Inform Community of Pertinent Rules	● Conduct a workshop for the CSC describing applicable rules and regulations, permitting process, and enforcement efforts around auto body shops. ● Collaborate with partner agencies who also have jurisdiction over auto body shops (e.g., local land-use agencies, Bureau of Automotive Repair, Department of Toxics Substances Control (DTSC), Certified Unified Program Agencies (CUPA), local fire departments) to present information and safer alternatives and processes to reduce emissions and exposres .	South Coast AQMD	Conduct Auto Body Shops Workshop for the CSC	1st quarter, 2023	2nd quarter, 2025
B: Identify Facilities of Concern	● Identify and prioritize locations of concern ● Conduct enforcement activity	South Coast AQMD	● Develop list of identified and prioritized locations of concern, in part using data reporting from CARB's CTR regulation ● Number of inspections	2nd quarter, 2022	2nd quarter, 2026
C: Agency Referrals	Refer auto body shops to appropriate agencies when issues are found during inspections that fall outside of South Coast AQMD's jurisdiction (e.g., Bureau of Automotive Repair, California Division of Occupational Safety and Health (Cal/OSHA), CUPA, public health departments, DTSC, local fire departments)	South Coast AQMD	Number of updates from appropriate agencies regarding referrals or follow-up information to the CSC	2nd quarter, 2022	2nd quarter, 2027
D: Outreach to Owners and Operators	Conduct targeted outreach to owners and operators in the SLA community, including providing information on best management practices, South Coast AQMD's Small Business	South Coast AQMD CSC	● Number of outreach events or materials distributed to auto body shops	2023	2025

Commented [11]: what would this look like? further expand how the enforcement will ocurr

Commented [12]: not just refer, but promote and clear collaborations that can yield opportunities for reducing emissions and increasing enforcement and compliance

	Assistance Program, permitting process, and applicable rules and regulations		● Number of auto body shops outreached		
E: Air Measurements Survey	Conduct initial air measurements surveys near facilities of concern (as identified under action B) to identify and characterize any potential emissions	South Coast AQMD	● Number of air measurements surveys ● Provide updates to the CSC	2nd quarter, 2022	2nd quarter, 2027
F: Focused Facility Enforcement	Conduct door-to-door focused enforcement of potential auto body shops in a CSC-identified area to ensure facilities are properly classified and to verify compliance with applicable rules and regulations -Amendment to rules 1151 an 1171 to include EPA best practices in the permitting process for auto body shops as BACT -Overlay EPA best practices onto two SCAQMD rules 1151 and 1171 showed that while some of these best practices were integrated into these rules, other best practices were not. As discussed above, auto body shops in the greater Los Angeles region are required to comply with SCAQMD rules and should integrate the following practices, as part of the permitting process for auto body shops.	South Coast AQMD	● Identify area for targeted enforcement inspections ● Number of inspections ● Provide updates to the CSC	2023	2024

Commented [13]: Number of autobody shops who indicate understanding of best practices, Small Business Assistance Program, permitting process, ect via a feedback form or sign up commitment to improve their practices?

Commented [26]: sanding dust from auto body operations as likely to contain toxic materials, that vacuum sanders control 93-98% of sanding dust, that purchasing vacuum sanders can pay for themselves by reducing labor time and reducing material costs, and recommends vacuum sanding as an EPA best practice. integrating vacuum sanders in Rule 1151 as a ...

Commented [14]: add amendment to rules 1151 an 1171 to include EPA best practices in the permitting ...

Commented [15]: integrating in water-based coating into Rule 1151 on

Commented [16]: sanding dust from auto body operations as likely to contain ...

Commented [17]: ensure actions for autobdy shops include amendments of rules 1151 and 1171 to ...

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Chapter 5d: General Industrial 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) community expressed concerns about emissions from and exposure to various stationary sources that are categorized as general industrial facilities, such as pallet manufacturers, recycling centers, chemical manufacturing, dry cleaners, gas stations, tire manufactures, and decommissioned facilities. The CSC highlighted specific locations of unknown types of industrial facilities that were of concern to them within SLA.

CSC members have identified dry cleaners as a category of concern due to the adverse health effects associated with solvents used in this process. One CSC-identified concern with dry cleaners is the use of perchloroethylene (PERC), a carcinogen, as a solvent, which was a common solvent used for dry cleaning.[1] As of January 1, 2021, Rule 1421[2,3] required all dry cleaning equipment utilizing PERC within the jurisdictional boundary of South Coast AQMD to be removed from service and facility owners switched to new dry cleaning systems using other compliant solvents (Rule 1102[4]) or water-based systems. CARB and South Coast AQMD conducted training to assist in the implementation of the statewide phase out of PERC. Additionally, South Coast AQMD established a financial incentive grant program, totaling $4.2 million, which assisted dry cleaners to make an early transition to non-perc alternative cleaning technologies.

South Los Angeles, there is a cumulative over concentration of these hazardous facilities, dry cleaners using PERC, that are linked to the development of chronic diseases in sensitive populations and workers. Dry Cleaners currently using Perchloroethylene are exposing their workers, communitinites nearby, and consumers to a variety of health impacts. Short-term: Breathing high levels of perchloroethylene for a short time can cause: dizziness, drowsiness, headache, nausea and vomiting, lack of coordination, irritation of the eyes and respiratory tract. Additionally, Long-term health impacts may include: cancer.

[1] South Coast AQMD, Governing Board Meeting December 6, 2002, Agenda Item 37, http://www.aqmd.gov/nav/about/governing-board/agendas-minutes

[2] South Coast AQMD, Rule 1421 – Control of Perchloroethylene Emissions from Dry Cleaning Systems, https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1421.pdf

[3] South Coast AQMD, Notice to Owner/Operator of Perchloroethylene (Perc) Dry Cleaning Equipment, http://www.aqmd.gov/docs/default-source/compliance/industrial-advisories/notice-to-existing-perc-dry-cleaners-(dec-18-2020).pdf

[4] South Coast AQMD, Rule 1102 – Dry Cleaners Using Solvents Other Than Perchloroethylene, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1102-dry-cleaners-using-solvent-other-than-perchloreothylene.pdf

Commented [1]: do subchapters for each facility listed in here

Commented [2]: add pictures

Commented [3]: add the hydrocarbons alternative

Commented [4]: but it does not exist anymore, so we should add that here

Commented [5]: how many dry cleaners in South LA were aid? add that here if none then that is a problem.

The California Air Resources Board passed a regulation to phase out Perchlorethylene by 2020, a chemical contaminant vastly used in Los Angeles as a solvent in Dry Cleaners. Perchlorethylene is a source of significant groundwater contamination and listed by the US Federal Clean Air Act as a hazardous air pollutant. As Perchlorethylene is being phased out, dry cleaners are being pushed to use other alternatives. The remaining dry cleaners are using hydrocarbons as a transition, which in addition to being combustible, was also a source of air and water pollution.

The hydrocarbon dry cleaning alternative has not been classified as a non-toxic alternative. While hydrocarbons have a potential impact on greenhouse gasses emissions and are explosive, many small dry cleaners owned by mostly immigrants and people of color have switched to this alternative of hydrocarbons. CARB has classified Professional Wet Cleaning And C02 dry cleaning alternatives as meeting the criteria as non-toxic and non-smog forming alternatives based on their relatively benign human health, environmental, and physical property hazard profile. This was identified as a concern by the CSC. Given that there are many abandoned and active dry cleaners in the community, CSC members were concerned regarding the support these businesses will need to transition to safer greener technologies.

Regulatory Background

There are approximately 354 general industrial facilities located within the SLA community boundary. These general industrial facilities conduct a variety of processes and include facility types such as chemical operations, dry cleaners, manufacturing operations, utility, and gas stations. South Coast AQMD's Facility INformation Detail (F.I.N.D.)[5] tool allows users to search for these permitted facilities by their facility ID number, name, address, permit number, application number, or Notice to Comply or Notice of Violation number. The F.I.N.D. tool provides detailed information for each facility, including equipment lists, emissions data for facilities subject to South Coast AQMD's or CARB's reporting rules, and compliance history. These facilities may be subject to South Coast AQMD rules that address odors, fugitive dust, and other emissions from facilities such as Rule 402,[6] 403,[7] 1137,[8] and 1147.[9]

[5] South Coast AQMD, Facility Information Detail (F.I.N.D.), http://www.aqmd.gov/nav/FIND

[6] South Coast AQMD, Rule 402 – Nuisance, http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf

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

[8] South Coast AQMD, Rule 1137 – PM10 Emission Reductions from Woodworking Operations, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1137.pdf

[9] South Coast AQMD, Rule 1147 – NOx Reductions from Miscellaneous Sources, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1147.pdf

South Coast AQMD regularly inspects and enforces requirements at general industrial facilities. These are initiated by South Coast AQMD through routine facility inspections or prompted by outside parties through complaints, facility notifications, or agency referrals. Air pollution concerns received from the community are an important source of information. Complaints can be submitted anonymously by phone or online, but contact information is crucial to ensure that inspectors can gather all the necessary information to conduct effective investigations.

Actions to Reduce Emissions or Exposure

In the process of developing this CERP, members of the CSC requested to identify all the general industrial facilities that exist in the community, with a focus on specific locations to help address emission and exposure reduction efforts. CSC members requested information regarding the type of the facilities, activities conducted, compliance history, and the emissions resulting from operations at general industrial facilities in this community. Additionally, there were requests for training and education on South Coast AQMD's F.I.N.D. tool and the process for filing air quality complaints to increase the community's involvement in addressing air quality concerns. The CSC also stressed the importance of outreach and training to dry cleaners regarding green alternatives and any financial and technical support to aid in the transition to green technologies.

In addition to dry cleaners, the CSC requested that information, outreach, and training be provided to assist them in increasing the community's involvement in addressing air quality concerns related to land-use issues. The CSC requested the following goals for general industrial facilities in SLA.

A. Inform the community of applicable rules and regulations, compliance history, and available data as they relate to general industrial facilities so they may prioritize facilities of concern.
B. Identify emissions and exposure reduction measures to address prioritized concerns identified by goal/action A.
C. Enforce Rules 1102 and 1421, seek funding to support transition to community identified green alternatives, and conduct community outreach to owners and operators regarding green alternatives.
D. Make referrals from general industrial inspections to the appropriate agencies to ensure these facilities follow rules and regulations from other agencies, in particular those related to hazardous waste handling and disposal, soil and water contamination, and land-use issues.
E. Inform the community about the F.I.N.D. tool and how to file air quality complaints.

The CSC developed the following CERP actions to address community concerns regarding the five CERP goals. **Table 5d-1** summarizes goals, actions, metrics, and provides a timeline to achieve emissions or exposure reductions from general industrial facilities in SLA.

Commented [6]: create new rule amendment to add Professional Wet Cleaning as BACT

Commented [7]: Create a new incentive and support program to allow ALL cleaners to switch from PERC and hydrocarbons to Professional Wet Cleaning.

Commented [8]: how is this going to be reported back to the CSC perhaps add report bac to the CSC on cross agencies collaborations/projects

Table 5d-1: Actions to Reduce Emissions from and Exposure to General Industrial Facilities

Goal	Actions	Responsible Entity(ies)	Metric(s)	Timeline	
				Start	Complete
A: Identify Facilities of Concern	● Prioritize general industrial facilities of concern ● Inform CSC of applicable South Coast AQMD rules for the prioritized facilities ● Inform CSC of three (3) year compliance history of the identified facilities, and identify enforcement gaps and needs to create a plan to improve enforcement outreach to small businesses with the CSC and business owners. ● Identify general industrial facilities clusters including and identify strategies to address aggregate numbers (Clusters) add to exposures and add to cumulative burden, how can this be addressed through regulatory actions ● Summarize available emissions and/or air pollution data collected at or near facilities ● Identify general industries near sensitive receptors - concern with metal recyclers that are next to schools.	South Coast AQMD	● Provide general industrial facility prioritization list ● Provide applicable rules list for identified facilities ● Provide compliance history for identified facilities ● Provide emissions data, if applicable, for identified facilities	2023	2023

B: Identify Strategies	Based on findings from Goal A, identify emissions and exposure reduction measures, if appropriate - promote for best practices for facilities of concern in the permitting process -improve reporting/ complaints response system for small sources of pollution by conducting outreach and reporting enforcement actions regularly to the community. -create procedural changes in permitting processes for these facilities so these facilities get to compliance to help reduce emissions exposures. -create a small business/general industries incentives fund program or community/business project to promote the use of BACT and purchasing power of equipment that can mitigate emissions such as fences, electric operations, stacks that trap emissions on site, etc - Regulations + incentives	South Coast AQMD	Number of emissions and exposure reduction measures	2023	2nd quarter, 2027

C: Dry Cleaners	• Enforcement of existing South Coast AQMD and CARB regulations (e.g., South Coast AQMD Rule 1102, South Coast AQMD Rule 1421, CARB Airborne Toxic Control Measure for Emissions of Perchloroethylene (Perc) from Dry Cleaning Operations (Dry Cleaning ATCM)) • create new rule amendment to rule 1102 to add Professional Wet Cleaning as BACT in the permitting process for new dry cleaners, to ensure new dry cleaners use BACT to reduce emissions and address legacy contamination • Create a new incentive and support program to allow ALL cleaners to switch from PERC and hydrocarbons to Professional Wet Cleaning, including amendment of funding from AB998 to ensure fee includes hydrocarbons and can fund transition to PWC. • Identify incentive opportunities to transition to community-identified green alternatives • Community outreach to owners and operators regarding green alternative practices	South Coast AQMD CSC	• Number of Rule 1102 and Rule 1421 inspections • Provide list of incentive opportunities to support transition to green alternatives, if incentive opportunities are identified • Number of outreach materials distributed to owners and operators	2023	2nd quarter, 2027

Commented [9]: rule amendment to ensure permitting process include BACT - Professional Wet Cleaning, CO2

Commented [10]: Research Memorandum included on how Professional Wet Cleaning meets all SCAQMD criteria for BACT and should be included and enforced through the permitting process for new dry cleaners permits.

Commented [11]: Maybe also number of owners and operators who commit to transitioning to green alternatives or provide feedback on support needed to transition to green alternatives

Commented [12]: to report on efficacy of the actions

D: Agency Referrals	Refer to appropriate agencies when issues are found during inspections that fall outside of South Coast AQMD's jurisdiction (e.g., Local land-use agencies, California Division of Occupational Safety and Health (Cal/OSHA), Certified Unified Program Agencies (CUPA), and public health departments) -work with OSHA to uplift incentives/operations/and equipment best practices that can protect workers and the community leveraging support from the workforce	South Coast AQMD	Number of updates from appropriate agencies regarding referrals or follow-up information to the CSC	2nd quarter, 2022	2nd quarter, 2027
E: F.I.N.D. Tool and Filing Complaints	Conduct community outreach on F.I.N.D. tool including training on how to use the F.I.N.D. tool to search for information about South Coast AQMD-regulated facilities (e.g., facility details, equipment, permits, compliance history, etc.) and on filing air quality complaints by phone, web, or mobile application to the community	South Coast AQMD	• Conduct one F.I.N.D. outreach session to the community • Create training materials for F.I.N.D. to be published on the South Coast AQMD website	4th quarter, 2022	2nd quarter, 2027

Commented [13]: this tools is not user friendly and inaccessible, can this tool be improved?

Commented [14]: maybe quarterly/ yearly meetings to go over enforcement data with CSC

Table 5d-1: Actions to Reduce Emissions from and Exposure to General Industrial Facilities

Goal	Action	Responsible Entity(ies)	Matic(s)	Timeline	
				Start	Complete
C: Dry Cleaners	Set acceptable emissions from non-	South Coast AQMD	• Modify BACT (Best Available Control Technology) for non-perc solvent dry clean machines using		

	perc solvent-based dry clean systems regulated by Rule 1102 to zero based on viability of zero-emission alternatives. • Phase out existing non-perc dry clean solvent machines after useful life and remove regulatory exemptions for non-perc dry clean solvent machines • Create incentive opportunities to transition to professional wet cleaning (and other commercially viable zero-emission technologies when identified) • Community outreach to owners and operators regarding regulatory changes, incentives for zero-emissions technologies, and	CSC	professional wet cleaning, setting the acceptable VOC emissions at zero • Amend Rule 1102 to eliminated Rule 102 Group II exemption [by striking (b) 13 and (h) II] and phase out non-perc dry clean machines after fifteen years for the date of installation • Provide list of incentive opportunities to support transition to professional wet cleaning, (and other commercially viable zero-emission technology when identified) • Notify all dry cleaners in SCAQMD – including cleaners with Rule 1102 permits as well as other non-perc dry cleaners not currently regulated by Rule 1102 of new BACT classification for non-perc solvents machines • Notify all dry cleaners in SCAQMD – including cleaners with Rule 1102 permits as well as other non-perc dry cleaners not currently regulated by Rule 1102 of Rule 1102 rule change • Support creating professional wet cleaning demonstration programs to jump start transition to zero emission professional apparel cleaning alternatives. • Number of outreach materials distributed to owners and operators be published on the website concerning new BACT, changes in Rule 1102,	3rd quarter 2022 3rd quarter 2022 3rd quarter 2022 4th quarter 2022	4th quarter 2022 3rd quarter 2023 2027 (note: assess need after 5 years)

	demonstration workshops on professional wet cleaning (and other commercially viable zero-emission technology when identified)		availability of incentives, and ongoing demo workshops on zero-emission technologies	3rd quarter 2023 3rd quarter 2022 4th quarter 2022	2027 (Note assess need for demo program after five years) 2027 (Note assess need if demo program extended

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, and strong odors from metals facilities. The CSC is concerned with metal recyclers and metal scrap yards near sensitive receptors, such as Atlas Metals. Lead, hexavalent chromium, nickel, arsenic are metal toxic air contaminants; a toxic air contaminant 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

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.

Commented [1]: can be a map

These metal processing facilities conduct various operations, including melting, plating, finishing, machining, 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 Rules 403[2] and 1466.[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.

Commented [2]: further explain each rule

California Air Resources Board (CARB) identifies and controls toxic air contaminants 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 toxic air contaminants, their health effects, and the methodology to estimate the health risks from air toxic metal exposure. South

[1] California Health and Safety Code, Section 39655

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

[3] South Coast AQMD, Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants, http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf

Coast AQMD regulates toxic air contaminants 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 has the authority to develop rules or regulations to control toxic air contaminants they identify. For example, after hexavalent chromium was identified as a toxic air contaminant,[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.

Commented [3]: further explanation of rules

Case Study on CMX - Lessons Learned informing CERP Actions

CMX optimizations to media-specific regulatory challenges have created positive environmental health benefits to other environmental media in general and air quality in particular that will be further considered for metal facility CERP actions.

- Storm Water Permitting – CMX developed an innovative two-step engineered approach: (1) Installation of water infiltration/aquifer recharge system channeling rainwater from roof drains and foundation challenges to a sump fed to a retention talk, into a infiltration chambers, fed to the soil to recharge the aquifer, and (2) Purchase and operations of ride-along mobile wet sweeper to minimize metal particle accumulation. This pollution prevention approach towards eliminating toxic metal particulates at the source and a sustainability approach of turning an environmental problem (e.g. toxic storm water discharge) into an environmental resource (i.e. recharging the aquifer with potable water via infiltration) – are identified as best practices for other metal industrial sites in the region.

[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-1426.pdf

[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] Hexavalent chromium was identified as an air toxic contaminant in 1987 (https://oehha.ca.gov/chemicals/chromium-hexavalent)

[11] For more information regarding CARB's current amendments to this ATCM, please visit https://ww2.arb.ca.gov/our-work/programs/air-toxics-program/chrome-plating-atcm/chrome-plating-meetings-workshops

- Wet Sweeping – Integration of wet sweeping into daily operations at CMX, in which all operational surfaces are swept three times each operational day, created three multi-media benefits – minimized metal particulate discharge into the storm water infiltration system, minimized occupational exposure of metal particulates to CMX employees, and minimizing release of metal particulates to the ambient air reducing potential exposure children and adults living, working, or attending school to the community adjustment to facility.

SCAQMD Rules Applicable to CMX: The list of specific SCAQMD Rules applicable to CMX are as follows:

- Rule 1407: CONTROL OF EMISSIONS OF ARSENIC, CADMIUM, AND NICKEL FROM NON-CHROMIUM METAL MELTING OPERATIONS
- Rule 1420: EMISSIONS STANDARD FOR LEAD
- Rule 1401: NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS.
    - Applicable when CMX is adding a new process to their operations.

***Integration of CMX Best Practices into SCAQMD Rules*:** While CMX was able to integrate operation of ride-along wet sweeper three times per operating day to reduce metal particle concentration to an optimally low level creating benefits to occupational exposure, storm water discharge, and ambient air, a review of the two SCAQMD rules (i.e. Rule 1407 and Rule 1420)

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) program[12] or Rule 1469.

[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), nitrogen oxides (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)

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.
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 toxic air contaminants that may be found in the community (e.g., hexavalent chromium, lead, zinc, nitrogen oxides).
F. Inform metal processing facilities of best practices and applicable rules and regulations, and provide information on South Coast AQMD's Small Business Assistance program.[13]
G. Reduce fugitive metal emissions from metal recycling facilities.
H. Encourage partnerships between communities, businesses, and SCAQMD to incorporate best practices
I. Require and enforce technology transfer of best practices at metal facilities including mobile metals sweepers, workplace enclosures, and air monitoring
J. Create incentives for businesses to incorporate best practices

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.

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

Commented [4]: goals should reflect recommendations made by CMX pilot project, to reduce emissions as presented to the CSC during the October 7, 2022 CSC meeting - in red below

Commented [5]: https://drive.google.com/file/d/1_1fOfey1OC6MXMspb-Mclomx_FDrlXVj/view

Commented [6]: is this just air monitoring?

Commented [7]: SCAQMD has huge investments in air monitoring technology - can an action be establish an air monitoring library to lend monitors to the community and provide staff support as needed.

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	• 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 • Provide information regarding CARB Chrome Plating ATCM amendments	CARB South Coast AQMD	• Delivery of CTR Workshop • Number of updates to the CSC on ATCM amendments	2023	2024
B: Identify Metals Facilities	• 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 • Summarize available emissions and air monitoring data collected at or near facilities	South Coast AQMD	• Provide list of permitted metals facilities • Provide applicable rules list for identified facilities • Provide compliance history for identified facilities • Provide emissions and air monitoring data, if available, for identified facilities	2023	2023
C: Identify Strategies	• Identify and prioritize air quality concerns related to sources of metal emissions	South Coast AQMD	• Provide list of prioritized concerns related to sources of metal emissions	2023	2nd quarter, 2027

Commented [8]: integrate hex chrome plating rule - enforce

	• Identify potential strategies and approaches to address the concerns at prioritized locations • Integrate new rulemaking on Hexavalent chromium to evaluation of current rules and applicability to South LA metal facilities • Integration of ride-along wet sweeper operations as a best practice into two SCAQMD rules -- Rule 1407 and Rule 1420. • *Integration of CMX Best Practices into SCAQMD Rules*: While CMX was able to integrate operation of ride-along wet sweeper three times per operating day to reduce metal particle concentration to an optimally low level creating benefits to occupational exposure, storm water discharge, and ambient air, a review of the two SCAQMD rules (i.e. Rule 1407 and Rule 1420) • Encourage partnerships between communities, businesses, and SCAQMD to incorporate best		• Provide strategies list, if applicable		

Commented [9]: This should be added, as a new rule or amendments of rules 1407 and 1420 to add best practices that can reduce emissions including integration of: 1) ride along wet sweeper, 2) stacks equipment to trap emissions on site, and 3)installation of monitors through facilities

	practices including hosting business workshops and training on BACT. • Require and enforce technology transfer of best practices at metal facilities including mobile metals sweepers, workplace enclosures, and air monitoring installations at facilities. • Create incentives for businesses to incorporate best practices				
D: Air Measurement Survey	Conduct initial air measurement surveys near facilities of concern to identify and characterize any potential emissions	South Coast AQMD	• Conduct air measurements survey • Provide updates to the CSC	2nd quarter, 2022	2nd 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, nitrogen oxides)	South Coast AQMD	Number of handouts distributed and/or delivery of presentation	2023	2025
F: Outreach to Owners and Operators	Conduct targeted outreach to metals facility owners and operators in the community, including providing information on best practices, South Coast AQMD's Small Business Assistance Program, permitting process, and applicable rules and	South Coast AQMD CARB	Number of outreach events or materials distributed to metals facilities	2023	2025

Commented [10]: led monitoring

Commented [11]: add this o general industrial facilities - this is needed information to confirm that emissions happening and to identify strategies to reduce them

Commented [12]: work with the CSC to develop good neighbor policies for metal facilities

	regulations – with a focus on new rule requirements from CARB and South Coast AQMD				
G: Metal Recycling Facilities	Initiate rule development process 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

Commented [14]: Maybe also assessment from the CSC on the efficacy of the rule being developed?

Commented [13]: amend rules to include best practices as BACT for permitting process

Chapter 5f: Oil and Gas Industry

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 emissions resulting from oil and gas operations conducted at drill sites and oil wells. In particular, the CSC has expressed concerns due to potential adverse health impacts associated with the proximity of these sites to residential areas. The CSC also identified three oil and gas facilities (i.e., Jefferson, Murphy, AllenCo Energy Inc, and The Inglewood Oil Fields) where they believe there is limited transparency of monitoring data and enforcement activity findings, such as Notices of Violations (NOVs). Community residents also expressed concerns about the lack of noticing and reporting for acidizing injection wells and all the chemicals used on site which are regulated by Senate Bill –4.[1]

Commented [1]: the community also expressed desire to include the Inglewood oil fields - Martha

Commented [2]: include a map

Regulatory Background

The oil and gas industry has existed in Southern California for over a hundred years. This industry, which includes oil wells, oil drilling, pipeline transfer stations, and oil and gas production fields, has hundreds of facilities that are subject to requirements set forth by city agencies, local air districts, and state agencies (e.g., California Air Resources Board (CARB) and the California Geologic Energy Management Division (CalGEM)).

South Coast AQMD has specific regulations for oil wells, including the Rule 1148.1,[2] Rule 1148.2,[3] and other rules that reduce emissions of volatile organic compounds (VOCs)[4,5] from oil and gas operations. CARB has also adopted an Oil and Gas Regulation[6] to reduce methane emissions from oil and gas production, processing, and storage. Other agencies with authority over oil and gas production

Commented [3]: explain separately these rules

[1] https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB4

[2] South Coast AQMD, Rule 1148.1 – Oil and Gas Production Wells, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1148-1.pdf

[3] South Coast AQMD, Rule 1148.2 - Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1148-2.pdf

[4] South Coast AQMD, Rule 1173 - Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1173.pdf

[5] South Coast AQMD, Rule 1176 – VOC Emissions from Wastewater Systems, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1176.pdf

[6] CARB, Oil and Gas Regulation, https://www.arb.ca.gov/regact/2016/oilandgas2016/oilandgas2016.htm

have been directed to draft rules or ordinances to regulate oil and gas production operations to address public health impacts. In 2019, CalGEM was directed by Governor Gavin Newson to develop a public health rule to update public health and safety protections for communities near oil and gas production operations.[7] In 2020, the Los Angeles County Department of Regional Planning began developing an oil well ordinance to update permit requirements and development operating standards for existing and new oil wells and accessory facilities in unincorporated Los Angeles County.[8] In 2022, the Los Angeles City Council passed a motion to recommend mayoral approval to require an ordinance be developed 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.[9]

Actions to Reduce Emissions or Exposure

During development of this CERP, the CSC expressed a desire to prioritize air measurements at specific oil drilling sites and identify areas of concern to conduct inspections in conjunction with CARB. CSC members requested transparency with monitoring and enforcement data, including periodic summaries of inspection findings including enforcement actions taken and referrals made to appropriate agencies if findings are outside South Coast AQMD's authority. The CSC has requested that regulatory agencies accept data provided by community-based organizations into their findings when conducting enforcement actions. In addition to monitoring and enforcement, the CSC requested that the current applicability of the Rule 1148 series be assessed to include reducing emissions from on-site diesel engines, banning chemical odorants at drill sites, and removing exemptions for injection wells.

The CSC requested the following goals for oil and gas facilities in SLA.

A. Identify locations of concern, characterize emissions, and identify potential elevated emissions through air measurement surveys around oil drilling sites.

B. Determine which oil well sites and activities may require additional monitoring.

C. Make referrals from oil and gas inspections to appropriate agencies to ensure these facilities follow rules and regulations from other agencies, in particular those related to land-use, public health, and abandoned wells.

D. Prepare a report for CSC of all enforcement activities and findings and enforcement actions taken at oil and gas facilities, in particular those related to odors and fugitive emissions.

E. Reduce emissions and exposure to oil and gas operations through ~~potential~~ rule amendments to Rules 1148.1 and 1148.2.

Commented [4]: Disclose all chemical use on the sites indludng oderants - Martha

[7] CalGEM Public Health Rulemaking, https://www.conservation.ca.gov/calgem/Pages/Public-Health.aspx

[8] Los Angeles County Department of Regional Planning, Draft Oil Well Ordinance, https://planning.lacounty.gov/oilwell

[9] Los Angeles City Council File 17-0447, https://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=17-0447

F. Support Participatory Action Research and community data collection on emissions

G. Improve accessibility and usability of the F.I.N.D. tool and how to file air quality complaints.

H. Inform the CSC of enforcement findings, specifically related to CARB regulations.

The CSC developed the following CERP actions to address community concerns regarding the nine CERP goals. **Table 5f-1** below summarizes goals, actions, metrics, and provides a timeline to achieve emission or exposure reductions from the oil and gas industry in SLA.

Table 5f-1: Actions to Reduce Emissions from and Exposure to Oil and Gas Industry

Goal	Actions	Responsible Entity(ies)	Metrics	Timeline	
				Start	Complete
A: Air Measurement Surveys	● Prioritize locations for community air monitoring ● Conduct air measurement surveys around oil drilling sites to identify and characterize any potential emissions ● Air monitoring for oil and gas should be readily available and with the correct monitor systems to monitor the right pollutants. ● Complaints response system should improve to ensure emergencies are addressed promptly - such as fugitive emissions	South Coast AQMD	● Provide list of prioritized locations for monitoring ● Number of air measurement surveys	2nd quarter, 2022	4th quarter, 2026

B: Monitoring	Collaborate with appropriate agencies and the CSC to determine if additional air monitoring is needed during specific well activities or under certain conditions -create a low cost sensor unit available for community science, that can be shared with CSC/south la community members, collaborate with SCAQMD low cost sensor department and the community to move towards utilizing and sharing and making these data sets more enforceable and validated - with http://www.aqmd.gov/aq-spec/sensors	South Coast AQMD	● Number of meetings with appropriate agencies ● Conduct air measurements during specific well activities, if necessary	2nd quarter, 2022	1st quarter, 2025
C: Agency Referrals	Refer oil and gas facilities to appropriate agencies when issues are found during inspections that fall outside of South Coast AQMD's jurisdiction (e.g., local land-use agencies, CalGEM, and public health departments)	South Coast AQMD	Number of updates from appropriate agencies regarding referrals or follow-up information to the CSC	2nd quarter, 2022	2nd quarter, 2027
D: Enforcement Updates	Provide periodic summaries of findings from enforcement activities, such as whether odors or emissions were confirmed or verified with complainants and at a specific site or source and any enforcement action taken -review summaries with the CSC quarterly to review NOC/s NOVS and set metrics and enforcement data gaps.	South Coast AQMD	Number of enforcement updates to the CSC	3rd quarter, 2022	2nd quarter, 2027

Commented [5]: with http://www.aqmd.gov/aq-spec/sensors

	Ensure that no Public Records Requests are not required to the CSC and add summaries to the South LA AB617 website quarterly for easier access and transparency				
E: Rule Amendment Feasibility	-Initiate process to amend rules 1148.1 and 1148.2 to include injections well, ban chemical odorants in acid work, and add mandatory public notices for when acid works are done. ~~Explore expanding Rule 1148.1 and 1148.2 to include~~ • Acid work at injection wells • Notification of workover rig operations • Notification of and requirements for using odorants and chemicals used onsite • Notification of modifications to any previously noticed work	South Coast AQMD	• Number of Rule Working Group meetings held, if necessary • Update to CSC on rule development efforts	2nd quarter, 2022	2nd quarter, 2027
F: Support Community ~~Citizen~~ Scientists	Identify opportunities to support citizen scientists to conduct community air monitoring -promote collaboration with other agencies to do surveys on Health impacts with community scientists that can support data collection. Ensure that this accepting data collected by the community in the regulatory landscape,	South Coast AQMD	Number of activities with the citizen scientists to collaborate	2nd quarter, 2023	2nd quarter, 2027

Commented [6]: NOT explore - AMED these rules. Initiate rule amendment process as language extracted from the Wilmington CERP https://www.baaqmd.gov/~/media/files/ab617-community-health/west-oakland/100219-files/final-plan-vol-1-100219-pdf.pdf?la=en

	community science data and findings should be equally validated as regulatory agencies. -CAQMD/CBO's co-develop a pilot community science program - training that can create a team of community trusted leaders -including incentives for community engagement. -evaluate paths for research from the community science to be integrated in the CERP implementation metrics.				
G: F.I.N.D. Tool and Filing Complaints	Conduct community outreach on F.I.N.D. tool including training on how to use the F.I.N.D. tool to search for information about South Coast AQMD-regulated oil and gas facilities (e.g., facility details, equipment, permits, compliance history, etc.) and on filing air quality complaints by phone, web, or mobile application to the community	South Coast AQMD	• Conduct one F.I.N.D. outreach session for the community • Create training materials for FIND to be published on the South Coast AQMD website	4th quarter, 2022	2nd quarter, 2027
H: CARB Regulations	CARB to collaborate with South Coast AQMD to conduct inspections of all CSC-identified oil and gas facilities of concern regarding CARB and South Coast AQMD rules (including Portable Equipment Registration Program	CARB South Coast AQMD	• Number of facilities inspected • Number of updates regarding findings	3rd quarter, 2022	2nd quarter, 2027

	(PERP), [10] mobile source regulations, and Oil and Gas Regulation[11])				
I: Other Governmental Agency Projects	Identify opportunities for other agencies to provide information regarding their authority and projects (e.g., future regulations or ordinances) related to the oil and gas industry -identify relevant County and City departments working on the initial assessments/actions/plans for prohibiting new oil wells/declaring non conforming land use to provide updates to CSC -in the meantime of LA county/city ordinance phase out oil drilling ordinance implementation, high priority oil wells in South LA create a funding support/community project or program for remaining operating/non operating oil wells implement best practices and emission reduction technologies such as electrification of their operations, and BACT for clean ups.	South Coast AQMD	Number of presentations from other agencies to the CSC	3rd quarter, 2022	2nd quarter, 2027

[10] CARB, Portable Equipment Registration Program, https://ww2.arb.ca.gov/our-work/programs/portable-equipment-registration-program-perp
[11] CARB, Oil and Gas Regulation, https://ww2.arb.ca.gov/resources/documents/oil-and-gas-regulation

Executive Summary

Air pollution in South Central Los Angeles emanates from a variety of sources, both stationary and mobile. Nestled among residential homes, schools, recreational facilities, houses of worship and commercial establishments are auto body shops, metal manufacturing facilities, oil and gas extraction sites, chemical plants and other industrial land sites. Freeways and high-volume thoroughfares surround and crisscross this urban landscape. These pollution sources regularly emit harmful air pollutants and particles, often above regulatory health standards , when combined with other socio-economic and environmental determinants of health, significantly impact the health and well-being of South Central Los Angeles residents.

The South Los Angeles (SLA) Community Emissions Reduction Plan (CERP) is a critical part of implementing Assembly Bill 617 (AB 617),[1] a California law that addresses the disproportionate impacts of air pollution in environmental justice (EJ) communities. "Environmental justice" is defined as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."[2] The AB 617 program invests new resources. AB617 creates new opportunities for communities to be empowered and lead in the air quality policy/regulatory landscape. The program refocuses resources on improving air quality at the local level in EJ communities and directs regulatory agencies to work directly with communities to develop solutions.

AB 617 communities are designated by California Air Resources Board (CARB) and they specify the plan(s) for the community as either an emissions reduction program, an air monitoring system, or both. South Central Los Angeles was selected as an official AB617 community after 3 years of the AB617 program implementation.

Within one year of an AB 617 community designation, the local air district must develop and adopt an emissions reduction program in collabration with CARB, community-based organizations, affected sources, and local governmental bodies, which must be implemented within five years.[3] The air monitoring system must be developed and deployed within one year of community designation.[4] An essential element of the program is partnership and collaboration with the community to address the community's air quality priorities and collectively develop respective solutions.

The Community Steering Committee (CSC) is a diverse group of people who live, work, own businesses, or attend school within the community. Additionally, local land-use agencies, public health agencies, regulatory agencies, and elected officials may have representation on the CSC.

[1] California Health and Safety Code, Section 44391.2
[2] California Government Code, Section 65040.12
[3] California Health and Safety Code, Section 44391.2 (b)
[4] California Health and Safety Code, Section 42705.5 (b)

Commented [1]: The entire Executive summary is missing the historical work of PSR-LA, SCOPE, and Watts in the community, and the efforts of SCLA-PUSH to ensure South LA was selected as an AB617 community. The work the SCLA-PUSH work did to ensure community members were trained and had tools to be part of the CSC.

Commented [2]: It also does a poor job of reflecting the work that it took community based organizations to get SLA selected under AB617.

Commented [3]: I am not sure this is accurate to say, necessarily, because AB617 funding comes from Cap and trade funding which was already existent, it was just redirected to create AB617

The CSC guides the development and implementation of the emissions reduction program and air monitoring system.

After years of historical advocacy and recent organizing efforts led by Physicians for Social Responsibility Los Angeles (PSR-LA) and community based organizations such as Strategic Concepts in Organizing and Policy Education (SCOPE) and Watts Clean Air and Energy Committee (WCAEC) through their Community Air Protection Project SCLA-PUSH, South Los Angeles was selected as an AB617 community.

During the California Air Resources Board (CARB) meeting on February 25th, 2021, voted to select South Central Los Angeles for both a Community Emissions Reduction Plan (CERP) and a Community Air Monitoring Plan (CAMP).

Through a community visioning and planning process, SCLA-PUSH project members, South LA organizations, and residents started working together to produce a roadmap for achieving the transformation of South LA's air, primarily through creative technology solutions and innovation rooted in a Just Transition framework.

~~On February 25, 2021, CARB designated SLA as an AB 617 community with both community plans, an emissions reduction program, and an air monitoring system.~~

This CERP serves as the emissions reduction program and outlines goals and actions by the CSC, South Coast Air Quality Management District (South Coast AQMD), and CARB to reduce air pollution in the SLA community. Additionally, a Community Air Monitoring Plan (CAMP) will be developed as the air monitoring system and will further explain air monitoring efforts included in this CERP. Findings from air monitoring will help to identify and evaluate next steps. South Coast AQMD will work with the CSC to review those findings and make necessary adjustments to implement the SLA CERP.

Physicians for Social Responsibility-Los Angeles (PSR-LA) along with Strategic Concepts in Organizing and Policy Education (SCOPE) and Watts Clean Air and Energy Committee (WCAEC) make up the South Los Angeles AB617 Community Steering Committee Co-leadership model in collaboration with the South Coast Air Quality Management District. Z

Commented [4]: This Co-leadership model is a case study as it is an AB617 first and approach to best practice.

Given these three organizations track record of success of over 20 years of experience in working in South LA organizing, building capacity, and advocating for solutions to the ongoing health threats linked to environmental justice issues in the community, they are co-leading this effort along with SCAQMD. This model was developed to ensure community voices are leading the process for identifying air quality priorities and emissions reduction strategies. The South Los Angeles AB 617 CSC co-leadership model was created and formulated by the community based organizations to ensure a meaningful community engagement process and create co-learning spaces for both community members and regulatory agencies that can amplify co-governance in the decision making process for the CERP and CAMP.

~~For this community, South Coast AQMD formulated a co-lead model to ensure that the development and implementation of the SLA CERP is a community-driven process. The three co-lead organizations are: Physicians for Social Responsibility-Los Angeles, Strategic Concepts in Organizing and Policy Education, and Watts Clean Air and Energy Committee.~~

~~Based on the sources of air pollution impacting the community, the SLA CSC identified the following air quality priorities to be addressed by this CERP:~~

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

~~At its core, this CERP seeks to address these air quality priorities with actions that reduce air pollution emissions from sources within the community and reduce air pollution exposure for the people in the community. Actions in this plan include developing regulations to capture new sources of air pollution; enforcing rules to ensure compliance with existing regulations; providing incentives to accelerate the adoption of cleaner technologies; and conducting air monitoring to characterize emissions. These efforts will provide critical information to help guide investigations and provide public information. As well, conducting outreach will provide useful information to support the public in making informed choices. Collaborative efforts with other regulatory agencies, community-based organizations, businesses, and other stakeholders will amplify the impact of these actions. Many of the actions included in this CERP will only be conducted during the five-year implementation timeframe of this plan, which begins at CERP adoption. However, there are some actions (e.g., regulation, ongoing enforcement activities, and certain incentive programs) initiated during the implementation timeframe that will continue to result in emission and exposure reductions beyond the five-year timeframe of this CERP. The focus of this plan is to improve air quality in the SLA community through concentrated efforts and community partnerships.~~

The CSC, South Coast AQMD, and CARB will continue to engage in the process of implementing the CERP and tracking its progress during the five-year timeframe.

The Reader's Guide to this CERP

This CERP is organized into six chapters, containing background information and strategies for reducing exposure to air pollution in the SLA community:

- Chapter 1 – Introduction, provides background information about the AB 617 program and timeline;
    - Chapter 1 B - Goals and Targets of the CERP

Commented [5]: This is inaccurate, it was not SCAQMD who formulated this co-leadership model, it was us the community based organizations.

Commented [6]: why only? what happens after the 5 year mark?

Commented [7]: MOVE TO Chapter 1

Commented [8]: again co-leads are left out of the narrative

Commented [9]: Similar to West Oakland

- Chapter 2 – Community Outreach, Community Steering Committee, and Public Process, which details the CSC process and community engagement;
- Chapter 3
    - Chapter 3a – Community Profile, provides context in understanding attributes of the community, including a general overview of the community, a discussion of community issues, and a characterization of public health data to establish a current baseline and socioeconomic factors;
    - Chapter 3b – Emissions and Source Attribution, providing an overview of air pollution sources in the community;
- Chapter 4 – Enforcement Overview and History, provides information about past and ongoing enforcement activities conducted by both the South Coast AQMD and CARB; this information may provide insight(s) into future enforcement activities;
- Chapter 5 – Actions to Reduce Community Air Pollution, as identified by the CSC. Chapter 5 is organized by air quality priorities, followed by actions to address each air quality priority. The actions are organized in a table that identifies the entities responsible for each action and the implementation timeframe. This CERP will include a California Environmental Quality Act (CEQA) analysis based on the actions; and,
- Chapter 6 – Community Air Monitoring Plan (CAMP) Summary, is a detailed approach for air monitoring actions and activities described in Chapter 5.
- Chapter 7 - Just Transition and Community Projects , detailed South LA case studies that outline specific industries best practices and clean production actions to reduce emissions that can inform the AB617 implementation.
- Chapter 8 describes methods to track implementation of the CERP strategies.

Appendices to the Plan present the….

Commented [10]: Agree

California Metal X (CMX) Case Study

Introduction: PSR-LA introduced to CMX in 2011 has part of a Los Angeles Trade Tech project of Green Manufacturing. Since 2011, PSR-LA and CMX participated on an advisory board of a five-year UCLA lifecycle project evaluating the viability of lead-free alloys for potable water supply components. Further, in 2016, CMX participated as a site for a Just Transition tour organized by PSR-LA of facilities in Los Angeles committed to taking actions to support environmental justice. Because CMX is located in the PSR-LA's South/Southeast Los Angeles AB617 catchment and because CMX is metals processing operation, they were selected as a metal's industry case study for this project. In interview with the owners of CMX as well as the environmental compliance consulting firm hired by CMX provided details for this case study.

Location: CMX is located at 366 E 58th St, Los Angeles, CA 90011.

NAICS: 423930 - Recyclable Material Merchant Wholesalers.

Business Description: Copper alloy manufacturer.

Ownership Structure: CMX is sole proprietorship owned by Tim Strelitz and Karen Strelitz.

Business Operations: Buys post-consumer scrap material, cleans and processes purchased post-consumer scrap material, melts cleaned post-consumer scrap material into copper-based alloy ingots sold to copper-based component manufacturers.

History: In 1981, CMX purchased the property at 366 E 58th St, Los Angeles and has continuous operated the site as a copper alloy manufacturer over the last 39 years. The facility is located in an industrial/commercial zone along Slauson Avenue. When CMX first began operating at this site in 1981, no schools were located in the surrounding community. Since then, three grade school have been built within one mile of CMX: Estrella Elementary School, Los Angeles Academy Middle School, and Dr. Maya Angelou Community High School. In addition, the density of residential units has also increased in the adjacent community.

CMX Proactive Modifications to Optimize Environmental Health Performance: In order to successfully compete as a copper-based alloy manufacturer in a highly saturated and increasingly globalized sector, CMX has created a culture of innovation in which operations and equipment are continuously modified to increase efficiency and effectiveness of the plant. This culture of innovation has been applied to compliance with environmental health regulations which have increased in complexity and stringency over the 39 years of CMX operations at this facility. With respect to environmental compliance, the philosophy of CMX has been to "get out front" of regulations in order to both fulfill the social responsibility of the firm by minimizing the firm's environmental health footprint as well as minimize the

risk of disruption in business operations associated with regulatory non-compliance. CMX optimizations to media-specific regulatory challenges has created positive environmental health benefits to other environmental media in general and air quality in particular.

- Storm Water Permitting – In response pending storm water permit requirements in California targeted to the metals manufacturing sector and the specific concern with run-off discharge of toxic metals particulate waste from these facilities to the storm water system, CMX developed an innovative two-step engineered approach: (1) Installation of water infiltration/aquifer recharge system channeling rain water from roof drains and foundation challenges to a sump fed to a retention talk, into a infiltration chambers, fed to the soil to recharge the aquifer, and (2) Purchase and operations of ride-along mobile wet sweeper to minimize metal particle accumulation (see below).

  Not only did these CMX actions fulfill new storm water permit requirements, the innovative CMX system – taking a pollution prevention approach towards eliminating toxic metal particulates at the source and sustainability approach of turning an environmental problem (e.g. toxic storm water discharge) into an environmental resource (i.e. recharging the aquifer with potable water via infiltration) – was view by the storm water regulatory agency as well as the environmental NGO focused on problems with storm water toxicity as best practices for other industrial sites in the region.

- Wet Sweeping – Integration of wet sweeping into daily operations as CMX, in which all operational surfaces are swept three times each operational day, created three multi-media benefits – minimized metal particulate discharge into the storm water infiltration system, minimized occupational exposure of metal particulates to CMX employees, and minimizing release of metal particulates to the ambient air reducing potential exposure children and adults living, working, or attending school to the community adjustment to facility.

- Lead-Free Brass Alloys – In 2006, California enacted a new law, AB 1953, which phased out lead-bearing brass components in the potable water supply system, with the intent to eliminate the problem of lead leaching into drinking water. At the time this law was create, a wide range of potable water supply components were made from lead-brass alloys (e.g. water meters, fire hydrants, back flow preventors, etc.). While many firms in the potable water metal manufacturer supply chain opposed enacting AB1953, CMX was the first firm to support this legislation. CMX advocacy spearheading a change in the metal manufacturing sector, with most firms coming around to support this bill phasing out of lead-brass. This industry support was critical to bill becoming law. In 2011, the federal legislation was enacted based on AB1953.

  The practical consequence for CMX was that beginning in 2008, they discontinued manufacturing the two main lead brass alloys previously used by potable water supply component manufacturers. This switch as CMX to manufacturing lead-free brass in turn resulted in a reduction in the generation of lead particles reducing lead concentration in storm water runoff, reducing occupational exposure to lead particles, and reducing emissions of lead particles to the ambient air.

CMX Environmental Compliance Infrastructure: CMX works with Keramida, Inc. to facilitate compliance with environmental health regulations including air quality permits from SCAQMD, storm water permits for California, and worker health and safety permits from OSHA/Cal-OSHA. Keramida markets is an WBE-certified (women-owned business enterprise) EHS and sustainability consulting firm. With respect to SCAQMD permitting, Keramida monitors data collected by CMX associated to assure specific reporting requirements and completes all reporting requirements to SCAQMD, including completing and submitting the SCAQMD Annual Emissions Report.

SCAQMD Permit: CMX's SCAQMD permit includes a number of pieces of equipment and operations associated with metal recycling at the facility – materials separation, materials cleaning, materials pelletizing, furnace operations, baghouse operations, and abrasive blasting. The equipment associated with the CMX SCAQMD Permit is listed on-line by SCAQMD in their FIND (Facility Information Detail) system (See Appendix A for the FIND list of regulated equipment at CMX)

SCAQMD Rules Applicable to CMX: The list of specific SCAQMD Rules applicable to CMX are as follows:

- Rule 1407: CONTROL OF EMISSIONS OF ARSENIC, CADMIUM, AND NICKEL FROM NON-CHROMIUM METAL MELTING OPERATIONS
- **Rule 1420:** EMISSIONS STANDARD FOR LEAD
- **Rule 1401: NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS.**
    - **Applicable when CMX is adding a new process to their operations.**

CMX Compliance with SCAQMD Permit

- January 2011-March 2020 – Based on the database provided by SCAQMD for this report of inspections in the South/Southeast Los Angeles catchment over the eight-and-a-quarter period, SCAQMD completed two inspections of CMX between January 2011 and March 2020 and neither inspection resulted in either a minor citation (i.e. Notice to Comply) nor a major violation (i.e. Notice of Violation). Of the 280 targeted facilities in this catchment, 61 were inspected twice, and of this group, less than half (44%) passed both inspections without a citation.

- History of any SCAQMD citations – The SCAQMD FIND database tracks facility inspection outcomes beginning in January 2003. Over this seventeen-and-a-half year period, only one inspection, on August 6, 2010 resulted in any citation, which was a minor Notice to Comply violation (See Appendix B). The details of the NC were found in a separate publicly available SCAQMD Notice to Comply Inquiry System (See Appendix C for details on this NC). The details of this NC were a request to submit records associated with the Rule 1420 compliance plan and the records on air flow to the baghouse associated with Rule 1407. The SCAQMD follow-up inspection two weeks later, on August 24, 2010, resulted in a status of "In Compliance." That is, CMX provided SCAQMD the records requested.

- Reliability of compliance after a violation – The history of violations at CMX described above shows one minor violation in 2010 over a seventeen-and-a-half year period, compliance after a

two-week reinspection, and two subsequent inspections with no violations. While it was not possible to track compliance after a violation for the data set provided by SCAQMD for all targeted facilities in the South/Southeast Los Angeles catchment, at least for CMX, this history shows repeated reliability of compliance after a violation.

Integration of CMX Best Practices into SCAQMD Rules: While CMX was able to integrate operation of ride-along wet sweeper three times per operating day to reduce metal particle concentration to an optimally low level creating benefits to occupational exposure, storm water discharge, and ambient air, a review of the two SCAQMD rules by which CMX is regulated (i.e. Rule 1407 and Rule 1420) shows that while wet cleaning methods are required for surface cleaning, facilities are required to clean floor surfaces once a week. SCAQMD should consider increasing the frequency of cleaning based on the best practices demonstrated by CMX.

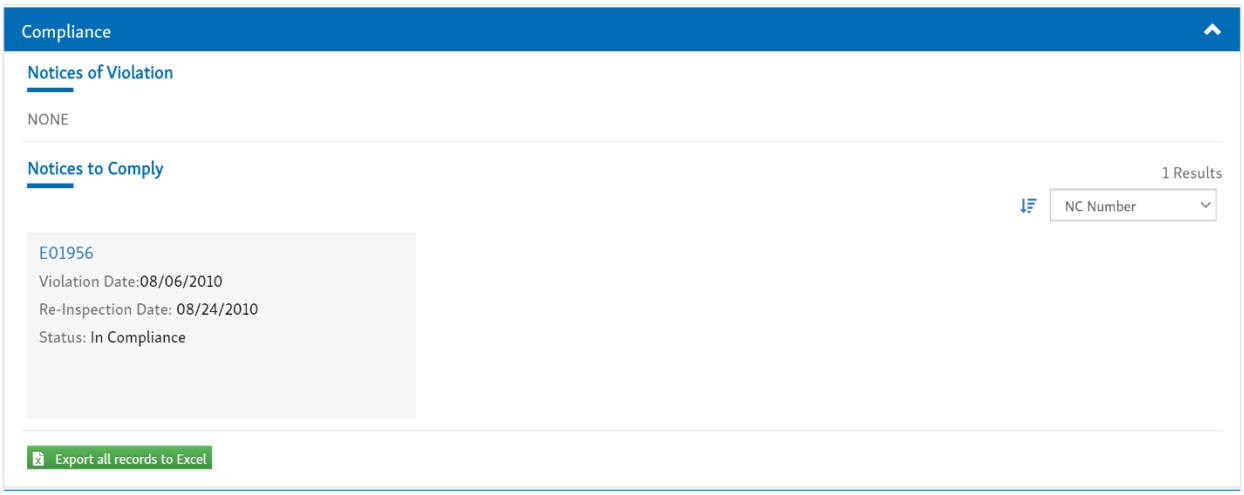
Appendix A

CMX List of Regulated Equipment in SCAQMD Permit (See https://xappprod.aqmd.gov/find//facility/AQMDsearch?facilityID=61681

Application Number	Permit Number	Issue Date	Permit Status	Equipment Description	Equipment Type	Application Date	Application Status
171477	D08108	5/30/1989	INACTIVE	DUST COLLECTOR CARTRIDGE TYPE	Control	6/22/1988	PERMIT TO OPERATE GRANTED
171478	D08109	5/30/1989	INACTIVE	MISC MATERIALS SIZE REDUCTION	Basic	6/22/1988	PERMIT TO OPERATE GRANTED
171479	D08110	5/30/1989	INACTIVE	MISCELLANEOUS MATERIALS PELLETIZING	Basic	6/22/1988	PERMIT TO OPERATE GRANTED
171480	D08111	5/30/1989	INACTIVE	MISCELLANEOUS MATERIALS PELLETIZING	Basic	6/22/1988	PERMIT TO OPERATE GRANTED
237600	D72301	4/12/1993	INACTIVE	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	Control	9/19/1990	PERMIT TO OPERATE GRANTED
255001	D72236	4/8/1993	INACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	8/12/1991	PERMIT TO OPERATE GRANTED
255052	D72237	4/8/1993	INACTIVE	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	Control	8/12/1991	PERMIT TO OPERATE GRANTED
267683	D69121	2/2/1993	INACTIVE	FURNACE ELECT IND & RES MISC METALS	Basic	5/13/1992	PERMIT TO OPERATE GRANTED
267684	D69122	2/2/1993	INACTIVE	FURNACE ELECT IND & RES MISC METALS	Basic	5/13/1982	PERMIT TO OPERATE GRANTED
267685	D69123	2/2/1993	INACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	5/13/1992	PERMIT TO OPERATE GRANTED
279697	D72249	4/8/1993	INACTIVE	AGGREGATE CONVEYING	Basic	3/21/1993	PERMIT TO OPERATE GRANTED
279698	D72250	4/8/1993	INACTIVE	AGGREGATE CONVEYING	Basic	3/24/1993	PERMIT TO OPERATE GRANTED
283217				PLAN, RULE 1420 LEAD COMPLIANCE	Basic	7/14/1993	APPROVED PLAN, BILLABLE
300364				Plan, Non-Ferrous Metal Melting Control	Basic	1/11/1995	BANKING/ PLAN GRANTED, NON BILLABLE
301434				FURNACE REVERB (ROTARY) BRASS-YELLOW	Basic	2/28/1995	APPLICATION CANCELLED, KEEP FILING FEES
301435				BAGHOUSE, HOT	Control	2/28/1995	APPLICATION CANCELLED, KEEP ALL FEES
301436				BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	2/28/1995	APPLICATION CANCELLED, KEEP ALL FEES
315411	F2541	9/9/1996	ACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	4/2/1996	PERMIT TO OPERATE GRANTED
361007				Plan, Non-Ferrous Metal Melting Control	Basic	10/20/1999	APPLICATION CANCELLED, KEEP FILING FEES
361536	F46363	11/10/2001	ACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	10/20/1999	PERMIT TO OPERATE GRANTED
361916	F60820	5/20/2003	ACTIVE	CHIP DRYER	Basic	11/1/1999	PERMIT TO OPERATE GRANTED
361917				AFTERBURNER, DIRECT FLAME	Control	11/1/1999	APPLICATION CANCELLED, KEEP ALL FEES
366028	F43529	8/27/2001	ACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	2/10/2000	PERMIT TO OPERATE GRANTED

366029	F43528	8/27/2001	ACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	2/10/2000	PERMIT TO OPERATE GRANTED
366030	F43527	8/27/2001	INACTIVE	FURNACE OTHER MET OPS BRASS-YELLOW	Basic	2/10/2000	PERMIT TO OPERATE GRANTED
372759	F33517	9/1/2000	ACTIVE	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	Basic	8/1/2000	PERMIT TO OPERATE GRANTED
372760	F33522	9/5/2000	ACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	8/1/2000	PERMIT TO OPERATE GRANTED
398136	F51783	4/30/2002	ACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	2/28/2002	PERMIT TO OPERATE GRANTED
444460	F76373	6/29/2005	ACTIVE	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	Control	5/25/2005	PERMIT TO OPERATE GRANTED
444461	F76374	6/29/2005	ACTIVE	MISC MATERIALS CLEANING	Basic	5/25/2005	PERMIT TO OPERATE GRANTED
469479	F90946	7/3/2007	ACTIVE	MISC MATERIALS SEPARATION	Basic	5/17/2007	PERMIT TO OPERATE GRANTED
469481				MISCELLANEOUS MATERIALS PELLETIZING	Basic	5/17/2007	APPLICATION CANCELLED, KEEP FILING FEES
469482				MISCELLANEOUS MATERIALS PELLETIZING	Basic	5/17/2007	APPLICATION CANCELLED, KEEP FILING FEES
469483	F90947	7/3/2007	ACTIVE	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	Control	5/17/2007	PERMIT TO OPERATE GRANTED
565169	G31933	7/9/2014	INACTIVE	MISC MATERIALS SIZE CLASSIFICATION	Basic	6/11/2014	PERMIT TO OPERATE GRANTED
565170	G31934	7/9/2014	INACTIVE	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	Control	6/12/2014	PERMIT TO OPERATE GRANTED
565171	G31940	7/9/2014	ACTIVE	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	Control	6/12/2014	PERMIT TO OPERATE GRANTED
566236	G51888	4/21/2018	ACTIVE	FURNACE OTHER MET OPS BRASS-YELLOW	Basic	7/2/2014	PERMIT TO OPERATE GRANTED
580515	G40684	6/16/2016	ACTIVE	FURNACE ELECT IND & RES MISC METALS	Basic	12/16/2015	PERMIT TO OPERATE GRANTED
580516	G40685	6/16/2016	ACTIVE	FURNACE ELECT IND & RES MISC METALS	Basic	12/16/2015	PERMIT TO OPERATE GRANTED
580517				FURNACE OTHER MET OPS BRASS-YELLOW	Basic	12/16/2015	APPLICATION CANCELLED, KEEP ALL FEES
588664	G51890	4/21/2018	ACTIVE	MISC MATERIALS SIZE CLASSIFICATION	Basic	9/7/2016	PERMIT TO OPERATE GRANTED
588665	G51892	4/21/2018	ACTIVE	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	Control	9/7/2016	PERMIT TO OPERATE GRANTED
588666	G51889	4/21/2018	ACTIVE	MISC MATERIALS SIZE CLASSIFICATION	Basic	9/7/2016	PERMIT TO OPERATE GRANTED
588667	G51891	4/21/2018	ACTIVE	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	Control	9/7/2016	PERMIT TO OPERATE GRANTED
621578				MISC MATERIALS SIZE CLASSIFICATION	Basic	4/23/2020	APPLICATION READY FOR PRESCREENING

Appendix B


Compliance
Notices of Violation
NONE
Notices to Comply
1 Results
NC Number
E01956
Violation Date:08/06/2010
Re-Inspection Date: 08/24/2010
Status: In Compliance
Export all records to Excel

Appendix C

NOTICE TO COMPLY INQUIRY SYSTEM

Notice Detail

Notice Number	E01956	Violation Date	8/6/2010	Issue Date	8/10/2010

Facility ID	61681
Company Name	THE STRELITZ CO, INC,CALIFORNIA METAL- X
Address	366 E 58TH LOS ANGELES, CA 90011
Violation Description	SUBMIT PLANT LAYOUT INCLUDING PERMIT NUMBER UNDER WHAT ID FOR ENTIRE FACILITY. SUBMIT RECORDS OF HOUSEKEEPING & MAINTENANCE TO PROVE COMPLIANCE W/R1420 COMPLIANCE PLAN. SUBMIT RECORDS OF AIR FLOW TO BAGHOUSE TO SHOW COMPLIANCE W/R1407 COMPLIANCE PLAN
Equipment Description	CONDITIONS 2 TO 5. SUBMIT RECORD OF BATCH LOAD IN ANY ON 120 MP THROUGH COPPER WIRE RECYCLE SYSTEM (F90946)-CONDITION #4. SHOW PROOF OF ALL BAGHOUSE DISCHARGE ONLY INTO CLOSED CONTAINERS.
Status	In Compliance
Re-inspection Date	8/24/2010

Rule No.	Rule Description
1407	Control of Emissions or Arsenic, CD, and NI from Non-Ferrous Metal Melting Op
1420	Emissions Standard for Lead

March 17, 2022

From: Peter Sinsheimer, Technical Consultant to SCLA-PUSH

To: South Coast Air Quality Management District

Re: Comments on March 2022 Draft SLA CERP related to dry cleaning

My comments below are being made in my role as technical consultant to SCLA-PUSH's project focused on air quality.

By way of background, between 1994-1997, as a PhD student at UCLA, I served as a senior researcher associated on a SCAQMD/CARB/USEPA project focused on the potential viability of professional wet cleaning based on the evaluation of the first professional wet cleaner to operate in California. Between 2000-2004 I served as project director of the SCAQMD-funded project focused on converting the first set of perchloroethylene (perc) dry cleaners to convert to professional wet cleaning. Between 2005-2014 I served as director of the CARB-funded professional wet cleaning demonstration project. In addition, I served as the lead scientist on a utility-funded project – sponsored by SCE, SCGC, and LADWP, focusing on a comparative analysis of electricity and natural gas use of a range of professional apparel cleaning technologies.

In 2019, Physicians for Social Responsibility – Los Angeles, ask me to serve as technical consultant on their SCLA-PUSH project. As part of this project, I was asked to evaluate Best Available Control Technology associated with targeted sectors including professional apparel cleaning services. During Phase 1 of this project, I completed an analysis of SCAQMD criteria for BACT, evaluated evidence related to a range of professional apparel cleaning technologies related to each criteria, used this evidence to assess the extent to which each technology met each SCAQMD BACT criteria, and concluded that there was strong reliable evidence that both professional wet cleaning CO_2 dry cleaning met each SCAQMD criteria of BACT with professional wet cleaning being extremely cost-effective given that operating cost of this zero-emission technology was lower than no-perc dry cleaning technologies that SCAQMD regulated.

Based on this analysis, the SCLA-PUSH document entitled "Report on the First Phase of Air Quality Assessment in South Central Los Angeles, 2019-2020" listed professional wet cleaning and CO_2 dry cleaning as BACT for non-perc dry cleaning (see page 48). That said, due to page constraints of this report, the analysis I completed underlying this finding was not included. In consideration of the SLA CERP, I believe my 2019 analysis supporting this conclusion is important to provide.

Further, this analysis also recommended amending SCAQMD Rule 1102 eliminating the Rule 102 Group II exemption, including the exemption excludes siloxane-based solvent decamethylcyclopentasiloxane (or D5) from Rule 1102 regulation. Toxicity risk associated D5

has resulted in the European Union banning D5, including its use on dry cleaning. Further, the extremely high energy use associated with D5 dry cleaning compared to zero-emission professional wet cleaning and CO_2 dry cleaning further supports removing the Rule 102 Group II exemption to Rule 1102.

In additional, an amendment to SCAQMD Rule 1102 should be created phasing out non-perc dry cleaning machines regulated under this rule based on a fifteen (15) year life of this equipment. Since listing zero-emission professional wet cleaning and CO_2 dry cleaning would prohibit further permitting by SCAQMD on new non-perc dry cleaning machines, a phase out of existing non-perc dry cleaning machines regulated under Rule 1102 should be created based on the 15-year expected useful life of this equipment. This rule change is comparable to the CARB 2007 ruling phasing out perc dry cleaning based on a 15-year useful life of perc dry cleaning equipment. Phasing out existing non-perc dry cleaning machines is essential given that older machines are more prone to break down control systems, including break down in pollution control equipment resulting in greater emissions as well as break down fire suppression equipment for non-perc dry clean machines using combustible solvents. Most, if non all non-perc dry cleaning machines regulated under Rule 1102 use combustible solvents.

As non-perc dry cleaning machines regulated by SCAQMD Rule 1102 are being phased out, an early-adopter incentive program for dry cleaners switching to viable zero-emission alternatives should be created to jump start this transition. This early adopter incentive program should be coupled with a zero-emission technology demonstration program to further enhance this transition.

Beyond the community emissions reduction benefits created by transitioning from non-perc solvent-based dry cleaning technologies regulated by Rule 1102 to viable zero-emission professional wet cleaning and CO_2 dry cleaning, from the perspective of dry cleaners switching professional wet cleaning, reliable evidence demonstrates that they will experience greater profitability based on lower operating costs. From the perspective of SCAQMD, given that neither professional wet cleaning and CO_2 dry cleaning machines require SCAQMD permits, the benefits of phasing out non-perc dry cleaning regulated by Rule 1102 and transitional cleaners to zero-emission equipment not regulated by SCAQMD will demonstrate to the professional apparel cleaning community in particular and the broader business community in general that SCAQMD supports reduced regulatory oversight.

While the above serves as an overall summary of recommendations to the March 2022 draft SLA CERP, below I am providing the following. Appendix 1: A recent memo I sent to my PSR-LA colleagues, which included the complete 2019 analysis of BACT for non-perc dry cleaning equipment regulated under Rule 1102. Appendix 2: Track change recommendations to Table 5d-1 related to the SLA CERP for dry cleaning as support by my 2019 BACT analysis as well as the comments provided above.

Appendix 1

March 16, 2022 Memo to Physicians for Social Responsibility – Los Angeles on 2019 Analysis of Professional Wet Cleaning and CO_2 Dry Clean as BACT for Non-Perc Dry Cleaning Machines Regulated by SCAQMD Rule 1102

March 16, 2022

To: Paula Torrado, Marth Arguello – Physicians for Social Responsibility Los Angeles

From: Peter Sinsheimer – Green Analytics

Re: Professional wet cleaning as SCAQMD BACT for non-perc dry cleaning machines

As you know, the SCLA-Push document "Report on the First Phase of Air Quality Assessment in South Central Los Angeles, 2019-2020" identified dry cleaners as a targeted sector of high concern and classified zero-emission professional wet cleaning and CO_2 dry cleaning as best available control technology (BACT) for non-perchloroethylene (perc) dry cleaning solvent machines regulated by South Coast Air Quality Management District. As you requested, as a technical consultant on this First Phase work, I completed this analysis of BACT for non-perc dry cleaning. Below is the detailed analysis demonstrating that professional wet cleaning clearing meeting SCAQMD's criteria as BACT for non-perc dry cleaning.

1. INTRODUCTION

Within the SCAQMD, Regulation XIII requires BACT be used by facilities applying for permits for new sources, relocated sources, and modifications to existing sources that may result in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia. SCAQMD periodically updates their BACT Guidelines which establish both the procedures determining BACT as well as the actual BACT for commonly permitted equipment."[i] SCAQMD invites written comments about BACT Guidelines and written comments are evaluated by SCAQMD staff and included in the BACT Docket.[ii]

SCAQMD divides facilities into two BACT groups – major polluting facilities and non-major polluting facilities.[iii] The SCAQMD document *Best Available Control Technology Guidelines* developed different policies and procedures for major and non-major polluting facilities. For major sources, BACT uses a Lowest Achievable Emission Rate (LAER) standard, evaluating what is achievable in practice with little consideration of cost. For non-major sources BACT, or MSBACT, BACT is based on the most stringent standard considered to be cost-effective.

In the SCAQMD BACT Guidelines, two parts focused specifically on MSBACT. "Part C – Policy and Procedures for Non-Major Polluting Facilities" provides specific criteria for determining MSBACT for each regulated equipment type or emission limit. "Part D: BACT Guidelines for Non-Major Polluting Facilities" provides the specific MSBACT requirements for each applicable piece of equipment or emissions limit. [iv]

Part D identified dry cleaning as a specific process applicable to MSBACT.

2. METHODS: MSBACT DRY CLEANING CASE STUDY

Methods used to evaluate the MSBACT for dry cleaner followed the following steps: (1) Review of MSBACT guidelines for developing MSBACT for a specific application, (2) Review of the current MSBACT for dry cleaning, and (3) Using MSBACT guidelines and a literature review of dry clean alternatives, complete an analysis to determine whether there is sufficient evidence to update the MSBACT for dry cleaning.

3. FINDINGS: MSBACT DRY CLEANING CASE STUDY

3.1 Procedures for Developing MSBACT for a Specific Application

Part C of the SCAQMD BACT guidelines entitled "Part C – Policy and Procedures for Non-Major Polluting Facilities" states that MSBACT for each source category is the most stringent emission limit or control technology that is either: (1) found in a state implementation plan (SIP), or (2) achieved in practice (AIP), or (3) is technologically feasible and cost effective. Of these options, SCAQMD states most MSBACT is based on AIP since it is more stringent that SIP and less constrained by state law than the technologically feasible/cost effective approach.

Part C cites a number of information sources where AIP may be identified including regional, state, and federal clearinghouses, regional and state BACT guidelines, and regional and state permits as well as "any other source for which the requirements of AIP can be demonstrated."

Given that SCAQMD uses AIP to establish most MSBACT, below provides additional detail in Part C on AIP.

PART C states four criteria used by SCAQMD for listing an AIP control technology or emissions limit:

- Commercial Availability: At least one vendor must offer this equipment for regular or full-scale operation in the United States. A performance warranty or guaranty must be available with the purchase of the control technology, as well as parts and service.

- Reliability: The control technology must have been installed and operated reliably for at least twelve months on a comparable commercial operation. If the operator did not require the basic equipment to operate continuously, such as only eight hours per day and 5 days per week, then the control technology must have operated whenever the basic equipment was in operation during the twelve months

- Effectiveness: The control technology must be verified to perform effectively over the range of operation expected for that type of equipment. If the control technology will be allowed to operate at lesser effectiveness during certain modes of operation, then those modes must be identified. The verification shall be based on a District-approved performance test or tests, when possible, or other performance data.

- Cost Effectiveness: The control technology or emission rate must be cost effective for a substantial number of sources within the class or category. Cost effectiveness criteria are described in detail in a later section. Cost criteria are not applicable to an individual permit but rather to a class or category of source. PART C includes an extensive section on cost effectiveness methodology to be applied.

Part C then describes a five-step decision method for selecting MSBACT for each category of regulated equipment or emissions unit.

- Step 1: Identify all possible control technologies. In searching for options, Part C highlights a search for pollution prevention alternatives, cites the 1990 federal Pollution Prevention Act as establishing a "national policy that pollution should be prevented or reduced at the source whenever feasible" (p. 42), and lists five relevant pollution prevention/source reduction approaches:
  - Equipment or technology modifications
  - Process or procedure modifications
  - Reformulation or redesign of products
  - Substitution of raw materials
  - Improvements in housekeeping maintenance or inventory control

- Step 2: Eliminate technically infeasible options. This step is essentially comparable to the "effectiveness" criteria above.

- Step 3: Rank remaining control technologies. This ranking is based on the overall control effectiveness of the relevant pollutant(s). Part C states that this ranking not only be based on control efficiencies/emission rates/emission reduction but also take into account environmental impacts (e.g., toxic emissions, multi-media impacts) and energy impacts.

  Here it is important to note that these indirect environmental impacts are characterized in the next step and can be used as a basis for eliminating the highest-ranking option. It is also important to note that a pollution prevention alternative which eliminate the relevant pollutant(s) is likely to be selected as the highest-ranking option, being more stringent than options which reduce but do not eliminate the relevant pollutant(s).

- Step 4: Evaluation. The "most effective" options ranking highest is evaluate first. Part C provides some guidance on this evaluation – discuss each of the beneficial and adverse impacts, focus on direct impacts including a calculation of both incremental and average cost effectiveness. Part C provides detailed guidance on conducting cost effectiveness calculations If the evaluation of the "top option" is ruled out based on impacts and cost effectiveness, the next "most stringent alternative is evaluated.

It is important to note here that while the guidance provided in Part C for this evaluation is extremely clear on ruling out an option based on cost effectiveness, given the amount a detail provided on cost effectiveness in Part C, with respect to other impacts, Part C is extremely value concerning what constitutes a sufficient threshold from other impacts sufficient to rule out an option. Further, Part C in vague about what specific impacts are included. Presumably, these include the impacts listed in Step 3 -- environmental impacts (including toxic emissions and multi-media impacts) and energy impacts.

- Step 5: Select BACT. The most stringent option not eliminated in Step 4 is proposed as BACT and presented to SCAQMD for review and approval.

3.2 Current MSBACT for Non-Perc Dry Cleaning

Two SCAQMD rules are specifically related to dry cleaning: SCAQMD Rule 1421 – Control of Perchloroethylene Emissions from Dry Cleaning Systems and Rule 1102: Dry Cleaners Using Solvent Other Than Perchloroethylene. These two rules specify minimum equipment requirement and specify best practices associated with cleaners using perchloroethylene (Rule 1421) and non-perchloroethylene dry clean solvent.

Part D of the 2019 SCAQMD BACT Guidelines lists "Dry Cleaning" as a specific equipment or process category. Table 1 is a screenshot of the dry cleaning table listed on Part D.

The table shows MSBACT for dry cleaning was first created in 10-20-2000 "Rev. 0" and revised on 7-9-2004 "Rev. 1". The first column in the table, labeled "Subcategory/Rating/Size" lists two subcategories of dry cleaning equipment: Perchloroethylene and Petroleum Solvent. Within the row labeled "Criteria Pollutants", information on the two dry clean equipment sub-categories is provided for only one criteria pollutant, VOC/ODC. This listing of VOC/ODC shows that petroleum dry cleaning is directly associated with VOC/ODC emissions.

In the VOC/ODC column, perchloroethylene dry cleaning was said to be "delisted" as a VOC, citing SCAQMD Rule 1421 from June 13, 1997. As such, perchloroethylene dry cleaning was found to be exempted from MSBACT control technology or emissions reduction specifications. Here it is important to note that in 2002, SCAQMD amended Rule 1421, phasing out permitting of perc dry clean machines by December 2020.

For petroleum solvent dry cleaning, the table drops a footnote after "Petroleum Solvent" stating: "This Equipment may also be subject to AQMD Rule 1102 – Dry Cleaners Using Solvent Other Than Perchloroethylene." The Petroleum Solvents/VOC/ODC cell states: "Closed Loop, Dry-to-Dry Machine with a Refrigerated Condenser (10-20-2000) or Evaporatively Cooled Condenser (7-9-2004)." The two dates listed here are the identical dates for when this MSBACT for dry cleaning was first created and when it was revised, as shown in the top right corner of the table.

Table 1: SCAQMD MSBACT for Dry Cleaning

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0
7-9-2004 Rev. 1

Equipment or Process: Dry Cleaning

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC/ODC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Perchloroethylene	Delisted as a VOC. See SCAQMD Rule 1421 – Control of Perchloroethylene Dry Cleaning Operations[1] (06-13-97)					
Petroleum Solvent[2]	Closed Loop, Dry-to-Dry Machine with a Refrigerated Condenser (10-20-2000) or Evaporatively Cooled Condenser (7-9-2004)					

[1] Rule 1421 implements the federal National Emission Standard for Hazardous Air Pollutant for Perchloroethylene Dry Cleaning Facilities (40 Code of Federal Regulations [CFR] 63.320, *et seq*) and the state Airborne Toxic Control Measure (ATCM) for Emissions of Perchloroethylene from Dry Cleaning Operations (17 California of Regulation [CCR] 93109, *et seq*).

[2]This Equipment may also be subject to AQMD Rule 1102 – Dry Cleaners Using Solvent Other Than Perchloroethylene.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

BACT Guidelines - Part D 43 Dry Cleaning

As such, the latest version SCAQMD's BACT Guidelines states that MSBACT for petroleum solvent dry cleaning are three emission control requirements build into a petroleum dry clean machine for reducing VOC emissions – (1) dry-to-dry – meaning apparel is put in dry and comes out dry thereby requiring that washing and drying be completed in the same drum, (2) closed loop – meaning that petroleum solvent evaporated during the dry cycle is captured and collected rather than being vented to the atmosphere, and (3) that the solvent capture system be condenser using either a refrigerant system or an evaporative cooling system.

To understand projected VOC emissions associated with this MSBACT for petroleum dry cleaning, it is fruitful to evaluate a 2007 SCAQMD document developed for permit streamlining entitled "PERMIT SAMPLE EVALUATION HYDROCARBON DRY CLEANING MACHINE (Based on applicable Rules & Regulations as of September 2007).[v] This six-page document is shown in Appendix A.

Page 2 of this document includes a heading entitled "EMISSIONS CALCULATIONS", shown in Figure 1 below, provides details related to how hydrocarbon emissions is projected for the applicant: the assumed volume of clothes cleaned of 600 lb/week, an estimated amount of hydrocarbon solvent use to process 600 lb/week of 10 gallons/month, an estimated 34% of the 10 gallons used will be emitted as VOCs, a density of hydrocarbon solvent of 6.41 lbs/gallon, and that monthly VOC emissions attributed to this activity comes to 21.8 pounds (10 gallons/month

* 34% * 6.41 lbs/gallon). In sum, a typical hydrocarbon dry cleaner cleaning 600 pounds of items a will use 10 gallons to hydrocarbon solvent per month, that 3.4 gallons/month is attributable to VOC emissions, and based on, 21.8 lb VOC/month, or 262 lb VOC/year.

EMISSION CALCULATIONS

Capacity [lb/load] :		50
Maximum Hydrocarbon consumption [gal/month] :		10
Clothes cleaned per week [lb/week] :		600
Density of HC/petroleum [lbs/gal] :		6.41
VOC emitted from HC dry cleaning system (based on Rule 1421 status report, 12/3/2004) :		34%
Control Efficiency (District policy on 12/3/2003) :		66%
Operating Schedule:	hr/day (average) =	9
	hr/day (max) =	10
	day/week =	6
	week/yr =	52

VOC Emission		Uncontrolled	Controlled
Monthly [lbs/mo]	= HC consumption x Petroleum density	64.1	21.8
Daily [lbs/day]	= Monthly / 4.33/ Max No of day per week	2.47	0.8
Hourly [lbs/hr]	= Daily / Max hours per day	0.25	0.08
Annual [lbs/year]	= Monthly controlled x 12 months	-	262
30-day avg [lbs/day]	= Monthly controlled/ 30 days	-	0.73

Figure 1: Hydrocarbon emissions calculation estimates from a SCAQMD a permit sample evaluation

3.3 Options Analysis for MSBACT for Non-Perc Dry Cleaning

An analysis of the literature shows a number of potential pollution prevention options that SCAQMD could considered as MSBACT for petroleum dry cleaning creating more stringent emission limits than the dry-to-dry closed-loop pollution control system currently listed as MSBACT. These potential pollution prevention options all use solvents not classified as VOCs including GreenEarth dry cleaning – using a siloxane-based solvent decamethylcyclopentasiloxane (or D5), CO_2 dry cleaning – using recycled CO2 as a solvent, and professional wet cleaning – using water as a solvent.

The first step in evaluating whether each of these zero-VOC alternatives could be used as MSBACT for petroleum dry cleaning is to assess each alternative with respect to the initial four baseline criteria stated in MSBACT guidance – commercial availability, reliability, effectiveness, and cost effectiveness. With respect to the first three, there is substantial evidence that GreenEarth, CO_2, and professional wet cleaning meet the minimum thresholds for each criterion detailed in SCAQMD BACT Guidelines PART C. The fact that SCAQMD has tracked professional

apparel cleaners in their own service territory using GreenEarth, CO_2, and professional wet cleaning over many years demonstrates the effectiveness and reliability of each of these options. For professional wet cleaning, additional support on effectiveness and reliability comes from a pair of peer review studies confirming the commercial viability of dry cleaners switching to professional wet cleaning in the greater Los Angeles region and in Massachusetts.[vi] With respect to cost-effectiveness, the fourth baseline criteria, each of these zero-VOC technologies meet the classification as cost-effectiveness based on the methods provided in the SCAQMD BACT Guidelines PART C, which uses $92,246/ton of ROG/VOC reduction as the threshold. For CO_2 dry cleaning and GreenEarth dry cleaning, cost per ton of ROG/VOC reduction are substantially lower than this threshold. For professional wet cleaning, with capital and operating costs being lower than petroleum dry cleaning, this technology shows a cost savings per ton of ROG/VOC reduced associated with cleaners switching to this technology option.[vii]

Since each of these zero-VOC technologies passes the four baseline criteria, the next step is to work through the SCAQMD's MSBACT Guidelines 5-step decision method for selecting MSBACT.

- Step 1, identifying possible control technologies: Each of these solvent substitute technologies can be considered a pollution prevention alternative, highlighted in the MSBACT PART C Guidelines as highly desirable.

- Step 2, eliminating technically infeasible options: As noted above, commercial viability on each zero-VOC alternatives, demonstrates all three options as passing through this gate.

- Step 3, rank remaining control technologies: MSBACT guidelines requires ranking to take into account both emissions reduction as well as other factors including environmental impacts. Each of these options eliminates VOC emissions associated with petroleum dry cleaning. With respect to toxicity, CO_2 dry cleaning and professional wet cleaning have been classified by the California Air Resources Board (CARB) as non-toxic and non-smog forming technologies; CARB created this classification in response to its authority to implement California law AB998 which provides incentives to perc dry cleaners switching to "non-toxic and non-smog-forming alternatives."[viii] While GreenEarth's D5 solvent does not appear to be smog-forming, CARB did not classified GreenEarth's D5 solvent as "non-toxic and non-smog-forming", specifically noting problems with toxicity concerning with D5.[ix] Further, in 2018 the European Union's regulatory agency implementing the EU's chemical legislation (ECHA) recently classified D5 as both a PBT (Persistent, Bioaccumulative, and Toxic), vPvB (very persistent and very Bioaccumulative), a substance of very high concern, placing D5 on a list of chemicals to be banned unless no other viable substitutes can be identified for a specific use.[x] Since MSBACT takes into account environmental impacts in rank ordering options for the most stringent emissions reduction, CARB's decision to reject listing D5 as non-toxic and ECHA's classification of D5 as a PBT and vPvB substance, suggests eliminating D5 as an option for MSBACT. At a minimum, GreenEarth would rank substantially lower than CO_2 and professional wet cleaning. These findings also suggest increased regulation of D5 dry cleaning by SCAQMD in Rule 1102 (see below).

- Step 4: Evaluation. While this step requires the "most effective" option be evaluated first, CO_2 dry cleaning and professional wet cleaning are tied as most effective given that both eliminate VOCs from petroleum dry cleaning, both are classified as non-toxic, and no other environmental impact

clearly separates these two alternatives at this time.[xi] The MSBACT Guidelines do provide some specific guidance for this evaluation step, including takings into account cost effectiveness calculations. As noted above, while both CO_2 and professional wet cleaning meet MSBACT Guidelines threshold as cost effective technologies, while CO_2's incremental cost effectiveness was estimated at slightly over $30,000 per ton of VOC reduced, a switch to professional wet cleaning resulted in a cost savings of slightly over $15,000 per tons of VOC reduced. As such, based on the evaluation criteria in MSBACT Guidelines, professional wet cleaning appears as the highest ranked "most effective" VOC-free alternative with no adverse impacts identified that would rule out this option.

- Step 5: Select BACT. Since professional wet cleaning was shown as the most stringent option not eliminated in Step 4, professional wet cleaning should be proposed as MSBACT for petroleum dry cleaning and be presented to SCAQMD for review and approval.

4. CONCLUSION: PROFESSIONAL WET CLEANING AS MSBACT DRY CLEANING

Based on SCAQMD MSBACT 5-step decision method guidelines, reliable evidence related to each criterion shows that zero-emission professional wet cleaning clearly meet the selection criterion as MSBACT for non-perc solvent-based dry cleaning.

The practical consequence of setting professional wet cleaning as BACT for non-perc dry cleaning is to prohibit further permitting of new non-perc dry cleaning in SCAQMD.

This classification of professional wet cleaning as BACT for non-perc dry cleaning should, in turn, trigger an amendment to Rule 1102 to include a phase out date for existing non-perc dry cleaning machine based on a fifteen year expected life.

The amendment of Rule 1102 provides SCAQMD the opportunity to remove the Rule 1102 exemption of siloxane-based D5 dry cleaning. As revealed in Step 3 of MSBACT completed above, based on an analysis of current toxicity evidence of D5, the European Union is move forward with steps to ban D5 from dry cleaning. Amending Rule 1102 provide SCAQMD the opportunity to remote D5 from the exemption list based on evidence substantially more recent than the date when Rule 1102 was last revised.

Appendix A: SCAQMD: PERMIT SAMPLE EVALUATION HYDROCARBON DRY CLEANING MACHINE

PERMIT SAMPLE EVALUATION
HYDROCARBON DRY CLEANING MACHINE
(Based on applicable Rules & Regulations as of September 2007)

ENGINEERING EVALUATION FOR PERMIT TO CONSTRUCT/OPERATE

APPLICANT ABC CLEANER (Facility ID: 123456)

MAILING ADDRESS 12345 Abc St., Chino Hills, CA 91709

EQUIPMENT LOCATION Same as above.

PERMIT HISTORY

The permit application for the hydrocarbon dry-cleaning machine was filed on August 16, 2007 as a new construction. This unit will replace the existing perchloroethylene dry-cleaning machine to comply with the requirements of Rule 1421 and Rule 1402.

There is no history of any violation or nuisance complaints for this facility.

Fees: Fee Schedule A. Permit Processing fee for new construction is $1170.20 for fiscal year 2007-2008.

EQUIPMENT DESCRIPTION

DRY CLEANING MACHINE, PETROLEUM SOLVENT, UNION MODEL HL-850, CLOSED LOOP, WITH A REFRIGERATED CONDENSER.

BACKGROUND/SUMMARY

This model, Union HL 850 has a design capacity of 45-50 pounds. The solvent used in this machine is DF 2000 Fluid, distributed by Exxon Mobil Chemical (MSDS included). This is a synthetic, C12 to C13 aliphatic hydrocarbon with a density of 6.41 pounds/gallon. This unit has a mileage of 120 pounds cleaned a day.

CEQA ANALYSIS

This equipment is not part of a project that is subject to CEQA. There is no significant impact.

EMISSION CONTROL DESCRIPTION

PERMIT SAMPLE EVALUATION
HYDROCARBON DRY CLEANING MACHINE
(Based on applicable Rules & Regulations as of September 2007)

This unit has a refrigerated condenser to reduce solvent losses during the cleaning and drying processes. Based on a staff report for Rule 1421 (December 3, 2004), it is estimated that the unit is 66% efficient in controlling the hydrocarbon emissions.

EMISSION CALCULATIONS

Capacity [lb/load] :		50
Maximum Hydrocarbon consumption [gal/month] :		10
Clothes cleaned per week [lb/week] :		600
Density of HC/petroleum [lbs/gal] :		6.41
VOC emitted from HC dry cleaning system (based on Rule 1421 status report, 12/3/2004) :		34%
Control Efficiency (District policy on 12/3/2003) :		66%
Operating Schedule:	hr/day (average) =	9
	hr/day (max) =	10
	day/week =	6
	week/yr =	52

VOC Emission		Uncontrolled	Controlled
Monthly [lbs/mo]	= HC consumption x Petroleum density	64.1	21.8
Daily [lbs/day]	= Monthly / 4.33/ Max No of day per week	2.47	0.8
Hourly [lbs/hr]	= Daily / Max hours per day	0.25	0.08
Annual [lbs/year]	= Monthly controlled x 12 months	-	262
30-day avg [lbs/day]	= Monthly controlled/ 30 days	-	0.73

RULES EVALUATION

RULE 212 – STANDARDS FOR APPROVING PERMITS

No public notice required as none of the criteria for public notice listed below is triggered.

(c)(1): Unit located within 1,000 feet of the outer boundary of a school.
(c)(2): Emission increases exceeding the daily maximums specified in subdivision (g) of this rule (VOC limit is 30 lbs per day)
(c)(3): Increases in emissions of toxic air contaminants such that Maximum Individual Cancer Risk (MICR) of greater than 1 x 10^{-6} for facilities with more than one permitted unit and greater than 10 x 10^{-6} for facilities with one permit unit.

RULE 401 – VISIBLE EMISSIONS

Compliance is expected with well maintained and properly operated equipment.

RULE 402 – NUISANCE

No nuisance is expected with well maintained and properly operated equipment.

RULE 442 - USAGE OF SOLVENTS

Monthly VOC emissions from this equipment are less than 833 pounds/month.

RULE 1102 - DRY CLEANERS USING SOLVENT OTHER THAN PERCHLOROETHYLENE

The dry cleaning machine is equipped with a refrigerated vapor condenser which is a primary control system for the equipment. Liquid leaks and solvent exposure to the atmosphere are expected to be minimal with proper care and maintenance. Compliance is expected.

REGULATION XIII – NEW SOURCE REVIEW

RULE 1303(a) – BEST AVAILABLE CONTROL TECHNOLOGY (BACT)
Emission increase is more than one pound per day for VOC, so BACT is applicable.
This is a minor source BACT. Per Part D of the BACT guidelines [http://www.aqmd.gov/bact/part-d-final-7-14-2006-update.pdf], current BACT for dry cleaning equipment using petroleum solvent is a closed loop, dry-to-dry machine with a refrigerated condenser or evaporative cooled condenser. The facility is proposing closed loop system that utilizes a refrigerated condenser. BACT requirements are met.

RULE 1303(b)(1) – MODELING
The unit emits only VOC which is exempt from modeling requirements.

RULE 1303(b)(2) – EMISSION OFFSETS
The potential to emit from this facility in AQMD's NSR system shows 0 tons a year. The emissions from the current machine using perchloroethylene are not considered a VOC. The offset threshold is 4 tons per year or 22 lbs per day. The emission increase from the use of the hydrocarbon solvent is less than 22 lbs per day therefore no offset are needed.

PERMIT SAMPLE EVALUATION
HYDROCARBON DRY CLEANING MACHINE
(Based on applicable Rules & Regulations as of September 2007)

Pollutant	Facility Potential to Emit [lbs/ year]			Offset Threshold [lbs/day]	Offset Required? Yes/No
	Before Construction	From Equipment	Total (After Construction)		
VOC	0	0.8	0.8	22	No

REGULATION XIV

RULE 1401 – NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS

As per the MSDS, the DF 2000 Fluid contains no toxic air contaminants listed in Rule 1401. (Amended March 4, 2005). Therefore this rule does not apply.

RULE 1401.1 – REQUIREMENTS FOR NEW AND RELOCATED FACILITIES NEAR SCHOOLS
Not applicable.

RECOMMENDATION

All applicable Rules and Regulations have been met. A permit to construct is recommended with the conditions shown on the sample permit pending completion public notice if required.

PERMIT SAMPLE EVALUATION
HYDROCARBON DRY CLEANING MACHINE
(Based on applicable Rules & Regulations as of September 2007)

PERMIT CONDITIONS

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT SHALL ONLY USE, AS A DRY CLEANING FLUID, PETROLEUM SOLVENT WITH AN INITIAL BOILING POINT OF NOT LESS THAN 375 DEGREES FAHRENHEIT.

4. THE TOTAL QUANTITY OF PETROLEUM SOLVENT THAT IS REPLENISHED IN THIS EQUIPMENT SHALL NOT EXCEED 10 GALLONS PER MONTH, AVERAGED OVER ANY 12-MONTH PERIOD.

5. EACH WORKING DAY, THE OPERATOR OF THIS EQUIPMENT SHALL INSPECT AND CLEAN WITH A WET CLOTH THE FOLLOWING COMPONENTS:
   A. GASKETS AND EDGES OF THE LOADING DOOR
   B. LOADING DOOR LINER
   C. LINT FILTER
   D. AIR FILTER
   E. WASTE WATER SEPARATOR

   IF ANY OF THE SEALS AND/OR GASKETS SHOW SIGNS OF WEAR (E.G. CUTS OR TEARS) SUCH THAT THEY CANNOT PROVIDE AN IMPERVIOUS SEAL AGAINST LIQUID, VAPOR OR AIR LEAKAGE FROM THE DRY CLEANING MACHINE, THE EQUIPMENT SHALL NOT BE OPERATED UNTIL THOSE SEALS AND/OR GASKETS ARE REPLACED.

6. IN ADDITION TO THE RECORD KEEPING REQUIREMENTS OF RULE 1102, THE OPERATOR SHALL KEEP RECORDS OF SOLVENT USAGE, INSPECTIONS AND REPAIRS TO SHOW COMPLIANCE WITH CONDITION NO.4 AND 5. THESE RECORDS SHALL BE PREPARED IN A FORMAT WHICH IS ACCEPTABLE TO THE DISTRICT

7. ALL WASTE MATERIALS WHICH COME INTO CONTACT WITH ANY PETROLEUM SOLVENT SHALL BE STORED IN CLOSED CONTAINERS, AND DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF HEALTH SERVICES.

8. PETROLEUM SOLVENTS USED IN THE EQUIPMENT SHALL NOT CONTAIN ANY CARCINOGENIC AIR CONTAMINANTS AS IDENTIFIED IN RULE 1401 AS AMENDED ON MARCH 4, 2005.

9. MATERIAL SAFETY DATA SHEETS FOR ALL DRY CLEANING SOLVENTS USED AT THIS FACILITY SHALL BE KEPT CURRENT AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

10. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED AT THE FACILITY FOR AT LEAST TWO YEARS AND MADE AVAILABLE TO ANY DISTRICT PERSONNEL UPON REQUEST.

11. THIS EQUIPMENT SHALL COMPLY WITH RULE 1102.

Appendix 2

Track Changes to March 2022 Draft SLA CERP

Table 5d-1: Actions to Reduce Emissions from and Exposure to General Industrial Facilities

Goal	Action	Responsible Entity(ies)	Matic(s)	Timeline	
				Start	Complete
C: Dry Cleaners	Set acceptable emissions from non-perc solvent-based dry clean systems regulated by Rule 1102 to zero based on viability of zero-emission alternatives. • Phase out existing non-perc dry clean solvent machines after useful life and remove regulatory exemptions for non-perc dry clean solvent machines • Create incentive opportunities to transition to professional wet cleaning (and other commercially viable zero-emission technologies when identified) • Community outreach to owners and operators regarding regulatory changes, incentives for zero-emissions technologies, and demonstration workshops on professional wet cleaning (and other commercially viable	South Coast AQMD CSC	• Modify BACT (Best Available Control Technology) for non-perc solvent dry clean machines using professional wet cleaning, setting the acceptable VOC emissions at zero • Amend Rule 1102 to eliminated Rule 102 Group II exemption [by striking (b) 13 and (h) II] and phase out non-perc dry clean machines after fifteen years for the date of installation • Provide list of incentive opportunities to support transition to professional wet cleaning, (and other commercially viable zero-emission technology when identified) • Notify all dry cleaners in SCAQMD – including cleaners with Rule 1102 permits as well as other non-perc dry cleaners not currently regulated by Rule 1102 of new BACT classification for non-	3rd quarter 2022 3rd quarter 2022 3rd quarter 2022 4th quarter 2022	4th quarter 2022 3rd quarter 2023 2027 (note: assess need after 5 years)

	zero-emission technology when identified)		perc solvents machines • Notify all dry cleaners in SCAQMD – including cleaners with Rule 1102 permits as well as other non-perc dry cleaners not currently regulated by Rule 1102 of Rule 1102 rule change • Support creating professional wet cleaning demonstration program to jump start transition to zero emission professional apparel cleaning alternatives. • Number of outreach materials distributed to owners and operators be published on the website concerning new BACT, changes in Rule 1102, availability of incentives, and ongoing demo workshops on zero-emission technologies	3rd quarter 2023 3rd quarter 2022 4th quarter 2022	2027 (Note assess need for demo program after five years) 2027 (Note assess need if demo program extended

[i] http://www.aqmd.gov/docs/default-source/bact/bact-guidelines/overview.pdf
[ii] http://www.aqmd.gov/docs/default-source/bact/bact-guidelines/overview.pdf
[iii] http://www.aqmd.gov/home/permits/bact/guidelines
[iv] http://www.aqmd.gov/docs/default-source/bact/bact-guidelines/part-d---bact-guidelines-for-non-major-polluting-facilities.pdf

[v] http://www.aqmd.gov/docs/default-source/permitting/dryclean_template.pdf

[vi] Sinsheimer, P., Grout, C., Namkoong, A., Gottlieb, R., & Latif, A. (2007). The viability of professional wet cleaning as a pollution prevention alternative to perchloroethylene dry cleaning. *Journal of the Air & Waste Management Association*, *57*(2), 172-178; Onasch, J., Jacobs, M., & Biddle, E. (2017). From Perchloroethylene Dry Cleaning to Professional Wet Cleaning: Making the Health and Business Case for Reducing Toxics. *Journal of Environmental Health*, *79*(6).

[vii] For CO2 dry cleaning, capital cost of the CO2 system is estimated to be $60,000 greater than a petroleum/hydrocarbon system. This amounts to a total present value of $40,533 based on the assumptions provided in PART C of a 4% interest rate over the 10-year equipment life. Using the figure of 261 lbs/year of VOC emissions, total emissions over 10 years comes to 2,610 lbs or 1.3 tons. Cost per ton of VOC/ROG reduced for CO2 dry cleaning versus petroleum dry cleaning comes to $31,179 per ton of VOC/ROG reduced ($40,533/1.3 tons). For GreenEarth, capital costs are relatively comparable to petroleum dry cleaning. Assuming a $1 increase in net present value, the cost of ton of professional wet cleaning compared to petroleum dry cleaning comes to a cost of $0.77/ton ($1/1.3 tons) of VOC/ROG reduced. For professional wet cleaning, both capital costs and operating costs have been shown to be lower than for petroleum dry clean. Assuming a $20,000 decrease in net present value, $15,385 savings (-$20,000/1.3 tons) per ton of VOC/ROG reduced.

[viii] http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200320040AB998

[ix] California Air Resources Board. Alternative Solvents: Health and Environmental Impacts. (https://www.arb.ca.gov/toxics/dryclean/notice2015_alt_solvents.pdf) (September 4, 2015).

[x] 2018 6 20 European Chemical Agency. Inclusion of substances of very high concern in the Candidate List for eventual inclusion in Annex XIV (Decision of the European Chemicals Agency),

[xi] Note: While CO2 is classified as a greenhouse gas, CO2 dry clean machine manufacturers claim that the CO2 used in CO2 dry cleaning machines is captured from locations where the CO2 would otherwise be emitted to the atmosphere, such as from landfills or industrial production, and thus should not be considered as creating new CO2 emissions. That said, if capturing CO2 from landfills or industrial production can cost-effectively be sequestered, permanently eliminating these CO2, CO2 emissions from CO2 dry cleaning should be considered as creating an adverse environmental impact.