Community Emissions Reduction Plan

Portside Environmental Justice Neighborhoods

APCD
San Diego County
Air Pollution Control District

PHASE II

JULY 2021

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EXECUTIVE SUMMARY

Executive Summary

In response to Assembly Bill 617 (AB 617) [C. Garcia, Chapter 16, Statutes of 2017], the California Air Resources Board (CARB) established the Community Air Protection Program. The bill requires new community-focused and community-driven action to reduce air pollution and improve public health in communities that experience disproportionate burdens from exposure to air pollutants. The program's mission is to reduce pollution exposure in communities based on environmental, health and socioeconomic information, and it establishes a new way of improving air quality in California communities. This first-of-its-kind statewide effort requires community air monitoring, community emission reduction plans, and incentive funding to deploy the cleanest technologies in the most impacted areas. This Community Emissions Reduction Plan (CERP) contains detailed information and strategies which are intended to reduce both air pollution emissions and community exposure to air pollution in the Community of Portside Environmental Justice Neighborhoods (Portside Community).

Chapter 1: Community Profile

The San Diego County Air Pollution Control District (District or APCD) nominated the Portside Community to be included in this CARB-funded program. The Portside Community includes the neighborhoods of Barrio Logan, Logan Heights, and Sherman Heights in the City of San Diego, and West National City within National City. The Portside Community was nominated because it has several census tracts with some of the highest CalEnviroScreen 3.0 (CES 3.0) ratings in California. CalEnviroScreen is a science-based mapping tool that helps identify California communities that are most affected by many sources of pollution, and that are often especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce a numerical score for each census tract in the State[1].

The Portside Community includes 12 census tracks; four census tracts that are in the 98th percentile for CES 3.0 and the other eight that are in the 85th percentile for CES 3.0. This environmentally burdened and vulnerable community has over 50,000 residents. As a result, this community was selected by CARB for an air pollution monitoring program in 2018 and for an emissions reduction program in 2019. The Portside Community Steering Committee (CSC) was formed in 2018 to incorporate community expertise and direction in the development and implementation of the CERP.

The Portside community has a mix of residential and industrial land uses and is bisected by major transportation corridors. It also contains various sources of air pollution that fall into one of the following categories: on-road and off-road mobile equipment, stationary sources (businesses regulated by the District), and area sources (such as residential fuel combustion, consumer products use, construction and demolition, and commercial cooking). Additionally, the community encompasses more than 13 miles of freeways that support regional and local transportation needs, including Interstate Highways 5 and 15, and part of the San Diego Coronado bridge. Mobile sources are the driver for diesel particulate matter (DPM) emissions, a known

[1] https://oehha.ca.gov/media/downloads/calenviroscreen/fact-sheet/ces30factsheetfinal.pdf

carcinogen, in the community with the major contributors being commercial harbor craft, off-road diesel equipment and vehicles, heavy-heavy duty vehicles, and medium-heavy duty vehicles. As a result, eleven of the twelve census tracts in the Portside Community (over 45,000 people) have an exposure risk to DPM greater than 95 percent of census tracts statewide (i.e., the 95th percentile) according to CalEnviroScreen 3.0. Four of the census tracts (over 15,000 people) are in the 99th percentile for DPM.

In addition to these environmental burdens, residents of the Portside Community also face significant health and socioeconomic challenges. CalEnviroScreen scores for the asthma indicator show five census tracts (20,000 residents) in the 95th+ percentile. With the high asthma indicator and significant pollution exposure, residents that suffer from asthma are especially vulnerable to the health effects of air pollution. Residents in seven of the census tracts (30,000 people) are also in the 95th percentile for poverty. Ten of the census tracts (40,000+ residents) are in the 90th percentile for housing burden. These challenges highlight the need for a CERP in the Portside Community. Chapter 1 - Community Profile of the CERP includes a more detailed discussion of the community profile, including additional information about the Portside Community which is detailed in CalEnviroScreen.

Chapter 2: Community Outreach and Engagement

Community outreach and engagement are critical to the success of the AB 617 initiatives. Participating stakeholders in the development of the monitoring plan and CERP include residents of the community; community-based environmental justice organizations - including the Environmental Health Coalition (EHC) and Mothers Out Front; academics from local universities; representatives from industries located in the Portside Community – including Industrial Environmental Association (IEA) and San Diego Gas & Electric (SDG&E), and representatives from government agencies – including the City of San Diego, City of National City, San Diego Association of Governments (SANDAG), California Department of Transportation (Caltrans), Port of San Diego, and the U.S. Navy. The CERP has been developed through community involvement in the monthly CSC public meetings, as well as extensive public outreach and public workshops conducted in September 2020 and April 2021. Chapter 2 - Community Outreach and Engagement of the CERP includes more detailed information regarding the public outreach and engagement process. Public comments received on the draft Phase I CERP, as well as associated responses to those comments are contained in Chapter 2. Comments received as part of the public comment period for the draft Phase II CERP will also be included in the final, adopted document.

Chapter 3: Technical Assessment - Emission Inventory Data

The main sources of criteria pollutants (air pollutants that are subject to a National Ambient Air Quality Standard or NAAQS) in the Portside Community are off-road mobile sources, on-road mobile sources, and certain area sources (Table 1).

Table 1 – Sources of Criteria Pollutants in the Portside Community (2018 baseline)

Source Category	NOx (tons/year)	ROG (tons/year)	PM_{10} (tons/year)	$PM_{2.5}$ (tons/year)
Off-road mobile	**922.4** (63.1%)	**317.8** (25.5%)	**36.2** (5.0%)	**34.4** (17.7%)
On-road mobile	**462.8** (31.6%)	**259.9** (20.8%)	**69.5** (9.5%)	**32.1** (16.6%)
Stationary Sources	**50.6** (3.5%)	**215.1** (17.2%)	**33.2** (4.6%)	**8.5** (4.4%)
Area Sources	**26.6** (1.8%)	**455.0** (36.5%)	**589.2** (80.9%)	**118.9** (61.3%)
Total (tons/year)	**1462.4**	**1247.8**	**728.1**	**193.9**

NOx: Nitrogen Oxides

ROG: Reactive Organic Gases

PM $_{10}$: Particulate Matter 10 Microns or Smaller

PM $_{2.5}$: Particulate Matter 2.5 Microns or Smaller

NO_x emissions in the Portside Community are dominated by mobile sources, mostly off-road commercial harbor craft, ocean going vessels, light duty vehicles, and heavy-heavy duty vehicles. Stationary and area source NO_x emissions are primarily from fuel combustion for residences and industry.

ROG emissions are driven by area sources, followed by mobile and stationary sources. Area source ROG emissions are primarily from solvent evaporation from the use of consumer products. Off-road ROG emissions are driven by off-road industrial equipment and recreational watercraft. On-road mobile source ROG emissions are almost entirely driven by light weight passenger vehicles. Stationary source ROG emissions are primarily from marine and other coating operations, and solvent operations (such as solvent cleaning and gasoline storage and dispensing).

Most PM_{10} emissions come from area sources, such as commercial cooking, construction and demolition, and paved road dust. Mobile source PM_{10} emissions are led by light duty vehicles, off-road equipment, and commercial harbor craft. Stationary source PM_{10} emissions are primarily from industrial process and fuel combustion. Chapter 3 – Technical Assessment - Emission Inventory Data contains a detailed discussion of community-level emissions and their sources. The detailed methodology for obtaining these emissions can be found in Appendix A -Toxics Pollutants and Appendix B Criteria pollutants.

Chapter 4: Technical Assessment - Monitoring

In addition to estimates of air pollutants made from emissions inventory data, ambient monitoring provides important and complementary data to assess community exposure to air pollution. From July 2005 through October 2015, the APCD operated an air monitoring station on the grounds of Perkins Elementary School (near the northwest corner of the school grounds), located in Barrio Logan. The air monitoring data collected at the Perkins Elementary School site found that the air met (i.e. attained) all NAAQS, the federal air quality standards designed to protect public health and welfare. At the request of the San Diego Unified School District, the APCD removed the air monitoring station from Perkins Elementary School in 2016. A replacement site is now operating at Sherman Elementary School in Sherman Heights, located in the Portside Community.

Additionally, the District has historically monitored for emissions of toxic air contaminants, including metals and Volatile Organic Compounds (VOCs) in the Portside Community at its stations at Perkins Elementary and Sherman Elementary, as well as other locations in San Diego County. As part of AB 617, the APCD has installed and is operating new, real-time (i.e. continuous) black carbon (an indicator for diesel particulate matter) analyzers at several locations in the Portside Community. These include the Tenth Avenue Marine Terminal (immediately adjacent to the Bay), Chicano Park (central Barrio Logan), Sherman Elementary School (in Sherman Heights), and at Oceanview Blvd. (Oceanview Blvd. at I-15, roughly 1.7 miles east of Perkins Elementary School).

Initial data from some of these stations shows that black carbon concentrations are highest in the morning hours, corresponding to morning commutes and other activities involving diesel engines. Additional information about air quality monitoring in the Portside Community can be found in Chapter 4 – Technical Assessment Monitoring. Most of the data provided in this chapter are based on the District's regional air monitoring stations, which are primarily intended for measuring air quality over larger portions of the region pursuant to federal and state requirements. Although these regional stations provide historical air quality data, currently the District has limited data from its neighborhood-scale air monitoring stations recently established in the Portside Community. The District is committed to continuing to work collaboratively with the CSC to obtain additional community-level air quality data and further quantify the emissions impacting the Portside community.

Chapters 5 and 6: Enforcement

Success in reducing community exposure to air contaminants would not be possible without enforcement of existing air quality laws and regulations. This is especially true in environmental justice communities such as the Portside Community, with heavy-duty diesel truck and industrial sources close to homes and schools. The District's and CARB's Enforcement Programs are designed to ensure sources of air pollution achieve compliance with all applicable rules and regulations to protect public health and the environment. The District's Enforcement Program involves the following elements to manage air pollution within the County of San Diego, and to ensure a level playing field for all regulated entities to prevent unfair advantages for violators: field inspections (stationary and mobile sources, asbestos from building renovations and demolition, and portable equipment); air quality complaint investigations; enforcement documents; and compliance assistance. All of these program elements are discussed in more detail in Chapter 5 – APCD Enforcement Program. CARB's Enforcement Plan reviews three years of stationary and mobile source enforcement data to assess local air

quality issues within the Portside Community boundaries. Additional information can be found in Chapter 6 - CARB Enforcement Plan.

Chapter 7: Actions and Strategies

At its core, the CERP is a plan for action to reduce air pollutant emissions and community exposure to those emissions in the Portside Community. In addition to the ongoing efforts described above, the CSC is proposing new actions to reduce air pollution in the community. The proposed actions define a path to further reduce air pollution from sources in the community under the following eight categories:

1. Outreach and Community Engagement
2. Incentives
3. Rule Development
4. Enforcement
5. Heavy-Duty Trucks
6. Land Use
7. Working Waterfront Activities (Port, Navy, Shipyards)
8. Advocacy Measures

Each action is to be carried out based on a set of strategies, goals, and timelines. The entity (e.g., government agency or organization) responsible for the actions is also identified. The actions will be presented to the APCD Board in two phases. Phase I includes actions from categories one through four from the list above and were adopted by the APCD Board in November of 2020. Phase II includes actions from categories five through eight and will be presented to the APCD Board in July of 2021. A full description of these actions as well as overall aspirational goals for the CERP can be found in Chapter 7 - Actions and Strategies. A summary of the goals and actions is presented below.

CERP Goals

GOAL 1. By 2031, reduce Diesel PM from 2018 levels by 80% in ambient air at all Portside Community locations.

GOAL 2. Medium-Duty and Heavy-Duty trucks servicing Portside Community to be 100% ZEV 5 years ahead of the California state requirements.

GOAL3. Establish ZEV HD/MD truck charging infrastructure in Portside, by specified dates in Action E1, with 4 sites operational by 2026.

GOAL 4. Reduce emissions from HD/MD trucks servicing indirect sources by 100% 5 years in advance of regulatory requirements.

GOAL 5. By December 2021, APCD to present the cumulative cancer risk for Portside Communities from Health Risk Assessments and modeling of cumulative risk (including freeways, rail, vessels, stationary sources, etc.) to inform Goal #6. APCD can achieve this modeling goal with CARB assistance and input from the Portside Community Steering Committee including methodology and input data.

GOAL 6. By February 2022, establish an estimated cancer risk reduction goal based on the modeling that is done in Goal #2. Estimated cancer risk at all census tracts in Portside Community from locally generated emissions, including both stationary and mobile sources, to meet goals of ___/ million by 2026 and ___ /million by 2031.

GOAL 7. Conduct a Health Risk Assessment (HRA) at the Port's two marine cargo terminals to establish an updated baseline that relies on the most recent source characterization and activity from the Port's 2019 Emissions Inventory to inform aspirational goals in support of public health community priorities:

1) By October 2021, identify existing health risk levels generated from the Port's Tenth Avenue Marine Terminal (TAMT) and the National City Marine Terminal (NCMT) for Diesel Particulate Matter (DPM) and other Toxic Air Contaminant (TAC) emissions.
    a. Reduce Health Risk: The HRA may be used to inform an aspirational goal of reducing cancer risk
    b. Reduce DPM Emissions: The HRA may be used to inform an aspirational emission reduction goal
    c. Assist the San Diego Air Pollution Control District (SDAPCD) and the California Air Resources Board (CARB) with preparing a cumulative cancer risk analysis for the AB 617 Portside Community by providing them with the Port's HRA (October 2021) and the other operational related information.

GOAL 8. By 2026 reduce cancer risk below 10/million for each permitted stationary source, including portable equipment, in the Portside Environmental Justice Community.

GOAL 9. By 2031 complete Harbor Drive 2.0 truck freight improvements, including enforcement and signage of truck route for National City.

GOAL 10. By 2031 increase tree canopy in the Portside Community to 35%.

GOAL 11. Develop a new vision for park/green space for the Portside Community to increase park space by 30% by December 2022.

CERP Actions

Strategies	Action	Description
Outreach and Community Engagement	A1	Develop and Implement an Incident Response Plan
	A2	Develop and Implement a Public Participation Plan
	A3	Develop a plan to quantify and prioritize the community health risks from air pollutants
	A4	Establish an Office of Environmental Justice within the APCD
Incentives	B1	Implement Additional Flexibility for Mobile Source Incentives
	B2	Reduce emissions from passenger vehicles
	B3	Develop and implement a residential air filtration and air monitoring program

	B4	Incentives Outreach
Rule Development	C1	Evaluate Rule 1206 (Asbestos Removal, Renovation, and Demolition) to potentially regulate residential structures between 1-4 dwelling units
	C2	Evaluate Rule 1210 to potentially reduce health risks
	C3	Evaluating existing rules and considering new rules
	C4	Propose amendment of District Rule 1401 to lower the threshold at which facilities must apply for and obtain a Federal Title V Operating Permit
Enforcement Actions/ Strategies	D1	Propose the development of a Supplemental Environmental Project (Sep) Program within the Violation Settlement program
	D2	Evaluate the feasibility of expanding mobile source enforcement program
	D3	Evaluate the current air quality complaint process
	D4	Increase APCD presence in Portside Community
	D5	Evaluate the feasibility of utilizing portable emission analyzers (Testo 350) to verify compliance
	D6	Evaluate the feasibility of expanding enforcement of truck idling regulations within the Portside Community
Heavy Duty Truck Strategies	E1	Advance the deployment of heavy-duty on-road electric trucks
	E2	Fair outcome for small fleet owners and truck drivers
	E3	Support dedicated truck route and avoid truck impacts to local community
	E4	Increase number of truck parking and staging facilities with electric charging capabilities
Land Use Strategies	F1	Support land uses that serve as a buffer between industrial and residential uses in the Portside Community
	F2	Reduce exposure for sensitive receptors within 500 ft. of Port, freeways, and industries
	F3	Urban greening
	F4	Public school exposure reduction
	F5	Support Harbor Drive Multimodal Corridor Study land use proposals
	F6	Neighborhood resiliency & housing stability
	F7	Improve transportation efficiencies
	F8	Truck diversion
Working Waterfront Activities (Port, Navy, and Shipyards)	G1	Reduce diesel emissions from cargo handling equipment
	G2	Reduce emissions from ships at berth
	G3	Reduce emissions from harbor craft
	G4	Reduce DPM and NOx emissions from portable air compressors and other diesel sources at shipyards
	G5	Promote best practices for reducing diesel, VOC and other emissions from ship repair activities
	G6	Reduce emissions from shipyard employee transportation

	G7	Promote adoption of ZE technologies by Port tenants, truckers, and other users of equipment
	G8	Reduce emissions associated with traffic at Naval Base San Diego
Advocacy Measures	H1	Support Emission Reduction Opportunities

CHAPTER 1
COMMUNITY PROFILE

Chapter 1 – Community Profile

Overview

The Portside Environmental Justice Community (Portside Community) comprises the neighborhoods of Barrio Logan, Logan Heights and Sherman Heights in the City of San Diego, and West National City within National City. This community was selected by CARB for an air pollution monitoring program in 2018 and for an emissions reduction program in 2019. The Portside Community Steering Committee (CSC) was formed in 2018 to incorporate community expertise and direction in the development and implementation of the CERP.

Portside Community Description

National City is the poorest city in San Diego County. It is a community of color with significant challenges including language barriers, insufficient access to reliable transportation and healthy food, and high exposure to pollutants. Notably, 22% of residents live below the federal poverty line and 35% of the population has less than a high school education[2]. Most residents are people of color (88%) with Latinos constituting the greater share of the population (63%) and Asian-American/Pacific Islanders following with 20%[2]. The community is also quite young with approximately 26% of residents under the age of 18."

Logan Heights is similar in its demographic makeup. An estimated 86% of residents are Latino with Black and Whites constituting the secondary and tertiary largest ethnic groups[3]. Among Logan Heights' residents, approximately 50% have less than a high school diploma and 30.8% live below the federal poverty line[4]. At the last census, 34% of Logan Heights' residents were under the age of 18[5].

Barrio Logan is a mixed-use neighborhood south of downtown San Diego. Its bayfront is highly industrialized. In the period between the 1920s and 1950s, Mexican American, African American and Asian residents as well as Mexican immigrants moved into Logan Heights/Barrio Logan because of its proximity to the bay front, railroad jobs, and the availability of affordable housing[6]. The community was heavily residential and continued to be so as multi-family units were developed throughout the neighborhood to house the continuous influx of immigrant labor.

The neighborhood of Barrio Logan achieved its current identity because of its separation from Logan Heights

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[2-2] Demographic and Socioeconomic Profile 2010, Zip 91950". San Diego Association of Governments.

[3] 2016 ACS 5-Year Estimates. "Selected Characteristics of the Total and Native Populations in the United States".

[4] Greater Logan Heights: Five Neighborhoods, One Community.

https://www.sandiego.gov/sites/default/files/legacy/planning/community/profiles/southeasternsd/pdf/greaterloganheightsfiveneighborhoodsonecommunity.pdf .

[5] 2010 Decennial Census. "Sex by Age".

[6] Smith, Brian F. and Associates and the City of San Diego City Planning and Community Investment/Planning Divisions. "Barrio Logan Historical Resources Survey". 1 February 2011.

https://www.sandiego.gov/sites/default/files/legacy/planning/programs/historical/pdf/2013/201304blhistoricsurvey.pdf.

due to the construction of Interstate 5 in 1963 and the San Diego-Coronado Bay Bridge in 1969, as well as the rezoning of the area from strictly residential to mixed use. Although it is considered a cultural gem of the county as San Diego's original Mexican-American neighborhood and a landmark site of the 1960s Chicano rights movement, the community still faces significant challenges: 78% of residents are characterized as low-income, 32% of the population is linguistically isolated, and 42% of the population has less than a high school education[7]."

Barrio Logan's rate of asthma-related hospital visits is higher than 92.9 percent of census tracts throughout the state, with about 81 visits per 10,000 people. Cancer is also a major health hazard for residents. Barrio Logan's cancer risk is in the 80th- 90th percentile nationally[6].

Sherman Heights is a high-density urban neighborhood that has a similar immigrant history and make up as Logan Heights[8]. As the northernmost neighborhood in the Portside Community, it is just south of downtown San Diego.

The Portside Community includes the following 12 census tracts: 6073005000; 6073004900; 6073003902; 6073003601; 6073003901; 6073005100; 6073003603; 6073004000; 6073003502; 6073021900; 6073004700; and 6073011602.

A map of the Portside Community, by census tracts, is shown below in Figure 1.

[7] "EJSCREEN Report (Version 2016) Block group: 060730050001". EJSCREEN Tool. US Environmental Protection Agency.

[8] City of San Diego Community Description

https://www.sandiego.gov/citycouncil/cd8/communities/shermanheights

Figure 1 - Map of the Portside Community, by Census Tract

Portside Community Impacts

Several of the census tracts within the Portside Community have some of the highest CalEnviroScreen 3.0 (CES 3.0) ratings in the State (Table 2, and Figure 2). Specifically, it has four census tracts that are in the 98th percentile for CES 3.0 and another eight that are in the 85th percentile. Over 50,000 San Diegans (Table 2) reside in this area and are subject to significant pollution exposure.

Table 2 - Portside Community CalEnviroScreen ratings by Census Tract

SD Rank	Census Tract	Total Population	ZIP	City	CES 3.0 Pctl	CES 3.0 Pctl Range	Pollution Burden Pctl	Population Char Pctl
1	6073005000	2227	92113	San Diego	**99.42**	**96-100%**	**95.81**	**97.39**
2	6073004900	5028	92113	San Diego	**99.00**	**96-100%**	**94.19**	**97.23**
3	6073003902	4927	92113	San Diego	**98.95**	**96-100%**	**94.49**	**96.63**
4	6073003601	3250	92113	San Diego	**98.73**	**96-100%**	**92.50**	**97.45**
5	6073003901	4241	92113	San Diego	**96.17**	**96-100%**	81.28	**97.63**
6	6073005100	7140	92113	San Diego	**95.79**	**96-100%**	**91.28**	89.42
7	6073003603	4228	92113	San Diego	**90.26**	**91-95%**	82.04	86.29
8	6073004000	5160	92102	San Diego	89.68	**86-90%**	70.30	**93.68**
9	6073003502	4946	92113	San Diego	88.55	**86-90%**	69.66	**92.23**
12	6073021900	6816	91950	Nat City	87.55	**86-90%**	**94.66**	65.82
13	6073004700	1858	92102	San Diego	86.72	**86-90%**	81.54	79.57
14	6073011602	3228	91950	Nat City	86.40	**86-90%**	63.91	**92.24**

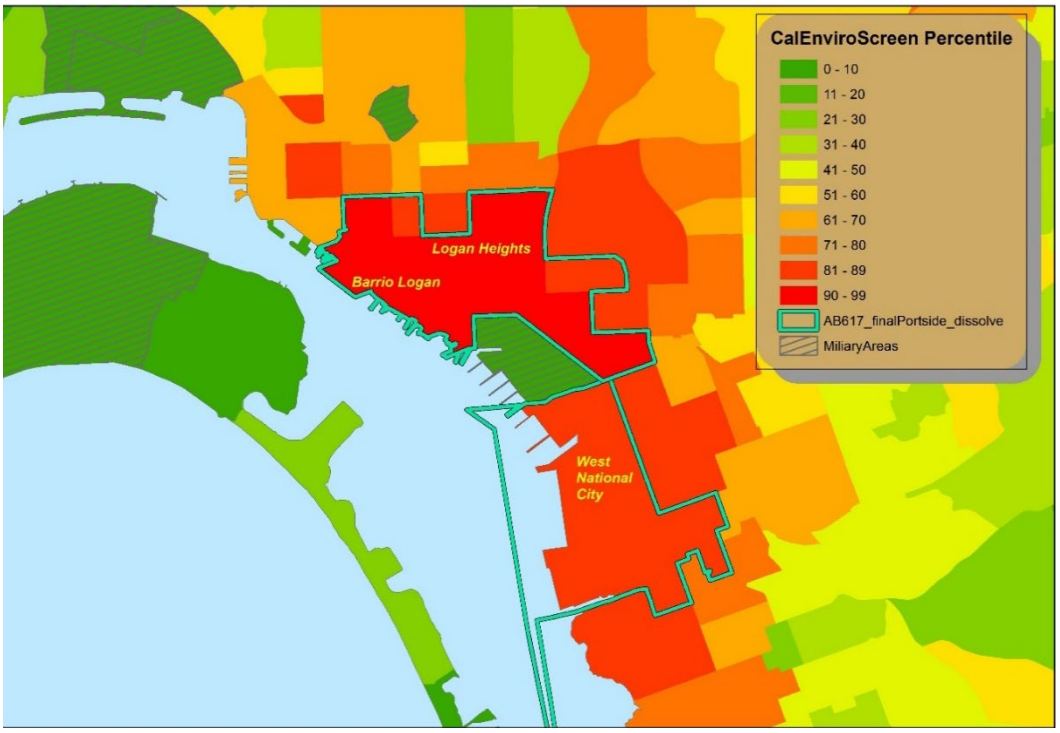


Figure 2 - CES 3.0 Map of the Portside Community

Diesel particulate matter (DPM), which is a known carcinogen and the greatest toxic air pollutant risk in the County, is one of the challenges the community faces. Eleven of the twelve census tracts (over 45,000 people) have an exposure risk greater than the 95th percentile. Four of the census tracts (over 15,000 people) are in the 99th percentile for DPM as shown in Table 3.

There are also significant environmental effect indicators including groundwater threats, hazardous waste, solid waste, and impaired water bodies. Several of the census tracts have pollution effects in the 95th+ percentile (Table 3).

The Community of Portside Environmental Justice Neighborhoods is a very sensitive population as evidenced by its CES 3.0 indicators. The asthma indicator, with five census tracts (20,000 residents) in the 95th+ percentile (Table 3), raises concerns. With the high asthma indicator and significant pollution exposure, residents are very vulnerable to effects of asthma.

Table 3 - CES 3.0 Data for Portside Community

SD Rank	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**12**	**13**	**14**
CA Rank	47	80	84	102	305	335	773	819	909	988	1054	1079
Total Pop.	2227	5028	4927	3250	4241	7140	4228	5160	4946	6816	1858	3228
Zip code	92113	92113	92113	92113	92113	92113	92113	92102	92113	91950	92102	91950
CES 3.0 Score	70.91	68.27	67.79	66.76	59.42	58.65	51.41	50.87	49.67	48.7	47.99	47.62
CES 3.0 Pctl	**99.42**	**99.02**	**98.95**	**98.71**	**96.17**	**95.79**	**90.26**	89.68	88.55	87.54	86.71	86.40
CES 3.0 Pctl Range	**95-100**	**95-100**	**95-100**	**95-100**	**95-100**	**95-100**	**90-95**	**85-90**	**85-90**	**85-90**	**85-90**	**85-90**
O3 Pctl	22.34	22.34	22.34	22.34	22.34	22.34	22.34	22.34	22.34	25.87	22.34	25.87
PM 2.5 Pctl	66.23	66.23	66.23	66.23	66.23	66.23	66.23	66.23	66.23	69.14	66.23	66.23
Diesel PM Pctl	**99.65**	**99.65**	**97.08**	**94.52**	**97.98**	**99.65**	**97.24**	**98.56**	87.28	**95.49**	**99.65**	**97.24**
Drinking Water Pctl	22.24	22.24	22.24	22.24	22.24	22.24	34.03	22.24	22.24	27.09	22.24	27.09
Pes. Pctl	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Tox. Release Pctl	61.84	53.75	78.14	58.76	56.14	44.49	55.7	50.19	50.09	56.5	44.16	52.81
Traffic Pctl	73.37	84.33	75.47	86.82	54.52	70.61	84.3	50.11	53.35	80.42	82.63	36.01
Clean up Sites Pctl	89.49	81.78	53.92	45.15	27.62	86.92	**6.33**	**2.72**	39.78	**98.1**	56.79	61.42
Groundwater Threats Pctl	**96.79**	**96.24**	80.8	**94.36**	74.91	**99.55**	**90.75**	79.18	39.42	**99.67**	**96.97**	41.19
Haz. Waste Pctl	**97.37**	**95.92**	**98.37**	**95.27**	82.35	**95.48**	46.52	57.13	**90.7**	85.19	**92.4**	65.56
Imp. Water Bodies Pctl	**97.26**	71.61	**95.64**	89.54	80.63	76.39	80.63	29.25	48.8	63.17	15.26	29.25
Solid Waste Pctl	**93.61**	**92.38**	**96.39**	84.51	84.77	73.54	73.54	75.64	52.84	**91.7**	65.24	70.29
Poll. Burden Pctl	**95.82**	**94.20**	**94.50**	**92.50**	81.28	**91.28**	82.04	70.29	69.65	**94.67**	81.54	63.85
Asthma Pctl	**97.23**	**97.23**	**97.23**	**97.08**	**93.62**	81.00	**94.07**	**90.13**	**97.23**	13.76	88.57	85.04

Low Birth Weight Pctl	63.17	68.47	51.34	70.24	83.21	**93.13**	26.44	84.06	24.98	83.21	50.72	82.81
Cardio Disease Pctl	70.78	70.78	70.78	69.53	50.8	44.11	55.75	49.35	70.78	56.84	45.01	77.04

Edu Pctl	**90.79**	**96.14**	**98.2**	**97.12**	**97.45**	66.19	**91.16**	**93.05**	**97.72**	45.6	**90.95**	86.35
Ling. Iso. Pctl	**96.29**	**93.15**	**97.03**	86.72	**95.13**	58.23	**95.45**	88.8	**91.92**	83.22	77.34	84.6
Poverty Pctl	**99.02**	**94.7**	**97.25**	**95.9**	**97.57**	**91.41**	85.72	**95.84**	**97.49**	84.34	87.59	87.94
Unemp Pctl	**90.84**	82.8	**96.19**	89.91	**97.33**	**95.91**	87.12	62.53	**94.29**	54.39	36.77	54.39
Housing Burden Pctl	**97.68**	**95.71**	**91.18**	**96.89**	**98.07**	**92.36**	**90.42**	**96.99**	**91.5**	81.7	**97.3**	73.17
Pop Char Pctl	**97.39**	**97.21**	**96.66**	**97.45**	**97.63**	89.44	86.32	**93.68**	**92.22**	65.81	79.52	**92.23**

Census Tracts 6073005000 (SD Rank 1); 6073004900 (SD Rank 2); 6073003902 (SD Rank 3); 6073003601 (SD Rank 4); 6073003901 (SD Rank 5); 6073005100 (SD Rank 6); 6073003603 (SD Rank 7); 6073004000 (SD Rank 8); 6073003502 (SD Rank 9); 6073021900 (SD Rank 12); 6073004700 (SD Rank 13); 6073011602 (SD Rank 14)

There are significant socioeconomic factor indicators that show how the Community of Portside Environmental Justice Neighborhoods' residents are limited in overcoming the pollution exposure and environmental effects. Residents in seven of the census tracts (30,000 people) are in the 95th percentile for poverty. The high poverty rate prevents residents from purchasing goods and services that would minimize any exposure. Ten of the census tracts (40,000+ residents) are in the 90th percentile for housing burden. With significant poverty levels and having much of their limited income going towards housing, their ability to protect themselves from pollution exposure is greatly limited and highlights the need for a Community Emission Reduction Plan.

CHAPTER 2
COMMUNITY OUTREACH AND ENGAGEMENT

Chapter 2 – Community Outreach and Engagement

Community Outreach and Engagement

In response to Assembly Bill 617 (AB 617) [C. Garcia, Chapter 16, Statutes of 2017], the California Air Resources Board (CARB) established the Community Air Protection Program (Program). The Program's mission is to reduce pollution exposure in communities based on environmental, health and socioeconomic information. This first-of-its-kind statewide effort requires community air monitoring, community emission reduction plans, and incentive funding to deploy the cleanest technologies in the most impacted areas.

The San Diego Air Pollution Control District (District or APCD) nominated the Portside Community to be included in this Program. This included the neighborhoods of Barrio Logan, Logan Heights and Sherman Heights in the City of San Diego, and West National City within National City.

In 2018, CARB selected the Portside Community as one of ten communities within the State for air quality monitoring under the Program. Prior to this selection and granting of AB 617 funds, the District reached out to members of the community and held community meetings to discuss areas of mutual interest via community meetings. These meetings were key to identifying air pollution concerns within the Portside Community and initiated the outreach process of forming community partnerships.

To facilitate information sharing and dissemination of AB 617-related information, the District created a new webpage on its website (Figure 3).

Figure 3 – AB 617 Webpage

The District Community Air Protection Program (AB 617)[9] webpage describes and illustrates the Program, the Portside Community Steering Committee meetings, and air pollution specifics in the area. The webpage is also a repository for meeting minutes, presentations, documents, and reports related to the Program.

Community Partnerships and Formation of a Community Steering Committee

Starting in March 2018, the District invited stakeholders to assist in developing the Community Air Protection Program submittal for Community Air Monitoring/Community Emission Reductions. Through this collaboration, the draft document to nominate a community was submitted to CARB on April 30, 2018 and the final document was submitted on July 31, 2018.

Participating stakeholders included: members of the community; community-based environmental justice organizations - Casa Familiar and the Environmental Health Coalition (EHC); academics from local universities; industry representatives - San Diego Gas & Electric (SDG&E), the City of San Diego, the San Diego Association of Governments (SANDAG), the Port of San Diego, and the U.S. Navy. Additionally, there were individual presentations given to SANDAG, the City of San Diego, the Port of San Diego, Casa Familiar, and industry. There were also two evening meetings with EHC where information was presented to Portside residents in Spanish by District staff.

The District started meeting with members of the community before the community nomination process was formulated (Figure 4). These meetings facilitated the discussions to identify and understand residents' concerns related to air pollution within their neighborhoods. This initiated the first steps towards the formation of a community partnership and the formation of the Portside Community Steering Committee (CSC)

Figure 4 - Stakeholder Meetings

[9] District Community Air Protection Program (AB 617) Website
https://www.sandiegocounty.gov/content/sdc/apcd/en/community-air-protection-program--ab-617-.html

A list of meetings and workshops that the District attended, participated in, or led in preparation of nominating a community, through the first CSC meeting is shown below in Table 4.

Table 4 – Summary of AB 617 Meetings with District Participation Leading to the First Steering Committee Meeting

Date	Subject	City	Attendees	Notes
October 23, 2017	CARB AB 617 Workshop	Los Angeles	~35	Listened to CARB/SCAQMD/Non-Profits/Public/Christina Garcia
November 18, 2017	APCD Advisory Group Meeting	San Diego	4	Update on AB 617 was an agenda item; answered questions
November 28, 2017	CARB Freight / AB 617 Workshop	National City	~35	Evening CARB community meeting on AB 617 and freight
February 14, 2018	APCD Advisory Group Meeting	San Diego	4	Update on AB 617 was an agenda item; answered questions
February 28, 2018	State of CA Community Air Protection Summit	Riverside	~150	Workshop on AB 617 Implementation- Best Practices
March 12, 2018	State of CA Community Leadership Summit	Riverside	~150	Workshop best practices in having community project success
March 14, 2018	APCD Advisory Group Meeting	San Diego	4	Update on AB 617 was an agenda item; answered questions
March 23, 2018	Stakeholder Kick-Off Meeting	San Diego	~20	Two community organizations, academia, utility, industry, EPA
March 29, 2018	San Ysidro Community Meeting	San Ysidro	~25	Residential concerns in San Ysidro/Otay Mesa
Month of April 2018	Door-to-Door Grant Outreach	San Diego		Outreach to companies in Portside Community

Date	Subject	City	Attendees	Notes
April 11, 2018	Portside Community Presentation	National City	20	Presentation at Environmental Health Coalition
April 14, 2018	APCD Advisory Board Meeting	San Diego	4	Agenda item was an AB 617 update
April 24, 2018	Project Workshop	San Diego	20	ARB presented program details, Q&A
April 26, 2018	Grant Outreach	San Diego		Outreach grants at industry Mexport Conference
April 27, 2018	Stakeholders Meeting	San Diego	20	Progress on monitoring, incentives grants
Month of May 2018	Door-to-Door Grant Outreach	San Diego		Outreach to companies in Portside Community
May 17, 2018	Monitoring Stakeholders Tour of District Facilities	San Diego	3	Tour of District lab and monitoring station for 2 professors and Joy Williams of EHC
May 29, 2018	Meeting with City officials	San Diego	6	Talk with City of San Diego Executive Team and Mayoral staff
May 31, 2018	Stakeholders Meeting	San Diego	24	Progress on monitoring, incentives
May 31, 2018	San Ysidro Community Meeting	San Diego	~25	Presentation at Casa Familiar Community Meeting
Month of June 2018	Door-to-Door Grant Outreach	San Diego		Outreach to companies in Portside Community
June 1 and 2, 2018	Meeting, tour of communities	San Ysidro/ National City	~25	Workshop and Port tour with CARB, EHC, and Casa Familiar
June 5, 2018	SANDAG presentation	San Diego	5	Project update for SANDAG Planning staff

Date	Subject	City	Attendees	Notes
June 7, 2018	SANDAG CBO Working Group presentation	San Diego	12	Provided AB 617 update
June 7, 2018	Grant Outreach	San Diego	~15	Port Tenants Association Environmental Managers Meeting
June 13, 2018	Environmental Health Coalition Community Meeting	National City	10	Instructed residents how to report air quality complaints to District; bilingual inspectors presented
June 18, 2018	IEA/APCD Workshop for industry	San Diego	32	Update on Emission Inventory Tool
June 22, 2018	Project Meeting	San Diego		Progress on monitoring, incentives grants
June 25, 2018	IEA/APCD Workshop for industry	San Diego	~20	AB 617 update including CARB Blueprint
June 27, 2018	Stakeholders Meeting	San Diego	~25	Update; Progress on monitoring, incentives grants, inspections; getting feedback from stakeholders
August 23, 2018	Stakeholders Meeting	San Diego	~25	Update; Progress on monitoring, incentives grants, inspections; getting feedback from stakeholders
October 4, 2018	Stakeholders Meeting	San Diego	~20	Update; Progress on monitoring, incentives grants, inspections; getting feedback from stakeholders
October 25, 2018	First Steering Committee Meeting	San Diego	43	16 of 20 committee members; CARB/District staff

During each meeting, the District engaged attendees, solicited ideas and comments, and incorporated their suggestions into the District's nominations and plans. The District will continue this collaborative approach with the CSC and the rest of the Portside Community throughout the entire AB 617 program.

The District developed English and Spanish applications and a draft charter for interested parties to apply as

CSC members. The goal of the CSC's composition was to have a diverse group that represented the recommended communities. The charter and committee membership makeup have since been updated to comply with CARB's Community Air Protection Blueprint, which was created to provide direction for selecting communities, preparing Community Emissions Reduction Programs, identifying statewide strategies, and conducting community air monitoring.

By design, the CSC is comprised of an odd number of members, with a maximum number set at 29 members. The majority of the CSC must be residents who live within the boundaries of the Portside Community. The Steering Committee members include: individuals residing, working, or owning businesses within the Portside Community; community-based environmental justice organizations; public health organizations that work within the Portside Community; academic researchers; labor unions; land use planning agencies; city/county officials; transportation agencies; locally-based business associations; and, workers or managers from larger industrial sources located in the Portside Community.

The current list of Steering Committee members is shown here. The Steering Committee operates under the Steering Committee Charter[10], which was updated in June of 2020. The charter specifies the background of the program, Steering Committee objectives, Steering Committee membership criteria and selection, member terms of appointment, meeting information, virtual remote meetings, meeting decorum and attendance, quorum requirements, voting requirements, conflict resolution, charter revisions, and charter subcommittees and working groups.

Steering Committee Meeting Information

The first Steering Committee meeting occurred on October 25, 2018 at Perkins Elementary School in Barrio Logan within the Portside community (Figure 5). There were 43 people in attendance that included 16 out of 20 regular steering committee members, 1 committee alternate, 6 members of the public, 12 District staff, 7 CARB staff, and 1 English to Spanish interpreter.

[10] Steering Committee Charter link

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/AB_617/Portside%20CSC%20Charter_FINAL_October%202020%20Update.pdf

Figure 5 - First Steering Committee Meeting at Perkins Elementary School (10-25-2018)

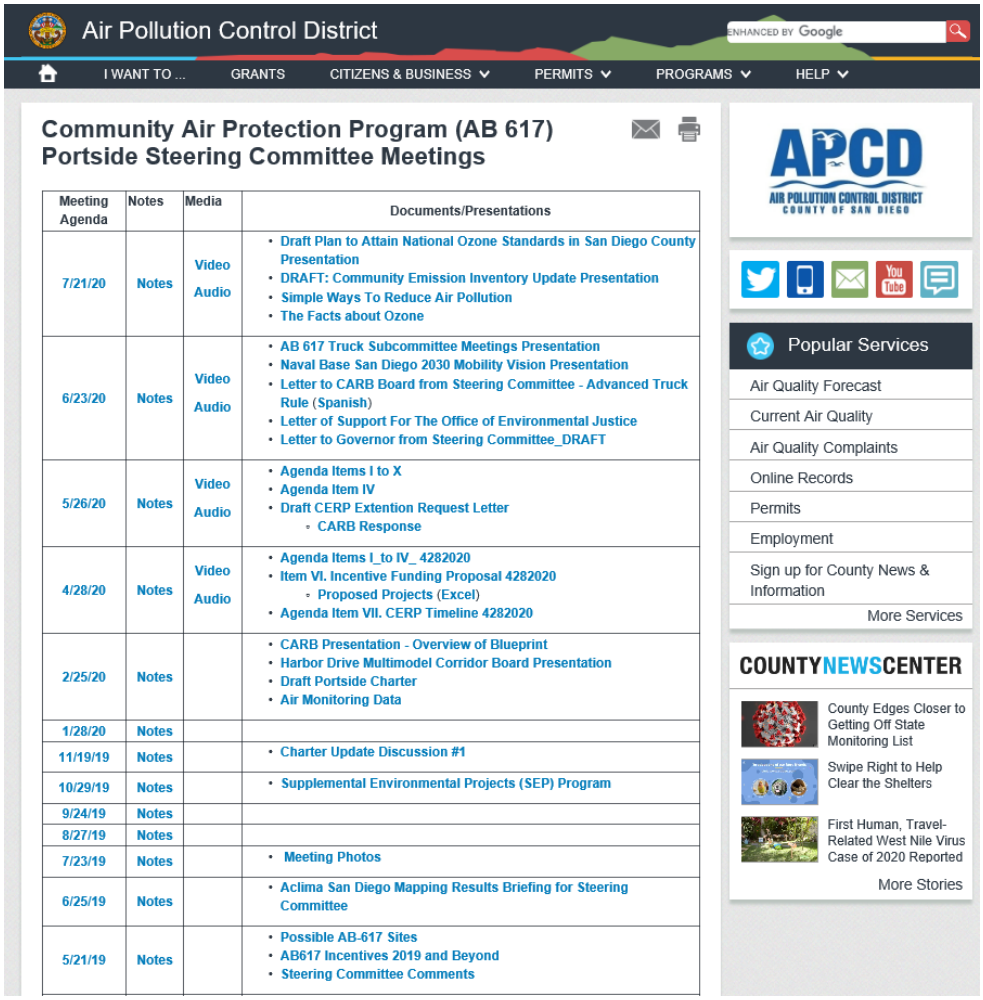
Monthly Steering Committee meetings continued to be held from 6 pm to 8 pm on Tuesday evenings, the third or fourth Tuesday of each month. The location was set at Perkins Elementary School in Barrio Logan and the meetings occurred in the evening to accommodate residents that have obligations during the day, allowing for attendance and participation. The meeting dates, times, and location are posted on the District website.

Steering Committee meetings have been held monthly, with two exceptions. The Steering Committee agreed during the November 2019 meeting to not convene in December 2019 due to holiday delays on active projects. The March 24, 2020 Steering Committee meeting was cancelled due to the California Executive Order and Public Health Order to stay at home to address the novel coronavirus pandemic. Monthly meetings have been conducted virtually since April of 2020 to comply with COVID-19 health orders.

Steering Committee meeting dates, agendas, minutes, and documents/presentations are maintained on the District website (Figures 6 and 7) Community Air Protection Program (AB 617) webpage [11].

[11] District Community Air Protection Program (AB 617) Website Steering Committee Documents

https://www.sandiegocounty.gov/content/sdc/apcd/en/community-air-protection-program--ab-617-/ab-617-steering-committee-documents.html



Air Pollution Control District

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I WANT TO ... GRANTS CITIZENS & BUSINESS PERMITS PROGRAMS HELP

Community Air Protection Program (AB 617) Portside Steering Committee Meetings

Meeting Agenda	Notes	Media	Documents/Presentations
7/21/20	Notes	Video Audio	• Draft Plan to Attain National Ozone Standards in San Diego County Presentation • DRAFT: Community Emission Inventory Update Presentation • Simple Ways To Reduce Air Pollution • The Facts about Ozone
6/23/20	Notes	Video Audio	• AB 617 Truck Subcommittee Meetings Presentation • Naval Base San Diego 2030 Mobility Vision Presentation • Letter to CARB Board from Steering Committee - Advanced Truck Rule (Spanish) • Letter of Support For The Office of Environmental Justice • Letter to Governor from Steering Committee_DRAFT
5/26/20	Notes	Video Audio	• Agenda Items I to X • Agenda Item IV • Draft CERP Extention Request Letter ◦ CARB Response
4/28/20	Notes	Video Audio	• Agenda Items I_to IV_ 4282020 • Item VI. Incentive Funding Proposal 4282020 ◦ Proposed Projects (Excel) • Agenda Item VII. CERP Timeline 4282020
2/25/20	Notes		• CARB Presentation - Overview of Blueprint • Harbor Drive Multimodel Corridor Board Presentation • Draft Portside Charter • Air Monitoring Data
1/28/20	Notes		
11/19/19	Notes		• Charter Update Discussion #1
10/29/19	Notes		• Supplemental Environmental Projects (SEP) Program
9/24/19	Notes		
8/27/19	Notes		
7/23/19	Notes		• Meeting Photos
6/25/19	Notes		• Aclima San Diego Mapping Results Briefing for Steering Committee
5/21/19	Notes		• Possible AB-617 Sites • AB617 Incentives 2019 and Beyond • Steering Committee Comments

APCD AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

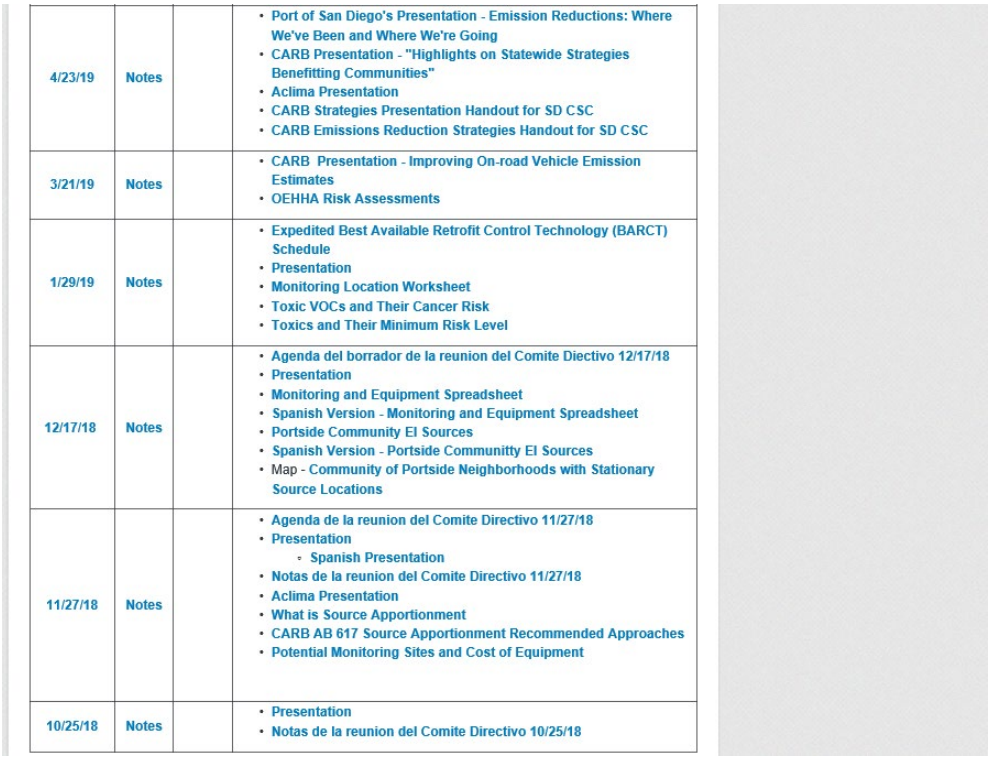
Popular Services

Air Quality Forecast
Current Air Quality
Air Quality Complaints
Online Records
Permits
Employment
Sign up for County News & Information
More Services

COUNTYNEWSCENTER

County Edges Closer to Getting Off State Monitoring List
Swipe Right to Help Clear the Shelters
First Human, Travel-Related West Nile Virus Case of 2020 Reported
More Stories

Figure 6 - AB 617 Webpage Image 1



4/23/19	Notes		• Port of San Diego's Presentation - Emission Reductions: Where We've Been and Where We're Going • CARB Presentation - "Highlights on Statewide Strategies Benefitting Communities" • Aclima Presentation • CARB Strategies Presentation Handout for SD CSC • CARB Emissions Reduction Strategies Handout for SD CSC
3/21/19	Notes		• CARB Presentation - Improving On-road Vehicle Emission Estimates • OEHHA Risk Assessments
1/29/19	Notes		• Expedited Best Available Retrofit Control Technology (BARCT) Schedule • Presentation • Monitoring Location Worksheet • Toxic VOCs and Their Cancer Risk • Toxics and Their Minimum Risk Level
12/17/18	Notes		• Agenda del borrador de la reunion del Comite Diectivo 12/17/18 • Presentation • Monitoring and Equipment Spreadsheet • Spanish Version - Monitoring and Equipment Spreadsheet • Portside Community EI Sources • Spanish Version - Portside Communitty EI Sources • Map - Community of Portside Neighborhoods with Stationary Source Locations
11/27/18	Notes		• Agenda de la reunion del Comite Directivo 11/27/18 • Presentation ◦ Spanish Presentation • Notas de la reunion del Comite Directivo 11/27/18 • Aclima Presentation • What is Source Apportionment • CARB AB 617 Source Apportionment Recommended Approaches • Potential Monitoring Sites and Cost of Equipment
10/25/18	Notes		• Presentation • Notas de la reunion del Comite Directivo 10/25/18

Figure 7 - AB 617 Webpage Image 2

Subcommittee Support for the Community Emissions Reduction Plan

The nomination of the Portside Community for a CERP was discussed and approved by the CSC during the July 23, 2019 meeting. The District submitted the nomination to be considered for a CERP to CARB on August 30, 2019 and was approved by the CARB Board on December 13, 2019. The District announced the acceptance of the CERP at the January 28, 2020 CSC meeting.

During the January 28, 2020 meeting, members of the CSC also announced that they wanted to form a subcommittee to focus on heavy-duty trucks and electrification projects. Further discussion on the formation of subcommittees to help develop emissions reduction actions and strategies for the CERP occurred at the February 25, 2020 CSC meeting. At this meeting, the CSC came to consensus to add subcommittees to the CSC Charter which would be on the Agenda for the following Steering Committee meeting.

The following Steering Committee meeting was held virtually on April 28, 2020. At this meeting, the Steering Committee agreed to establish four (4) subcommittees to support the development of the CERP for the Portside Community. These four subcommittees and objectives are:

1. CERP - Work with the District and technical experts to develop the Community Emissions Reduction Program (CERP),
2. Land Use - Focus on land use issues in Portside community,
3. Port - Identify strategies that can be incorporated into the CERP and Maritime Clean Air Strategy Plan (MCAS), created by the Port of San Diego, and

4. Trucks - Formalize ad hoc group focused on the technological and institutional challenges of electrification of heavy-duty truck fleets that serve the port's cargo terminals.

These subcommittees have been meeting either weekly or biweekly since April 2020 and have actively worked with the Steering Committee and the District to explore and develop the strategies included in this CERP for the Portside Community. The Subcommittee meeting dates, agendas, documents, and presentations are also maintained on the District website Community Air Protection Program (AB 617) webpage[12].

Public Workshops for CERP Development

In addition to the monthly Steering Committee meetings and Subcommittee meetings where the CERP was discussed and refined, the District held online public workshops on September 21, 2020 from 6:00-8:00 pm and on September 23, 2020 from 1:00-3:00 pm. To promote these workshops with the public, announcements were made on the AB 617 CERP webpage and the District's Twitter account (Figure 8). Additionally, a public workshop notice was mailed out to about 45 thousand residences in the area.[13]

The workshops provided the public an opportunity to learn about the goals of the CERP and, more importantly, allowed the public to provide feedback and ask questions about the CERP. In order to further promote public participation, Spanish language interpretation was available during the public workshops.

In each meeting aspects of the CERP were presented by both District staff as well as members of the Steering Committee for the first hour and then an additional hour was available for public comments. Members of the public made up 22 and 28 of the totals of 50 and 61 attendees, respectively for each meeting. The other attendees included government agency staff, Steering Committee members, and the facilitation team. The meeting notes for both the September 21, 2020[14] and September 23, 2020[15] are available on the District website.

On April 27 and 28, APCD staff held additional public workshops to solicit input on the final CERP document (Phase II). Outreach was conducted in English and Spanish through direct mail, social media (Figure 8), email distribution, and APCD's website. The workshop included a bilingual presentation as well as interpretation services (English/Spanish). The workshops were attended by a total of 57 members of the public. In addition,

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[12] Community Air Protection Program (AB 617)

https://www.sdapcd.org/content/sdc/apcd/en/community-air-protection-program--ab-617-.html

[13] Notice of Public Webinars for Discussion of AB 617 Community Emission Reduction Program Development

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/AB_617/AB617%20Workshop%20Notice%20English%20%20Spanish%20082020%20(2).pdf

[14] AB 617 Portside Community Emissions Reduction Plan Workshop Notes 9.21.20

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/AB_617/CERP%20Workshops%20Notes%209.21.20.pdf

[15] AB 617 Portside Community Emissions Reduction Plan Workshop Notes 9.23.20

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/AB_617/CERP%20Workshop%20Notes%209.23.20.pdf

representatives from APCD staff and other partner agencies were also present.

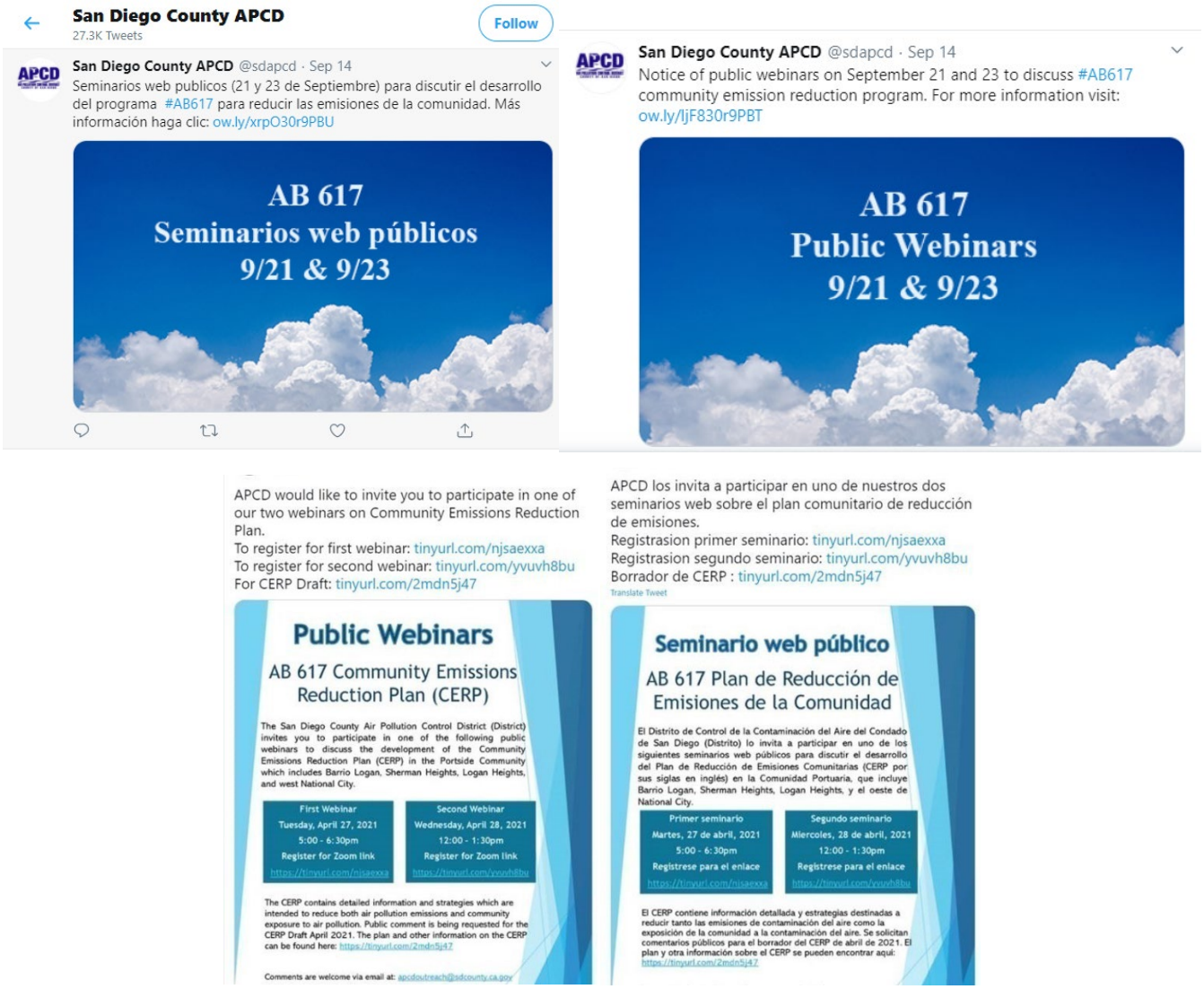


Figure 8 - Example AB 617 Tweets

CHAPTER 3
TECHNICAL ASSESSMENT - EMISSION INVENTORY DATA

Chapter 3 – Technical Assessment – Emission Inventory Data

Emissions Inventory and Source Attribution

The San Diego Portside Community contains various sources of air pollution that fall into one of the following categories: on-road and off-road mobile equipment, stationary sources (businesses regulated by the District), and area sources (such as residential fuel combustion, consumer products use, construction and demolition, and commercial cooking). The stationary sources include, but are not limited to, ship building and repair businesses, electric utilities, national security, autobody repair shops, metal fabrication and coating operations, petroleum bulk terminals, gasoline service stations, dry cleaning operations, and medicinal and botanical manufacturing. The Portside Community also has more than 13 miles of freeways that support regional and local transportation needs, including Interstate Highways 5 and 15.

The freeways and roadways are heavily travelled bypass-through traffic (including both commuters and goods movement that does not originate or end in the Portside Community) as well as local business and residential traffic. Source attribution analyses, using the 2018 year as the pre-Community Emissions Reduction Plan baseline year, highlights that on-road and off-road mobile sources are the driver for diesel particulate matter (DPM) emissions in the community with the major contributors being commercial harbor craft, off-road diesel equipment, heavy-heavy duty vehicles, and medium-heavy duty vehicles.

The pollutants contributing the most to the air toxics cancer risk in this community are DPM[16], metals such as arsenic, and organic gases such as benzene, 1,3-butadiene, and methylene chloride[17]. Arsenic is mainly attributable to construction and demolition activities as well as dust from roadways[18]. Both benzene and 1,3-butadiene are from on-road and off-road mobile sources while methylene chloride emissions are from consumer product use[19].

In addition to community-wide risk, certain stationary source operations involving air toxic pollutants impact the health risk affecting business and residences in close proximity to the operations. For the stationary source operations within the Portside Community, this localized risk comes primarily from DPM and hexavalent chromium from certain welding operations[20]. The analyses presented in this chapter also present in more detail the breakdown on sources of oxides of nitrogen (NO_x), reactive organic gases (ROG), and particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$). ROG are also sometimes called volatile organic compounds (VOC).

Community-level emissions and their sources will be discussed in this chapter but the detailed emissions are

[16] CARB's estimated statewide cancer risk due to DPM is 460 per one million in 2014.

[17] Chapter 4 – Technical Assessment Monitoring Data

[18] Appendix A: Toxic Pollutants

[19] Appendix B: Criteria Pollutants and Diesel Particulate Matter

[20] Based on Health Risk Assessments for sources under the Air Toxics "Hot Spots" Program

contained in Appendices A and B for toxics and criteria pollutants, respectively. The following sections contain discussions on baseline year emissions of criteria and toxic air contaminants (TAC) in the Portside Community, with a summary of emissions at the end of this chapter.

Base Year Emissions Inventory and Source Attribution

There are many sources that contribute emissions in the San Diego Portside Community but not all the sources contribute pollutant species equally. Contributing sources are grouped into four categories: On-road mobile sources, off-road mobile sources, area sources, and stationary sources. To determine the area, off-road and on-road mobile source information, the California Air Resources Board (CARB), in discussions with the District and the Community Steering Committee, set an emissions study boundary using one-kilometer grid cells used within CARB's emissions inventory to encompass the Portside Community, but this study will also include some areas just outside the community boundary, as shown below in Figure 9. Additionally, due to their magnitude and potential impact on the Portside Community, emissions from cruise ships berthed in the upper left grid cell are included in the off-road mobile source category.

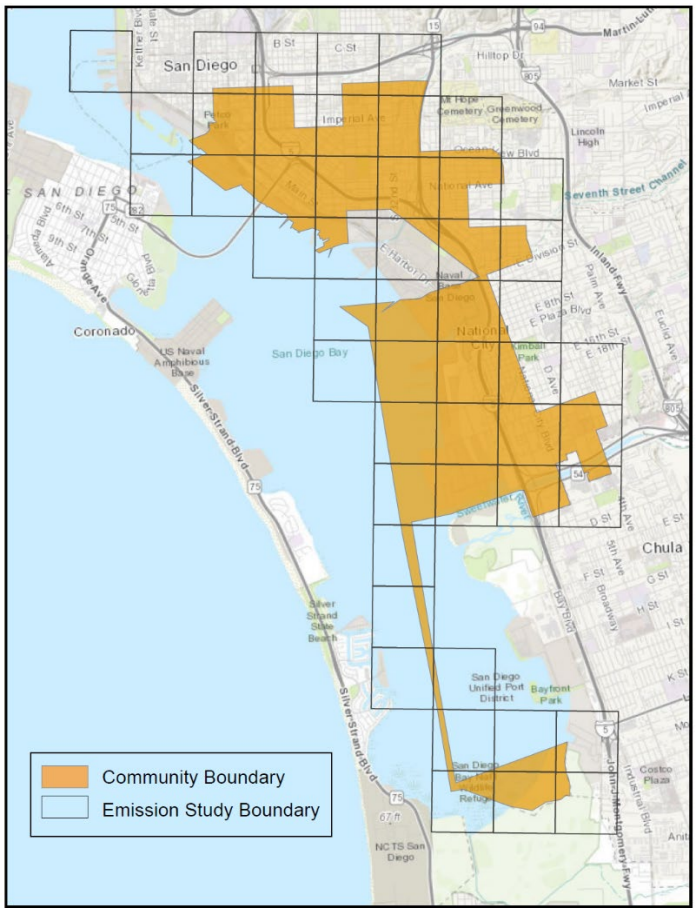


Figure 9 - Community vs. Emission Study Boundary[21]

Table 5 below displays the baseline emissions determined for the Portside Community in 2018, and is based on the information in Appendices A and B. Emissions were calculated using methods that best collected the activity data, such as product or fuel use, vehicle miles travelled, or population density, that results in the emissions. Stationary source emissions were calculated by using the District's Emission Inventory data that was provided by regulated facilities[22]. Area and both off-road and on-road mobile source emissions were estimated through multiple channels, such as fuel consumption tracking, population and activity surveys, vessel visits, etc., paired with the U.S. Environmental Protection Agency and CARB emission factors for those sources. Population, employment, housing, roads and railways were also considered when determining emission sources and their impact. For the area and both off-road and on-road mobile sources, county information for all the

[21] Data provided by CARB

[22] Stationary source inventories are available at

https://www.sandiegocounty.gov/content/sdc/apcd/en/engineering/Permits/Engineering_Emissions_Inventory/Engineering_Phase_2_Toxics_Facility_Emissions.html

metrics were narrowed down into the emissions study area to determine community emissions (including some areas just outside the community).

Table 5 provides the breakdown of the criteria pollutant emissions of interest by percentage and source. This data paired with the various area maps illustrate the community's main source impact being petrochemical fuel combustion and the associated emissions.

Table 5 – 2018 Community Baseline Criteria Emissions Summary[23]

Source Category	NOx (tons/year)	ROG (tons/year)	PM_{10} (tons/year)	$PM_{2.5}$ (tons/year)
Off-road mobile	**922.4** (63.1%)	**317.8** (25.5%)	**36.2** (5.0%)	**34.4** (17.7%)
On-road mobile	**462.8** (31.6%)	**259.9** (20.8%)	**69.5** (9.5%)	**32.1** (16.6%)
Stationary Sources	**50.6** (3.5%)	**215.1** (17.2%)	**33.2** (4.6%)	**8.5** (4.4%)
Area Sources	**26.6** (1.8%)	**455.0** (36.5%)	**589.2** (80.9%)	**118.9** (61.3%)
Total (tons/year)	**1462.4**	**1247.8**	**728.1**	**193.9**

NOx: Nitrogen Oxides

ROG: Reactive Organic Gases

PM_{10}: Particulate Matter 10 Microns or Smaller

$PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller

[23] Based on Appendix B: Criteria Pollutants and Diesel Particulate Matter

Table 6 provides the breakdown of selected toxic air contaminant (TAC) emissions by percentage and source. These include TACs that the District has air monitoring data for and determined drives the cancer risk from the monitored pollutants[24], as well as DPM, which CARB has estimated the statewide cancer risk[25], and hexavalent chromium which can cause localized elevated cancer risk[26].

Table 6 - Community Baseline Emission Summary for selected Toxic Air Contaminants[27]

Source Category	Arsenic (lb./yr.)	Benzene (lb./yr.)	1,3-Butadiene (lb./yr.)	Hexavalent chromium (lb./yr.)	DPM (lb./yr.)
Off-road mobile	**0.08** (0.2%)	**17,196** (52.8%)	**3,462** (63.3%)	**0.56** (25.3%)	**44,150** (78.0%)
On-road mobile	**1.1** (2.9%)	**14,601** (44.8%)	**1,756** (32.2%)	**0.21** (9.5%)	**10,904** (19.3%)
Stationary Sources	**0.9** (2.4%)	**409** (1.3%)	**84** (1.5%)	**1.40** (63.3%)	**1,472** (2.7%)
Area Sources	**37** (94.4%)	**372** (1.1%)	**164** (3.0%)	**0.04** (1.8%)	**0** (0%)
Total (pounds/year)	**39**	**32,578**	**5,466**	**2.21**	**56,526**

Uncertainties in Emissions Inventories

Over the years, emission inventories have become more robust, and improvement and updates to emission inventories are continuously made to ensure the most accurate inventory is used for emission focused programs, such as the community emission reduction program. Community-scale emission inventories for stationary, area, and mobile sources are developed using the best and latest available data inputs for estimating and spatially allocating emissions. Emissions from sources are estimated using a variety of inputs, such as activity data, emission factors, spatial surrogates, future growth and control factors, and pollutant speciation profiles. However, with each input, a level of uncertainty can exist when calculating emissions within a community due to data availability, representativeness, and limitations, and disparity between county or regional level data to

[24] Chapter 4 – Technical Assessment Monitoring Data

[25] CARB's estimated statewide cancer risk due to DPM is 460 in one million in 2014

[26] Based on Health Risk Assessments for sources under the Air Toxics "Hot Spots" Program

[27] Based on Appendix A: Toxic Pollutants for pollutants discussed in Chapter 4 – Technical Assessment Monitoring Data and based on Health Risk Assessments for sources under the Air Toxics "Hot Spots" Program

community level data.

For all sources, activity and emission factors used to calculate emissions might be incomplete, outdated, and not completely represent the current year or community. For example, activity profiles for a source might be developed either based on reported data, survey results, reported studies, or purchased data from previous years and might not accurately represent the current year of an emission inventory. Area and certain off-road mobile source estimates which are based on general methodologies that use regional activity assumptions and generic industry-wide or average emission factors have inherent uncertainties in the estimates.

The speciation profiles used to calculate toxic air contaminants are based on information from literature reviews and lab testing and may not always reflect all emission processes and activities resulting in those emissions. Additionally, speciation profiles might not include all toxics emitted from a specific source or in some cases it may include additional toxics compared to the pollutants that are actually emitted.

Spatially allocating emissions related to area, off-road mobile, and on-road mobile sources within communities can sometimes be difficult due to not having complete and detailed information related to activity location data for some source categories. In this case spatial surrogates which best fit emission activity are developed to allocate county level total emissions to the local level. For example, emission from consumer products are estimated using overall sales data, and spatially allocated within the community using population as a surrogate.

Future year emission projections use many assumptions based on industrywide economic forecasts, historical data, adopted regulations etc., making it challenging to project accurate emission estimates even at regional scales, let alone at the community level. Additionally, current forecasting factors do not consider current events like the ongoing pandemic and its impact on the economy, and therefore inventories for future years beyond 2020 may need further revisions as better data becomes available.

Contributors to Emissions in the Community

In the Portside Community, NO_x emissions, a component of smog, are driven by off-road mobile sources, with the major contributors being ocean going vessels and commercial harbor craft (Figure 10). On-road mobile sources are the second highest NO_x contributor (Table 5) with light duty vehicles as the leading emitter and heavy-heavy duty vehicles following it (Figure 11). Area and stationary sources of NO_x emissions are almost entirely from fuel combustion with area sources being driven by residential fuel consumption used for heating and stationary sources driven by industrial equipment fuel consumption[28].

2018 Off-Road Mobile Source Emissions[29]

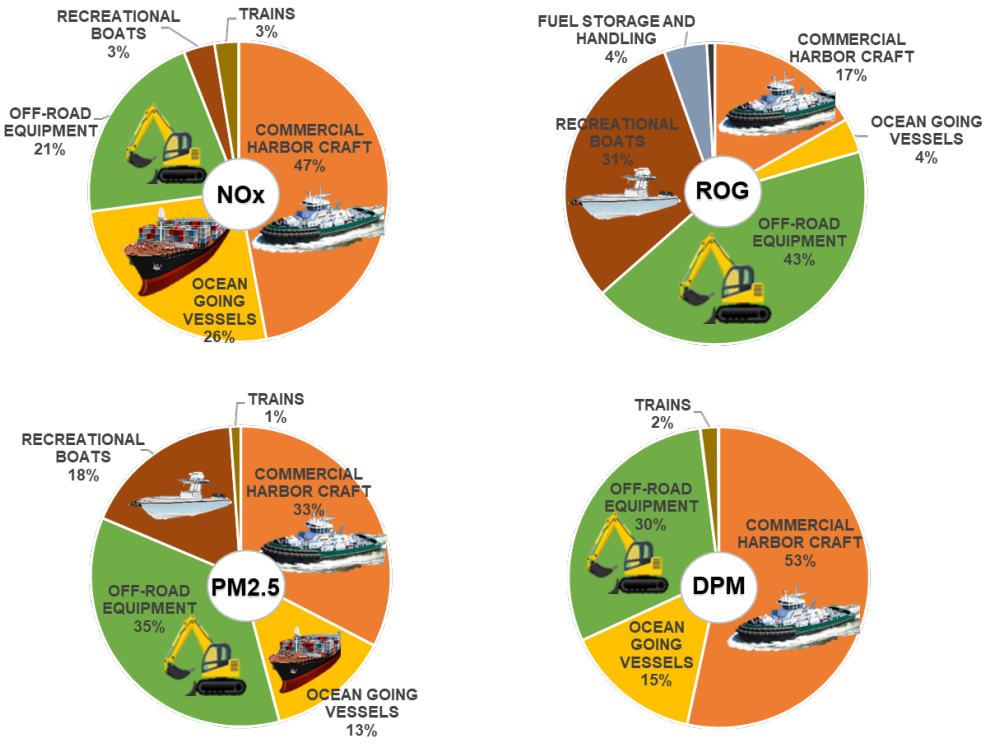


Figure 10 – 2018 Off-Road Mobile Source Emissions

2018 On-Road Mobile Source Emissions[30]

[28] Appendix B: Criteria Pollutants and Diesel Particular Matter

[29] Data Provided by CARB

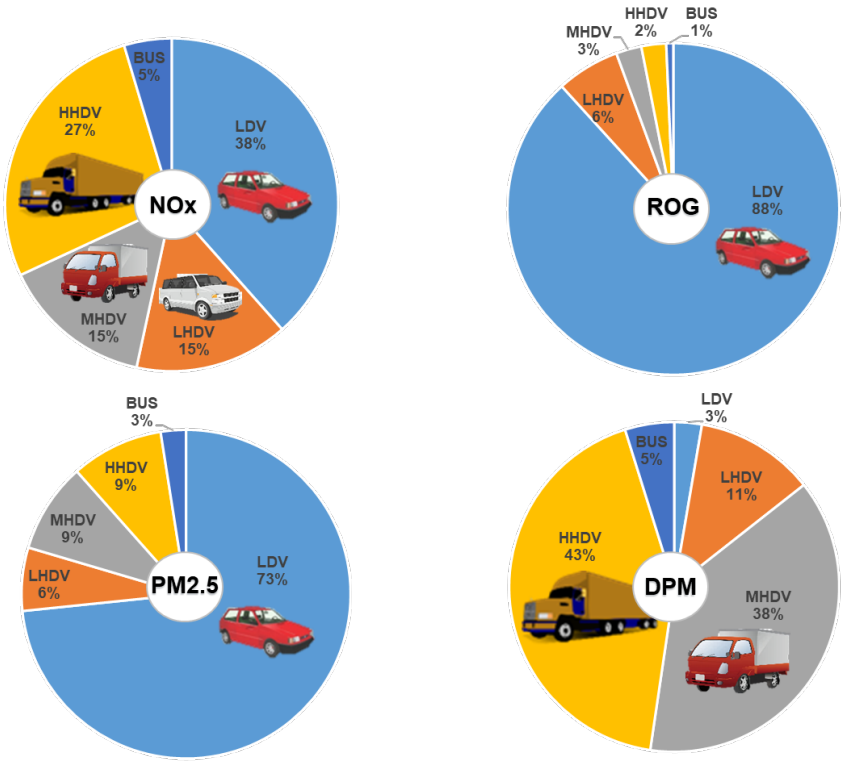


Figure 11 - 2018 On-Road Mobile Source Emissions

DPM emissions are associated with NO_x emissions and are also driven by off-road mobile sources with the major contributors being commercial harbor craft and off-road equipment (Table 5 and Figure 10). On-road mobile equipment is the second highest DPM contributor (Table 5), with heavy-heavy duty vehicles and medium-heavy duty vehicles as the leading emitters (Figure 11). Stationary sources of DPM are entirely from fuel combustion in engines[31]. There are no area source DPM emissions.

ROG emissions from area sources (Table 5) are associated with consumer products (like aerosols and cleaners), architectural coatings and solvents (Figure 12). The second highest category for ROG emissions is off-road mobile sources (Table 5), with the main contributors being off-road equipment and recreational boats (Figure 10). On-road mobile sources are the third leading ROG category (Table 5), where light-duty vehicles are the predominant source (Figure 11).).

[30] Data provided by CARB

[31] Appendix B: Criteria Pollutants and Diesel Particulate Matter

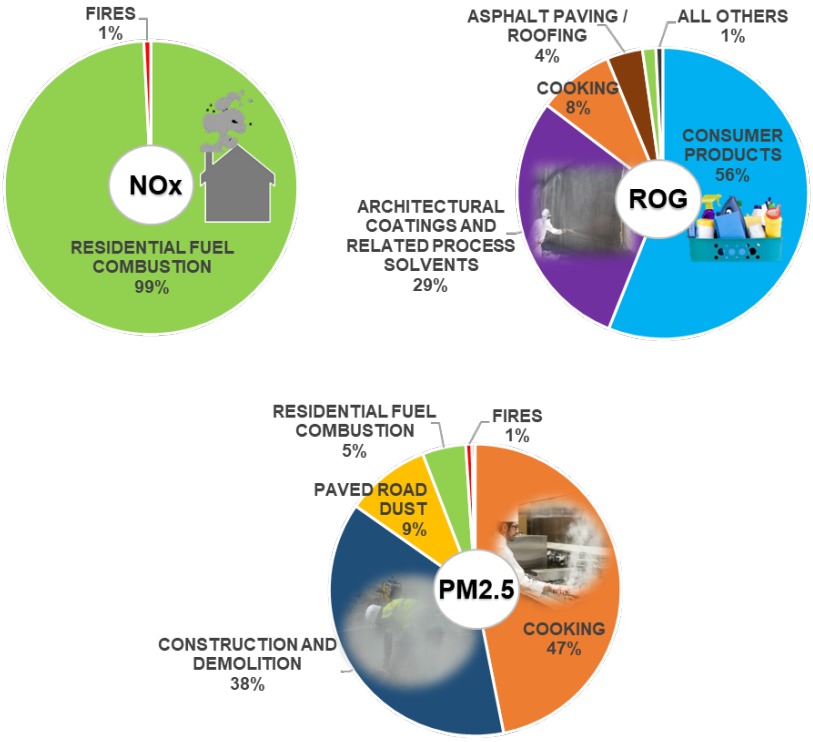


Figure 12 - 2018 Area Source Emissions[32]

Area sources are the leading source category for particulate matter less than 10 micrometers in diameter (PM_{10}) and $PM_{2.5}$ in the Portside Community (Table 5). As $PM_{2.5}$ is more harmful to people than PM_{10}, $PM_{2.5}$ will be the focus of this discussion. $PM_{2.5}$ area source emissions are mainly from commercial cooking operations and construction/demolition (Figure 12). Road dust, though caused in part by mobile sources, is also an area source that contributes to the total $PM_{2.5}$ emissions in the community. The large freeways running through the area along with highly trafficked streets near the waterfront are the sources of the road dust. Figure 13 shows the $PM_{2.5}$ emissions following along those roadways. However, traffic on the residential streets further from the freeways and industrial throughway also contribute to the $PM_{2.5}$ total emissions.

[32] Data provided by CARB

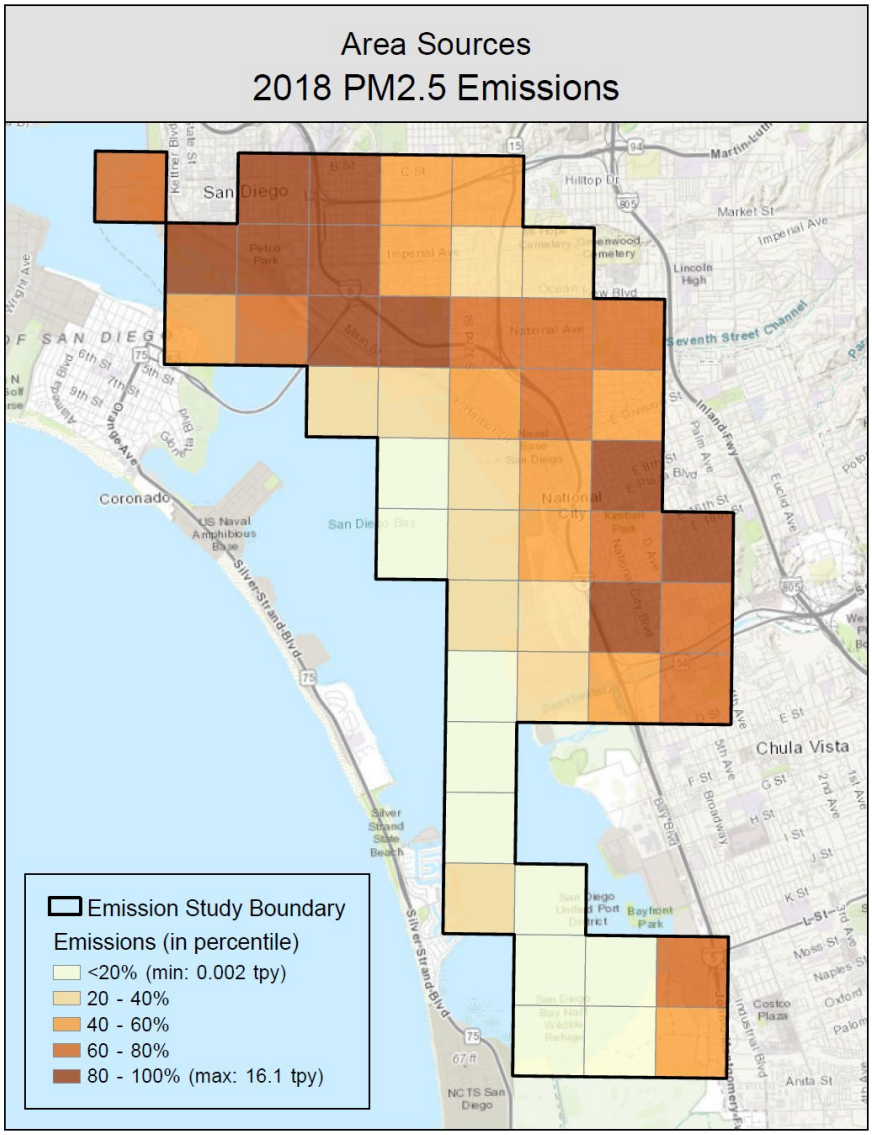


Figure 13 - 2018 $PM_{2.5}$ Emissions[33]

TAC emissions from stationary sources were determined using facility emissions inventory reports. TAC emissions associated with area sources, on-road and off-road mobile sources were calculated using industry specific pollutant speciation profiles applied to Total Organic Gases (TOG) and PM emissions.

As mentioned above, off-road mobile sources contribute about 78% of the total DPM emissions for the Portside community. Combustion of petroleum-based fuels generate a variety of emissions including DPM and NO_x. Off-road mobile source emissions are driven by fuel consumption and the correlation between DPM and NO_x can be seen below, with the similar percentages between sources as seen in Figure 10, above. Off-road mobile

[33] Data Provided by CARB

sources mostly support the waterfront operations and nearby industry that supports those operations, which is shown by the high emission grid cells in Figure 14 below. Figure 14 shows the relation between the freeways and DPM – the emissions are highest where freeways SR 94, SR 75 (San Diego Coronado Bay Bridge), and I-5 meet the port (upper left of the map).

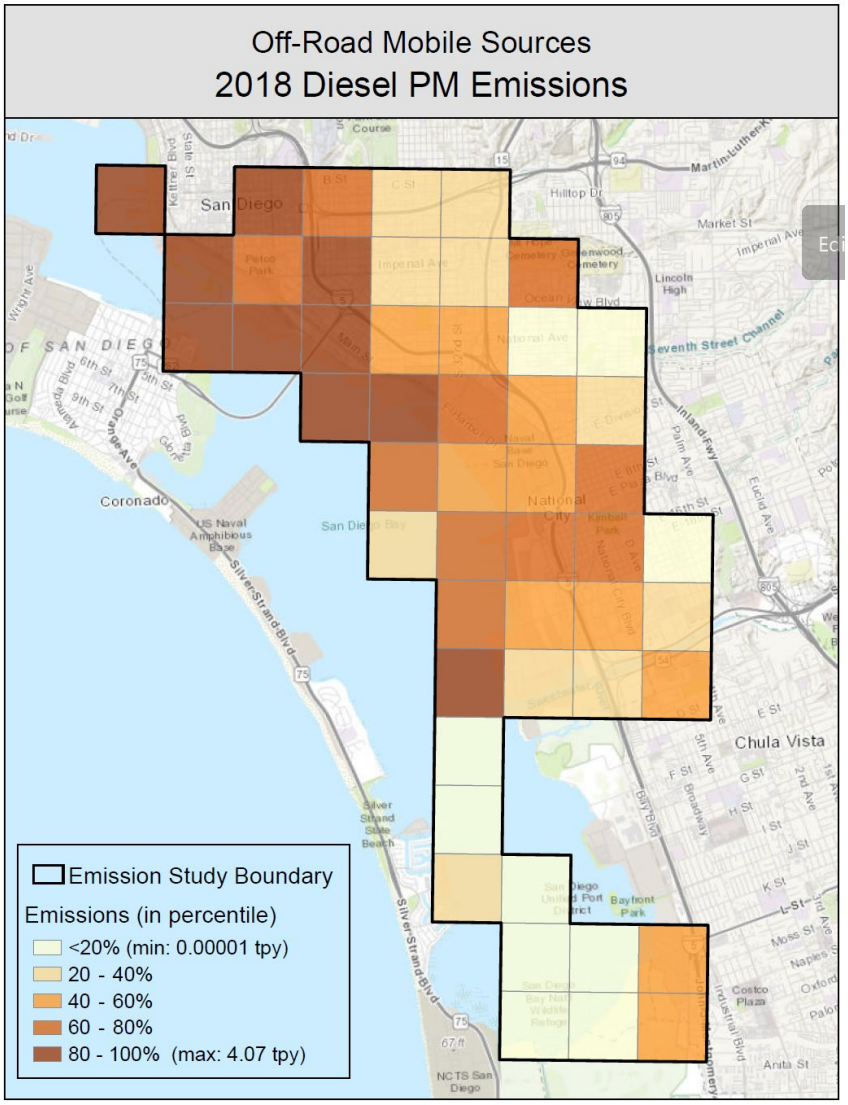


Figure 14 – 2018 Off-Road Diesel PM Emissions Percentile Map[34]

[34] Data provided by CARB

The inland freeway (I-5) that runs through the Portside Community is paralleled by a coastal road (Harbor Drive) that can be viewed as an unofficial split between industry and residential area. The side of Harbor Drive closer to the water is where industry is focused while the residential population is eastward. The darkly shaded grid cells in Figure 14, showing higher emissions, do frequently cross over into the residential population and these emissions can directly affect sensitive receptors in the area such as schools, parks, playgrounds, and residential dwellings. Figures 15 and 16 below are maps of the northern and southern parts of the community, respectively, with some receptors of importance (schools and religious centers) flagged. Parks and residential dwelling proximity can also be seen more clearly in relation to freeways and the harbor in Figures 15 and 16. Within the community boundary there are 22 schools, 14 licensed daycare facilities, and one hospital which need to be considered when prioritizing emissions.

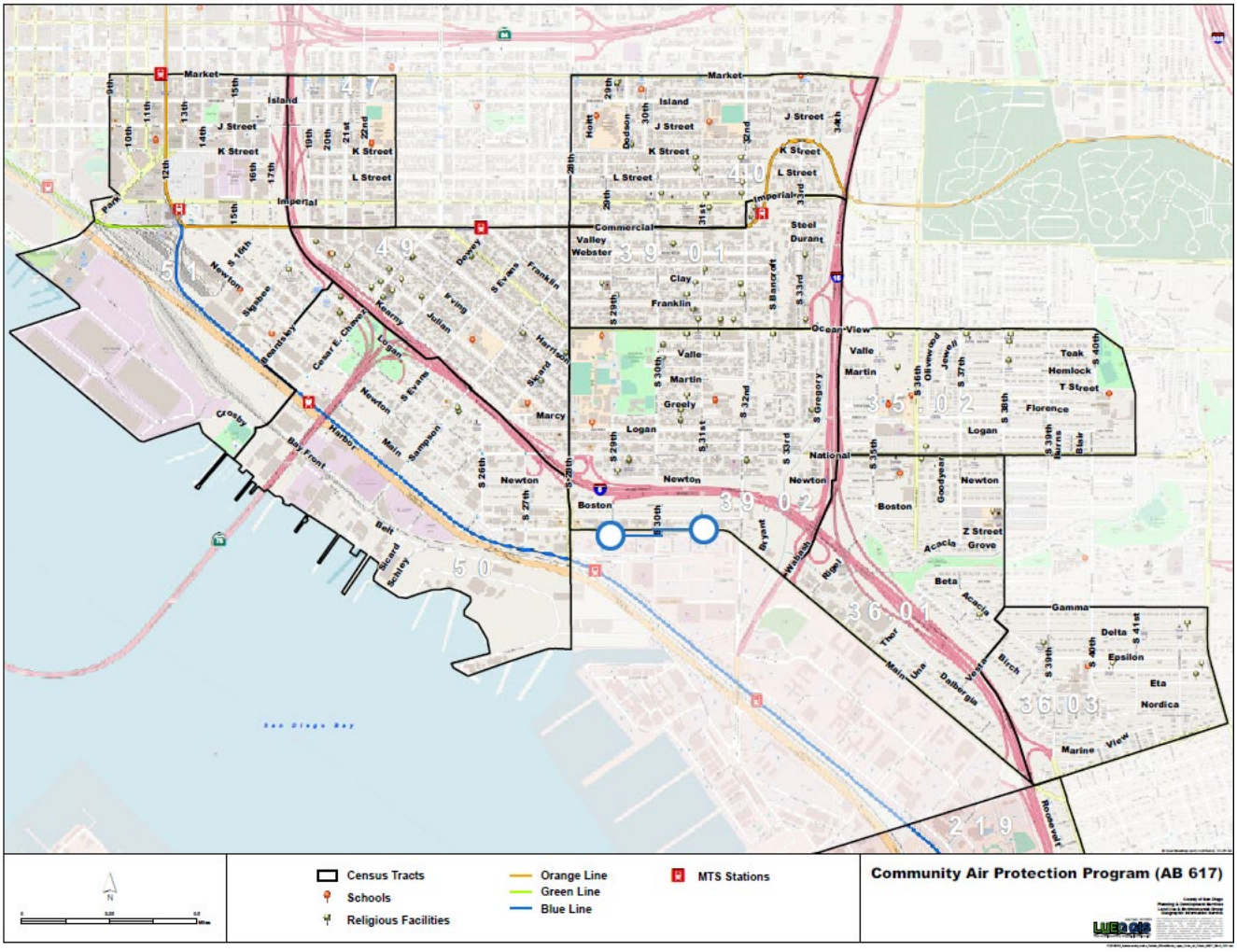


Figure 15 - AB 617 Northern Sector[35]

[35] https://www.sandiegocounty.gov/content/sdc/apcd/en/community-air-protection-program--ab-617-/ab-617-community-maps.html

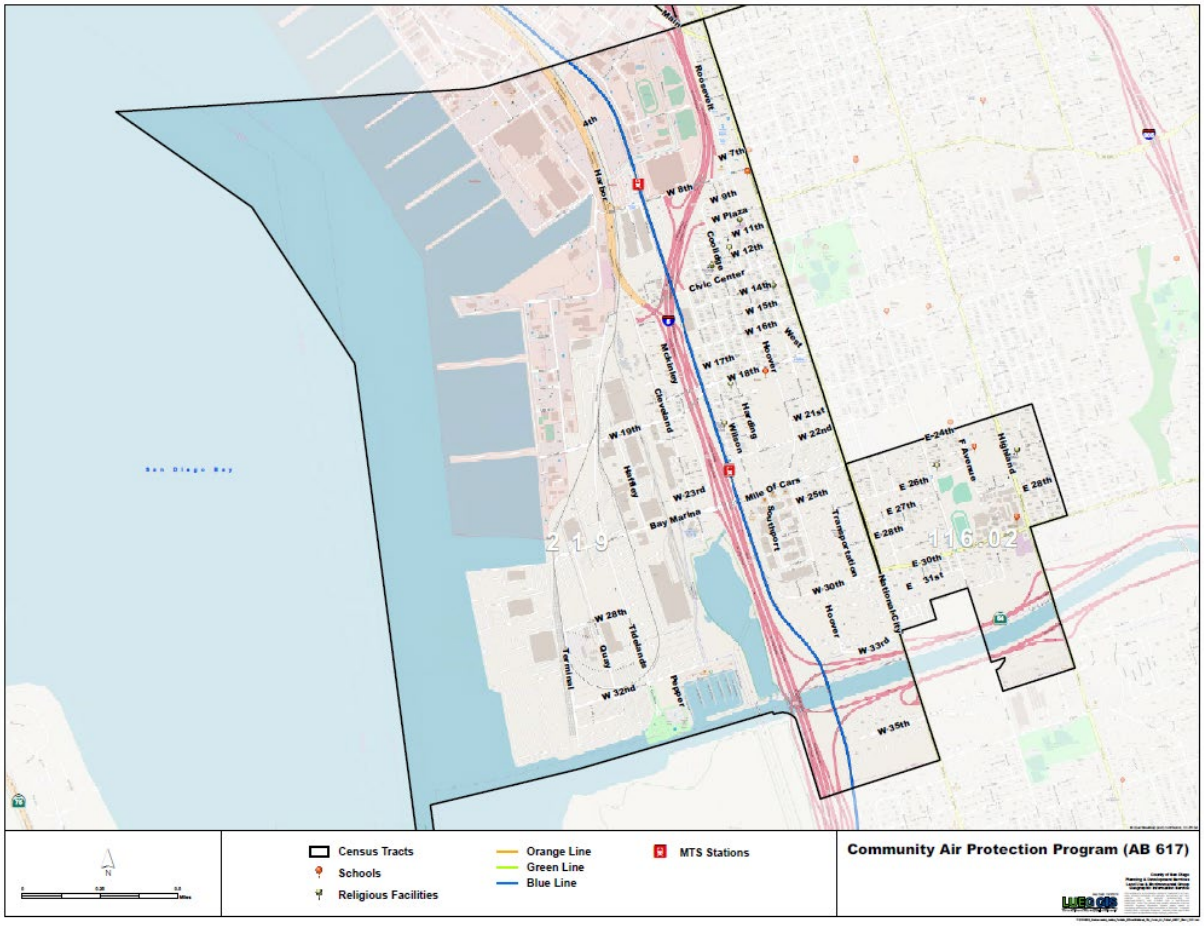


Figure 16 - AB 617 Southern Sector[36]

DPM is the carcinogen of most concern in the county and Portside Community but it is not the only pollutant of concern nor is it the sole precursor of PM_{10} and $PM_{2.5}$. Though the particulate emissions are not entirely dependent on one another they do all have similar high percentile locations that mainly follow the I-5 freeway and areas with more commercial cooking operations and construction and demolition activities, or are concentrated in the area at the top left corner of the map as seen in Figures 13, 14, and 17.

[36] https://www.sandiegocounty.gov/content/sdc/apcd/en/community-air-protection-program--ab-617-/ab-617-community-maps.html

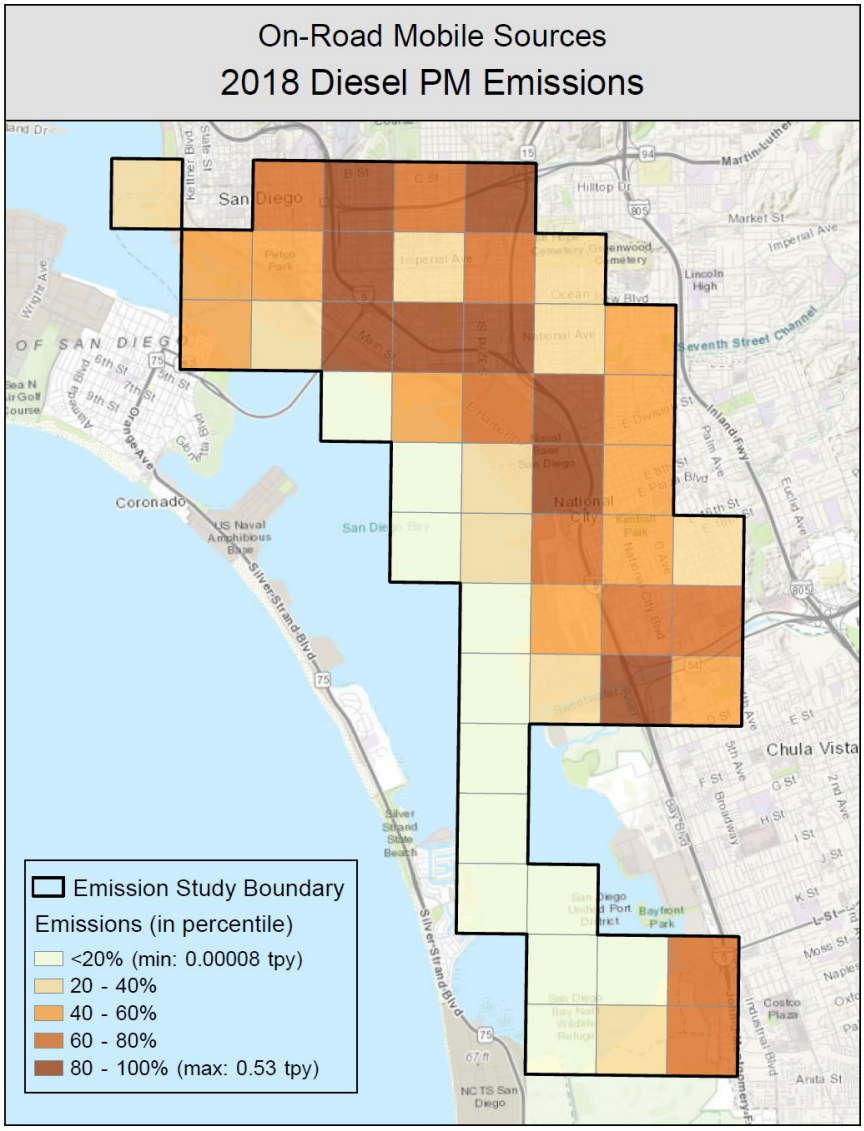


Figure 17 - 2018 On-Road Diesel PM Emission[37]

On-road mobile source emissions share a very similar breakdown in emissions to off-road mobile source emissions. On-road emissions (Figure 17) tend follow the freeways whereas the off-road emissions (Figure 14) follow the coast therefore residents between the two areas will be exposed to higher levels of DPM. CARB, the District, and the Community Steering Committee will be evaluating the risk from DPM in the community. Figure 11 above shows the breakdown of on-road emission sources which can be compared to Figure 10 above for off-road emission sources. On-road and off-road mobile sources share similarities between ROG and $PM_{2.5}$

[37] Data provided by CARB

trends even though they have different equipment sources. This trend is similar to the correlation between NO_x and DPM emission sources –on-road and off-road share these correlations due to the nature of combustible fuels whereas area and stationary sources have a greater variety of emission sources and don't necessarily share the same trends. When both mobile source emissions are combined, they outweigh the area and stationary sources for NO_x and DPM.

However, area source emissions are also impactful on the community because they drive the emissions of $PM_{2.5}$ and ROG which can have serious acute and chronic health risks[38,39.] There is also more diversity in source types between area and stationary emissions. Area sources in the community vary from residential fuel consumption to construction and demolition to consumer products (Figure 12). Area sources make up approximately 61% of the total $PM_{2.5}$ emissions in the Portside Community (Table 5) with commercial cooking operations being the largest contributor followed by construction/demolition occurring in the area (Figure 12). Area sources also make up approximately 37% of the ROG emissions with evaporation of consumer products and architectural coatings/solvents producing most of those emissions (Table 5).

Stationary sources are also contributors to ROG emissions. Within the community and emission boundary there are 79 permitted facilities and 318 permitted operations. The larger industries in the community are ship building and repair, electric utilities, metal coating services, petroleum bulk stations, and national security. The ROG emissions from these industries are mostly from marine coating operations and other solvent evaporation at large industry facilities and petroleum production marketing (Table 7).

[38] Appendix A: Toxic Pollutants

[39] The state Office of Environmental Health Hazard Assessment (OEHHA) publishes cancer risk values (https://oehha.ca.gov/media/CPFs042909.pdf) and reference exposure levels for short and long-term non-cancerous health impacts (https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary). CARB also posts this information (https://ww2.arb.ca.gov/sites/default/files/classic//toxics/healthval/contable.pdf).

Table 7 - 2018 Stationary Source Emissions Summary[40]

Stationary Sources	NOx	ROG	PM_{10}	$PM_{2.5}$
Cleaning and Surface Coatings Tons Per Year (TPY)	**0.00**	**170.97**	**5.28**	**0.00**
Autobody Refinishing	0.00	2.73	0.09	0.00
Cold Solvent Degreasing	0.00	1.91	0.00	0.00
Marine Coatings	0.00	154.24	4.73	0.00
Metal Parts and Products Coatings	0.00	2.40	0.18	0.00
Paper, Film and Fabric Coatings	0.00	2.14	0.00	0.00
Wood Product Coatings	0.00	1.21	0.01	0.00
Miscellaneous Cleaning and Coating Processes	0.00	6.34	0.27	0.00
Fuel Combustion (TPY)	**48.35**	**4.60**	**8.53**	**8.53**
Boilers	7.44	1.97	2.73	2.73
Engines	13.71	2.45	0.75	0.75
Flares	0.04	0.00	0.01	0.01
Motor Vehicle and Mobile Equipment	0.00	0.00	0.00	0.00
Turbines	26.64	0.14	4.92	4.92
Miscellaneous Combustion Equipment	0.68	0.04	0.12	0.12
Industrial Processes (TPY)	**2.06**	**11.49**	**19.40**	**0.00**
Abrasive Blasting	0.00	0.00	6.51	0.00
Plasma Spray Operations	0.00	0.00	0.00	0.00
Welding	0.00	0.00	4.69	0.00
Mineral Industry	0.00	0.00	6.43	0.00
Miscellaneous Industrial Processes	2.06	11.49	1.77	0.00
Petroleum Production and	**0.00**	**27.93**	**0.00**	**0.00**

[40] Appendix B: Criteria Pollutants and Diesel Particulate Matter

Stationary Sources	NOx	ROG	PM_{10}	$PM_{2.5}$
Marketing (TPY)				
Bulk Gasoline Loading Rack	0.00	6.33	0.00	0.00
Bulk Gasoline Vapor Processor	0.00	2.05	0.00	0.00
Gasoline Bulk Storage Tanks	0.00	18.78	0.00	0.00
Petroleum Marketing	0.00	0.77	0.00	0.00
Waste Disposal	**0.00**	**0.12**	**0.00**	**0.00**
Landfill Operations	0.00	0.12	0.00	0.00
Wastewater	**0.00**	**0.01**	**0.00**	**0.00**
Pump Station	0.00	0.01	0.00	0.00
Grand Total (TPY)	**50.57**	**215.12**	**33.21**	**8.53**

Stationary point sources can be seen following Harbor Drive and the I-5 freeway in Figure 18 below and this can be compared to the ROG percentile map for area sources in Figure 19 below. There are similar trends in location for all sources and tracks with freeway positioning and how industry (and residents) have built around and within them.

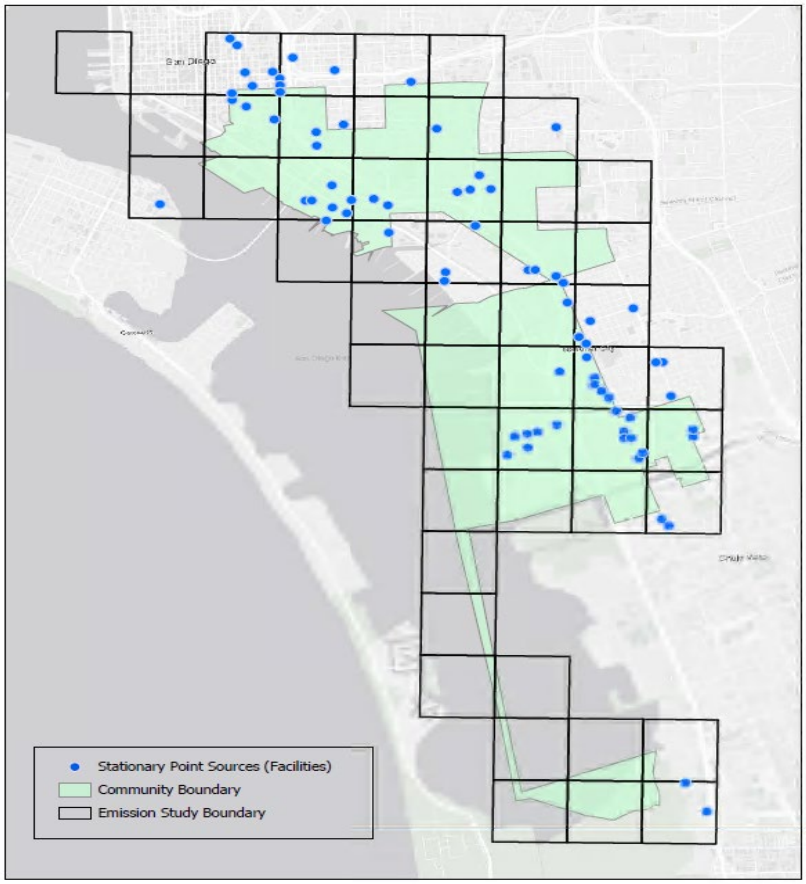


Figure 18 - Map of Stationary Point Sources

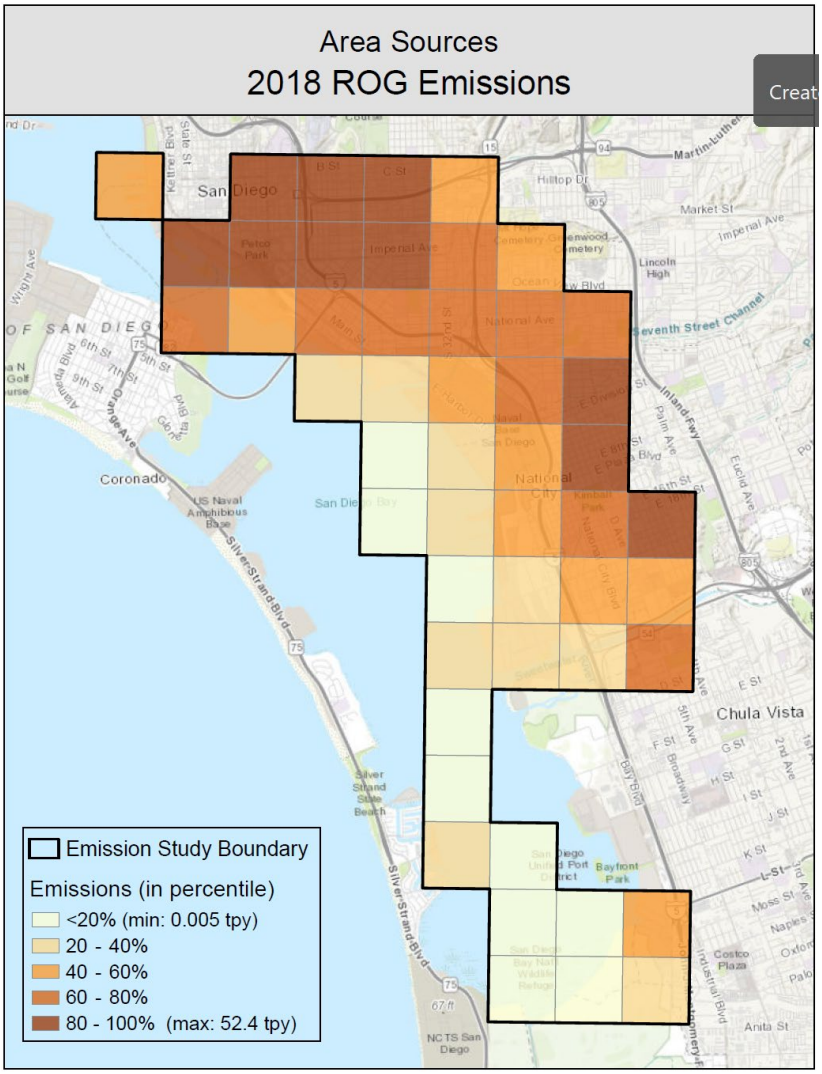


Figure 19 - 2018 Area Source Emissions[41]

In absence of a risk analysis that encompasses all the TAC emissions within a community, it can be difficult to determine which TACs pose the greatest risks. While Chapter 4 includes a discussion of risk, this is based on air monitoring data for selected TACs measured in specific locations, and therefore does not estimate the risk from all the TAC emissions within the community. One way to compare different toxic pollutants is to look at Toxicity Weighted Emissions (TWE). TWE are adjusted emissions for TACs that have Office of Environmental Health Hazard Assessment (OEHHA) approved health values. They are calculated by multiplying the mass emissions of each TAC by the corresponding health values as determined by OEHHA, molecular weight adjustment factors accounting for the molecular weight fraction of a compound associated with the specific health effects, maximum hours of emissions, and normalization factors (these are factors that

[41] Data provided by CARB

allow the conversion of different toxic pollutant emissions into a standard to help compare pollutants to one another). TWEs are not risks, but the weighted emissions are useful to compare the relative toxicity of TACs.

There are three types of risk that are associated with TAC emissions. Cancer risk is the risk of contracting cancer due to long term exposure to a TAC (40 years of exposure, starting at birth, for residents and 30 years of exposure for workers). Non-cancer risk is determined for TAC that can cause health effects in a short-term exposure (acute) or long-term exposure (chronic). The non-cancer risk is expressed as an index to the Reference Exposure Level (REL), the level at which health effects can be caused from breathing air that contains a TAC (if the index is less than one, the concentration of the TAC is below the REL, and if it is above one, the concentration is above the REL).

The tables below show the top 10 TACs based on the TWEs for each of the three types of risk in the Portside community (Tables 8, 9, and 10). The top TWE is also broken out to show the contribution from each source (Figures 20-22). Note that to avoid double counting of risk from constituents that also occur in whole diesel exhaust sources, Tables 8 and 9 did not include the contribution of individual chemical species that occur from diesel exhaust sources. However, one should be sure to take into account the contribution of the diesel-source species when considering particular types of detailed analysis, including for example, the diesel contribution to multipathway risk, to particular target organ/endpoint thresholds, and to ambient levels of individual chemicals. Some examples of the species that occur in diesel exhaust and could affect those types of detailed analyses include benzene; ethyl benzene; metals such as arsenic, cadmium, chromium, and nickel; various aldehydes; and others.

Table 8 - Top 10 TACs Based on Cancer Risk Toxicity Weighted Emissions (Inhalation only) Within the Community[42]

TAC	Total Emissions (lbs./year)	Cancer Risk Weighted
Diesel Particulate Matter (DPM, total)	56,526.93	130,577.20
Off-Road Mobile Sources	*44,150.25*	*101,987.09*
On-Road Mobile Sources	*10,904.20*	*25,188.69*
Stationary Sources	*1,472.48*	*3,401.42*
Area Sources	*0.00*	*0.00*
1,3-Butadiene	5,466.59	6,598.20
Off-Road Mobile Sources	*3,462.50*	*4,062.84*
On-Road Mobile Sources	*1,755.76*	*2,210.29*
Area Sources	*164.44*	*215.25*
Stationary Sources	*83.90*	*109.82*

[42] Based on Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

Benzene	32,578.74	6,273.62
Off-Road Mobile Sources	*17,195.94*	*2,996.67*
On-Road Mobile Sources	*14,601.24*	*3,102.43*
Stationary Sources	*409.32*	*91.40*
Area Sources	*372.24*	*83.12*
Chromium, hexavalent (& compounds)	2.21	2,384.48
Stationary Source	*1.40*	*1617.75*
Off-Mobile Source	*0.56*	*576.12*
On-Road Mobile Source	*0.21*	*140.40*
Area Source	*0.04*	*50.21*
Cadmium	60.39	1,909.58
Area Sources	*40.34*	*1,304.68*
Stationary Sources	*18.45*	*596.54*
Off-Road Mobile Sources	*0.48*	*8.36*
On-Road Mobile Sources	*1.12*	*0.00*
Formaldehyde	66,037.00	1,527.34
Off-Mobile Sources	*39,389.27*	*536.69*
Area Sources	*10,232.01*	*472.72*
On-Road Mobile Sources	*15,102.59*	*457.26*
Stationary Sources	*1,313.14*	*60.67*
Naphthalene	3,964.34	985.04
Area Sources	*2,640.27*	*691.22*
On-Road Mobile Sources	*649.07*	*161.59*
Off-Mobile Sources	*658.27*	*127.85*
Stationary Sources	*16.74*	*4.38*
Arsenic	38.81	983.21
Area Sources	*36.68*	*932.03*
On-Road Mobile Sources	*1.14*	*28.03*
Stationary Sources	*0.91*	*23.16*
Off-Mobile Sources	*0.08*	*0.00*
Ethylbenzene	43,806.64	829.90
Stationary Sources	*29,283.59*	*563.71*
On-Road Mobile Sources	*6,091.92*	*115.16*
Off-Mobile Sources	*6,542.11*	*114.67*
Area Sources	*1,889.02*	*36.36*
Nickel	346.55	692.58
Stationary Sources	*129.70*	*259.67*
Area Sources	*119.41*	*239.07*

On-Road Mobile Sources	*70.21*	*140.03*
Off-Mobile Sources	*27.23*	*53.82*

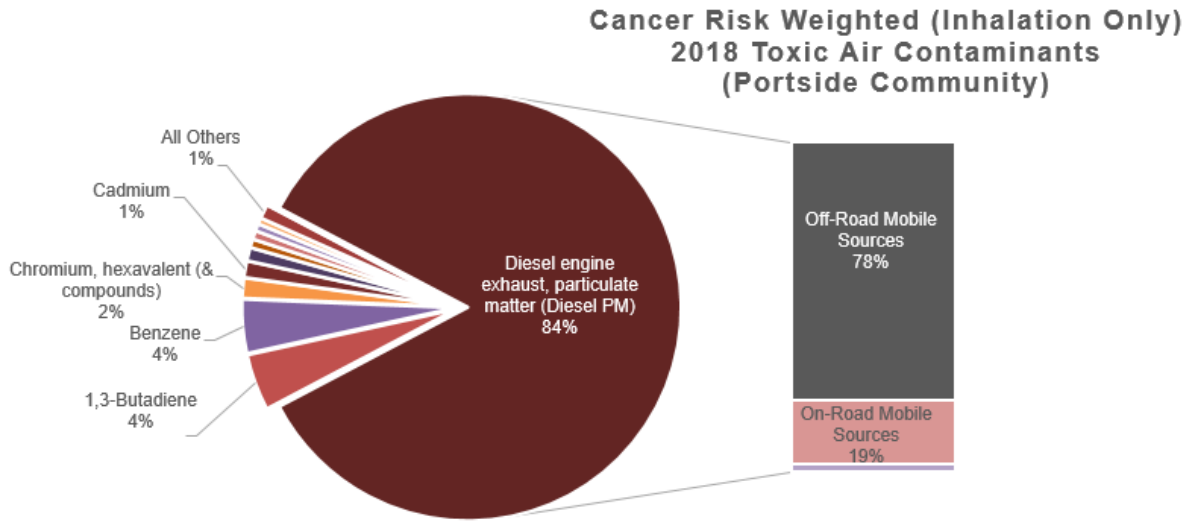


Figure 20 - 2018 Cancer Toxicity Weighted Emissions (Inhalation Only)[43]

Table 9 - Top 10 TACs Based on Chronic Non-Cancer Risk Toxicity Weighted Emissions (Inhalation Only) Within the Community[44,44]

TAC	**Total Emissions (lbs./year)**	**Chronic Non- Cancer Risk Weighted**
Manganese (total)	2,330.33	442.95
Area Sources	*2,017.86*	*383.92*
On-Road Mobile Sources	*178.34*	*33.89*
Stationary Sources	*127.79*	*24.31*
Off-Mobile Sources	*6.35*	*0.83*
Nickel	346.55	423.12
Stationary Sources	*129.70*	*158.64*
Area Sources	*119.41*	*146.05*

[43] Based on Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

[44] Based on Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

On-Road Mobile Sources	*70.21*	*85.55*
Off-Mobile Sources	*27.23*	*32.88*
Diesel Particulate Matter (DPM)	56,526.93	193.59
Off-Mobile Sources	*44,150.25*	*151.20*
On-Road Mobile Sources	*10,904.20*	*37.34*
Stationary Sources	*1,472.48*	*5.04*
Area Sources	*0.00*	*0.00*
Benzene	32,578.74	160.36
On-Road Mobile Sources	*14,601.24*	*79.30*
Off-Mobile Sources	*17,195.94*	*76.60*
Stationary Sources	*409.32*	*2.34*
Area Sources	*372.24*	*2.12*
Formaldehyde	66,037.00	62.90
Off-Mobile Sources	*39,389.27*	*22.10*
Area Sources	*10,232.01*	*19.47*
On-Road Mobile Sources	*15,102.59*	*18.83*
Stationary Sources	*1,313.14*	*2.50*
Cadmium	60.39	50.55
Area Sources	*40.34*	*34.54*
Stationary Sources	*18.45*	*15.79*
On-Road Mobile Sources	*0.48*	*0.22*
Off-Mobile Sources	*1.12*	*0.00*
Arsenic	38.81	44.17
Area Sources	*36.68*	*41.87*
On-Road Mobile Sources	*1.14*	*1.26*
Stationary Sources	*0.91*	*1.04*
Off-Mobile Sources	*0.08*	*0.00*
1,3-Butadiene	5,466.59	43.16
Off-Mobile Sources	*3,462.50*	*26.57*
On-Road Mobile Sources	*1,755.76*	*14.46*
Area Sources	*164.44*	*1.41*
Stationary Sources	*83.90*	*0.72*
Acrolein	824.74	40.35
Off-Mobile Sources	*672.03*	*32.88*
On-Road Mobile Sources	*95.01*	*4.65*
Area Sources	*36.28*	*1.78*
Stationary Sources	*21.41*	*1.05*
Chloropicrin	474.99	20.33

Area Sources	*474.99*	*20.33*
On-Road Mobile Sources	*0*	*0*
Off-Road Mobile Sources	*0*	*0*
Stationary Sources	*0*	*0*

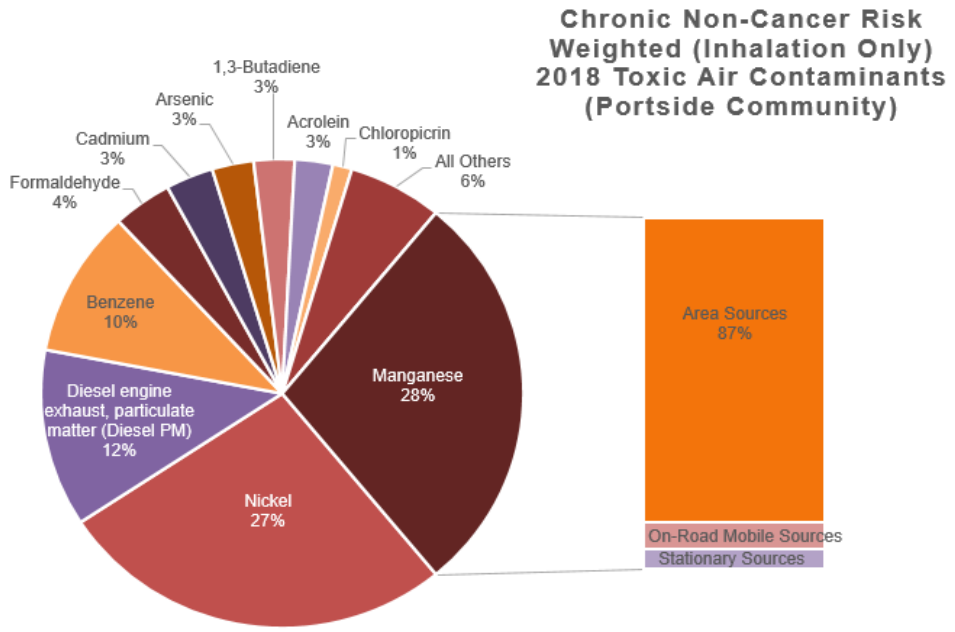


Figure 21 - 2018 Chronic Non-Cancer Toxicity Weighted Emissions (Inhalation Only)[45]

Table 10 - Top 10 TACs Based on Acute Non-Cancer Risk Toxicity Weighted Emissions (Inhalation Only) Within the Community[46]

TAC	**Total Emissions (lbs./year)**	**Acute Non-Cancer Risk Weighted**
Nickel (total)	346.55	296.71
Stationary Sources	*129.70*	*111.05*
Area Sources	*119.41*	*102.24*
On-Road Mobile Sources	*70.21*	*60.11*
Off-Mobile Sources	*27.23*	*23.31*
Benzene	32,578.74	206.61

[45] Based on Appendix A Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

[46] Based on Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

Off-Mobile Sources	*17,195.94*	*109.06*
On-Road Mobile Sources	*14,601.24*	*92.60*
Stationary Sources	*409.32*	*2.60*
Area Sources	*372.24*	*2.36*
Formaldehyde	66,037.00	205.59
Off-Mobile Sources	*39,389.27*	*122.63*
On-Road Mobile Sources	*15,102.59*	*47.02*
Area Sources	*10,232.01*	*31.86*
Stationary Sources	*1,313.14*	*4.09*
Acrolein	824.74	56.49
Off-Mobile Sources	*672.03*	*46.03*
On-Road Mobile Sources	*95.01*	*6.51*
Area Sources	*36.28*	*2.49*
Stationary Sources	*21.41*	*1.47*
Arsenic	38.81	33.23
Area Sources	*36.68*	*31.40*
On-Road Mobile Sources	*1.14*	*0.98*
Stationary Sources	*0.91*	*0.78*
Off-Mobile Sources	*0.08*	*0.07*
Acetaldehyde	39,103.35	14.25
Off-Mobile Sources	*17,733.79*	*6.46*
Area Sources	*13,676.47*	*4.98*
On-Road Mobile Sources	*7,339.00*	*2.67*
Stationary Sources	*354.09*	*0.13*
Ammonia	231,206.06	12.37
Area Sources	*147,567.28*	*7.90*
On-Road Mobile Sources	*82,342.35*	*4.41*
Off-Mobile Sources	*1,049.35*	*0.06*
Stationary Sources	*247.08*	*0.01*
Mercury	35.61	10.16
Area Sources	*30.65*	*8.75*
Stationary Sources	*4.48*	*1.28*
Off-Mobile Sources	*0.32*	*0.09*
On-Road Mobile Sources	*0.17*	*0.05*
Copper	5,378.12	9.17
Stationary Sources	*3,917.31*	*6.67*
On-Road Mobile Sources	*1,200.17*	*2.06*
Area Sources	*247.96*	*0.42*

Off-Mobile Sources	*12.68*	*0.02*
Vanadium (fume or dust)	600.99	3.43
Area Sources	*532.20*	*3.04*
On-Road Mobile Sources	*68.65*	*0.39*
Off-Mobile Sources	*0.14*	*0.00*
Stationary Sources	*0.00*	*0.00*

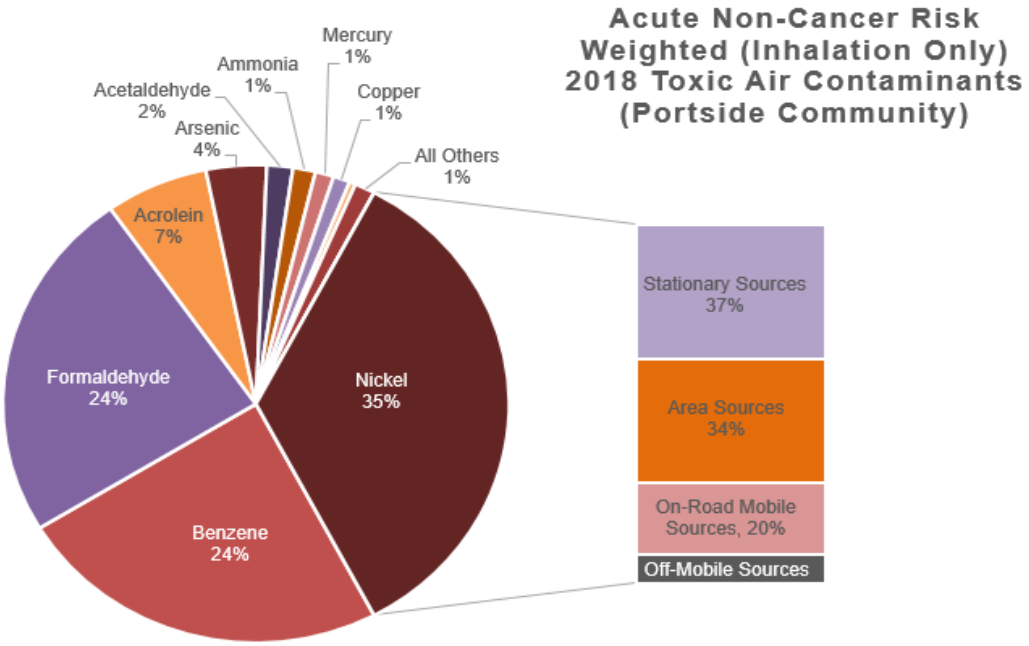


Figure 22 - 2018 Acute Non-Cancer Toxicity Weighted Emissions (Inhalation Only)[47]

Summary

The main sources of air pollution in the San Diego Portside Community are off-road mobile sources, on-road mobile sources, and certain area source emissions, Table 11.

Table 11 - 2018 Community Emissions Contributions Summary

Source Category	Criteria Pollutants[48]
Mobile-Off-Road	37.1%

[47] Based on Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

[48] Based on Table 5, for NOx, ROG and PM_{10}. $PM_{2.5}$ emissions are included in the PM_{10} totals

Area	31.1%
Mobile-On-Road	23.0%
Stationary	8.7%

NO_x emissions in the Portside Community are dominated by mobile sources, mostly off-road, that account for approximately 95% of the NO_x and DPM total emissions, as shown in Tables 5 and 6. Commercial harbor craft, ocean going vessels, light duty vehicles, and heavy-heavy duty vehicles are the major NO_x emission contributors, as shown in Figures 10 and 11. Stationary and area NO_x emissions are primarily from fuel combustion for residential and industry and only make up around 5% of NO_x emissions in the Portside Community, as shown in Tables 5 and 7 and Figure 12.

ROG emissions are driven by area sources, followed by mobile sources. As shown in Table 5, area sources and mobile sources combined make up over 80% of ROG emissions in the Portside Community. Area source ROG emissions are primarily from the evaporation of consumer products, as shown in Figure 12. Off-road ROG emissions are driven by off-road industrial equipment and recreational watercraft, as shown in Figure 10. On-road mobile source ROG emissions are almost entirely driven by light weight passenger vehicles, as shown in Figure 11. Stationary source ROG emissions are primarily from marine and other coating operations, and solvent evaporation operations (such as solvent cleaning and gasoline storage and marketing), as shown in Table 7.

Approximately 61% of $PM_{2.5}$ emissions are from miscellaneous area sources, such as commercial cooking, construction and demolition, and paved road dust, as shown in Table 5 and Figure 12. Mobile source $PM_{2.5}$ emissions are led by light duty vehicles, off-road equipment, and commercial harbor craft, as shown in Figures 10 and 11. Stationary source operations contribute only approximately 4% of the $PM_{2.5}$ emissions in the community, as shown in Table 5.

Based on the limited risk information currently available from exposure to TACs in the Portside Community, the cancer risk is driven by DPM[49], hexavalent chromium[50], and benzene and 1,3-butadiene[51]. For the non-cancer risks (short- and long-term), risk estimates are not currently available. Toxicity Weighted Emissions are used to compare different TACs to inform which TACs should be prioritized for reduction in emissions and/or exposure as they take the amount of emissions and their toxicity to allow an equal comparison. Figures 20, 21, and 22 present these weighted emissions for the Portside Community. The cancer risk weighted emissions (Figure 20) are consistent with the risk information available, as they are led by DPM, hexavalent chromium

[49] CARB's estimated statewide cancer risk due to DPM is 460 per one million in 2014

[50] Based on Health Risk Assessments for sources under the Air Toxics "Hot Spots" Program

[51] Chapter 4 – Technical Assessment – Monitoring Data

(from certain stationary source welding operations)[52], benzene and 1,3-butadiene (from mobile sources)[53]. For the non-cancer chronic (long-term) TACs (Figure 21), the highest weighted emissions are for manganese and nickel (from stationary source welding and abrasive blasting operations and from area sources)[54]. The leading weighted emissions for acute (short-term) non-cancer TACs (Figure 22) are nickel (from stationary source welding and abrasive blasting operations and from area sources)[55] and formaldehyde and benzene (primarily from mobile sources)[56].

[52] Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

[53] Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

[54] Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

[55] Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

[56] Appendix A: Toxic Pollutants (mass emissions in lbs/year). Toxicity Weighted Emissions were calculated as described in the methodology above for all the pollutants and the top 10 are shown in Table 8.

CHAPTER 4
TECHNICAL ASSESSMENT - AIR MONITORING

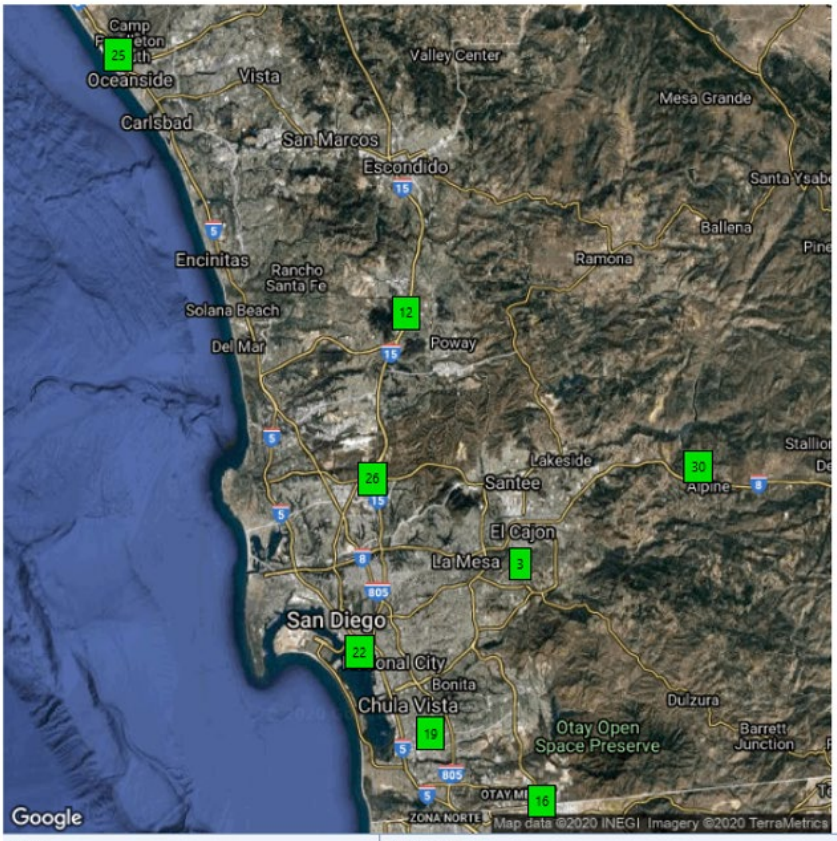
Chapter 4 – Technical Assessment - Air Monitoring

Air Monitoring Data

The Federal Clean Air Act of 1970 defined health-based standards for a variety of airborne pollutants. These health-based standards, known as National Ambient Air Quality Standards, or NAAQS, are periodically reviewed and revised as determined by the latest scientific evidence, to protect public health and welfare.

Monitoring of the air is needed to determine if these standards were being met for a given region. In San Diego county, the San Diego County Air Pollution Control District (District or APCD) is responsible for conducting ambient air quality monitoring. Air monitoring stations are located within the county based upon population and geographic factors, and continuously monitor for a variety of air pollutants to determine whether the county meets or exceeds the NAAQS (the map below, Figure 23, shows the locations of the APCD's permanent, regional air monitoring stations).

The standard for each pollutant (sulfur dioxide, particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide, ozone, nitrogen dioxide, and lead) has its own criteria to determine if it is being met within a limited time frame. Except for the NAAQS for 8-hour ozone, San Diego county meets all other NAAQS. The 8-hour ozone standard is typically exceeded in Alpine, which is in the foothills, approximately 12 miles east of El Cajon.



AQI Level	Value
Good	0-50
Moderate	51-100
Unhealthy for Sensitive Groups	101-150
Unhealthy	151-200
Very Unhealthy	201-300
Hazardous	301-500

Link	Description
Today's 8-Hour Ozone	Today's 8-Hour Ozone Rolling Average Report (start hour)
Today's Daily Report	Today's Daily Report - All Data
Yesterday's 8-Hour Ozone	Yesterday's 8-Hour Ozone Rolling Average Report (start hour)
Yesterday's Daily Report	Yesterday's Daily Report - All Data

Figure 23 - Air Monitoring Locations

Portside Monitoring

The APCD has conducted air monitoring in the Portside area for many years. From July 2005 through October 2015, the APCD operated an air monitoring station on the grounds of Perkins Elementary School (near the northwest corner of the school grounds), located in Barrio Logan. The air monitoring data collected at the Perkins Elementary School site found that the air met (i.e., attained) all NAAQS. At the request of the San Diego Unified School District, the APCD removed the air monitoring station from Perkins Elementary School in 2016. A replacement site is now operating at Sherman Elementary School in Sherman Heights, located in the Portside Community. Figure 24 is a map of the locations of Sherman and Perkins Elementary School.

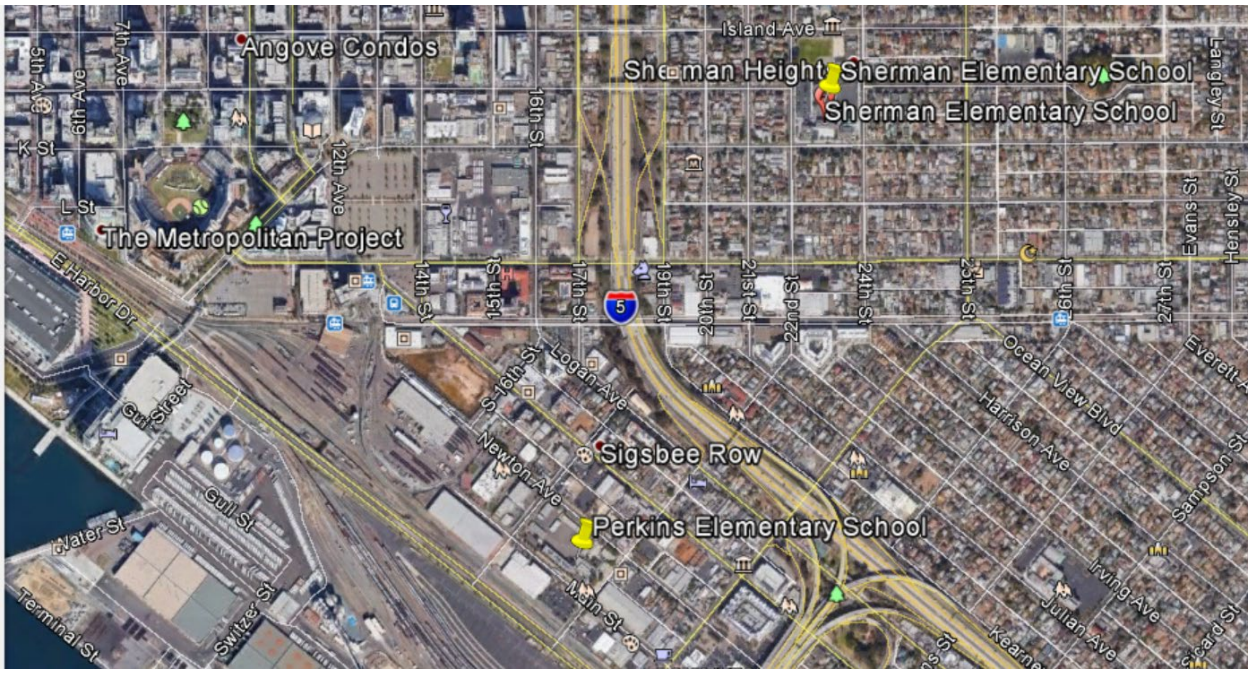


Figure 24 - Perkins and Sherman Elementary School Location Map

Airborne microscopic particles, or particulate matter, represent one of the most significant threats to public health from air pollution, and particulate matter standards have evolved over time to reflect new information from health studies. The current health-protective standard for particulate matter is for particles of 2.5 micrometers and less in diameter, known as $PM_{2.5}$. Combustion is the primary source of airborne $PM_{2.5}$ and is one of the pollutants the community has expressed concerns about within the Portside area.

There are two separate NAAQS for $PM_{2.5}$. The 24-hour standard is designed to protect against higher and short-term concentrations, while the annual standard protects against lower and long-term concentration levels. The 24-hour standard for $PM_{2.5}$ is 35 micrograms per cubic meter, and the annual standard is 12.0 micrograms per cubic meter. Attainment of the standards is determined by calculating the Design Value for each standard from the measured concentrations. Design Values are statistics that describes the air quality status in comparison to the NAAQS.

The charts below (Figure 25) show the 24-hour $PM_{2.5}$ Design Values from Perkins Elementary School (PES) compared to the 24-hour NAAQS, and the Annual Design Values compared to the Annual NAAQS. These charts show that the Perkins Elementary School site met the 24-hour (Figure 26) and Annual Design Values, and that measured concentrations were decreasing through 2015, which is consistent with all emissions inventory estimates for the area.

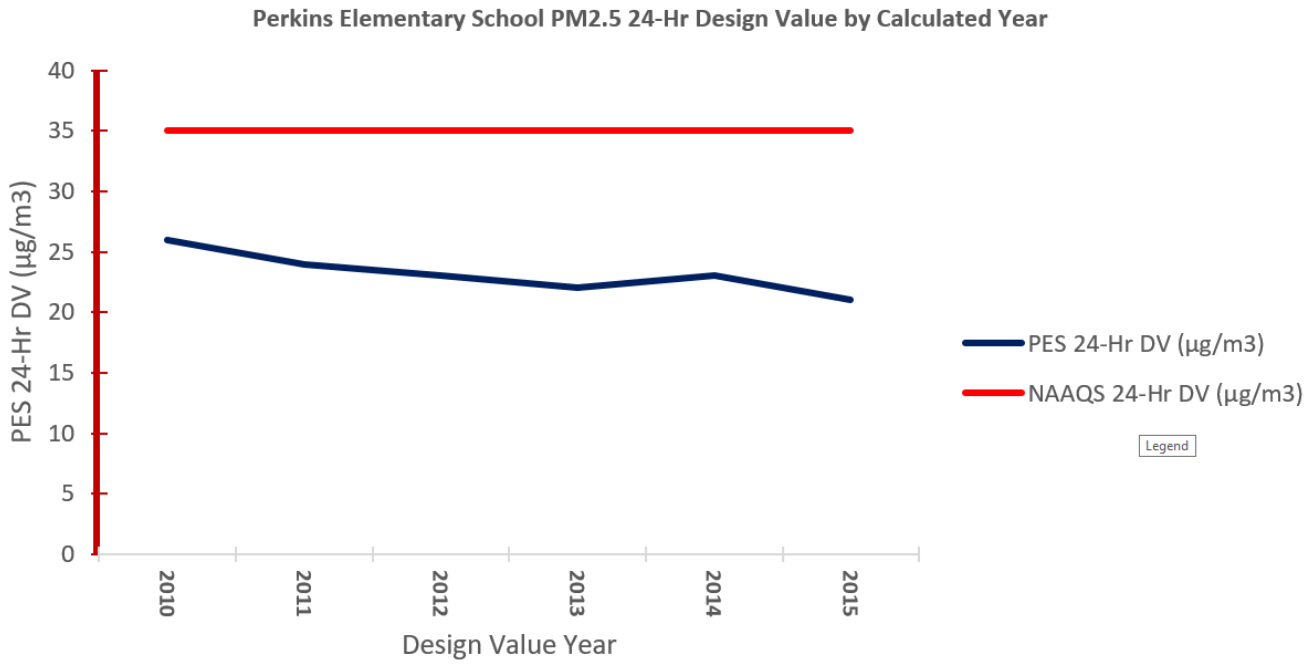


Figure 25 - Perkins Elementary School $PM_{2.5}$ by Year

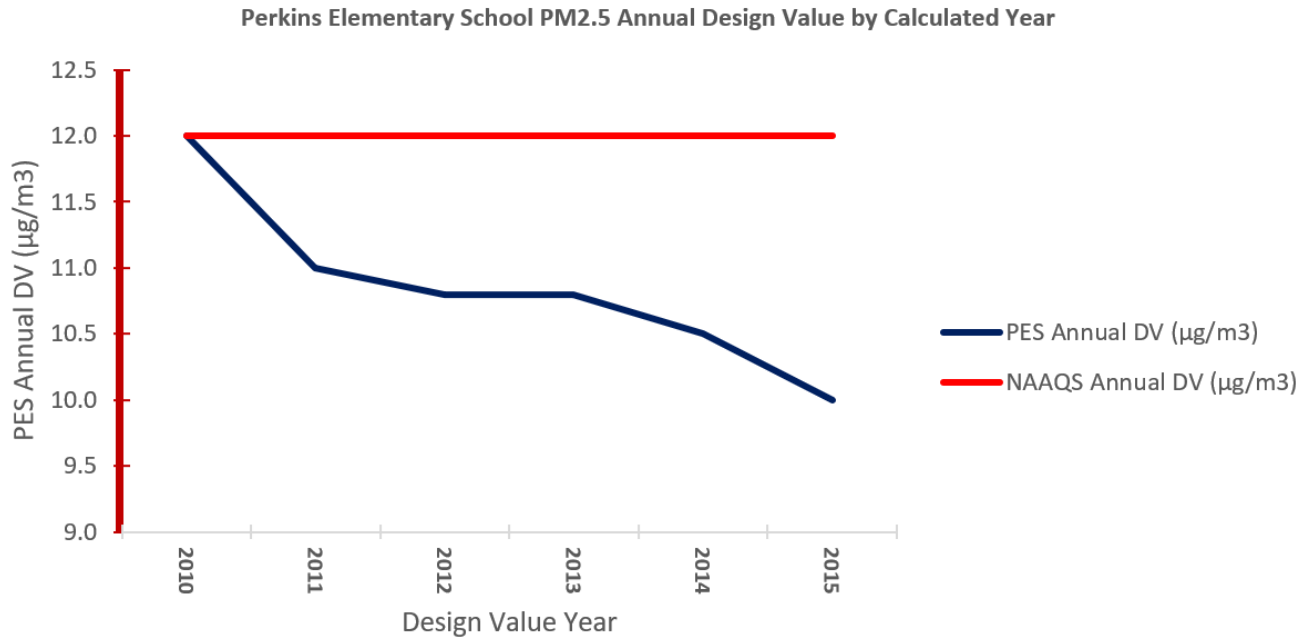


Figure 26 - Perkins Elementary School $PM_{2.5}$ Design Value by Year

The next chart shows an entire month of 24-hour $PM_{2.5}$ averages measured in the APCD's air monitoring network. Figure 27 shows that $PM_{2.5}$ concentrations typically increase and decrease throughout the region, reflecting changes in the atmosphere rather than changes in daily emissions. The data also shows that $PM_{2.5}$ concentrations in the Portside Community are not always the highest measured in the county.

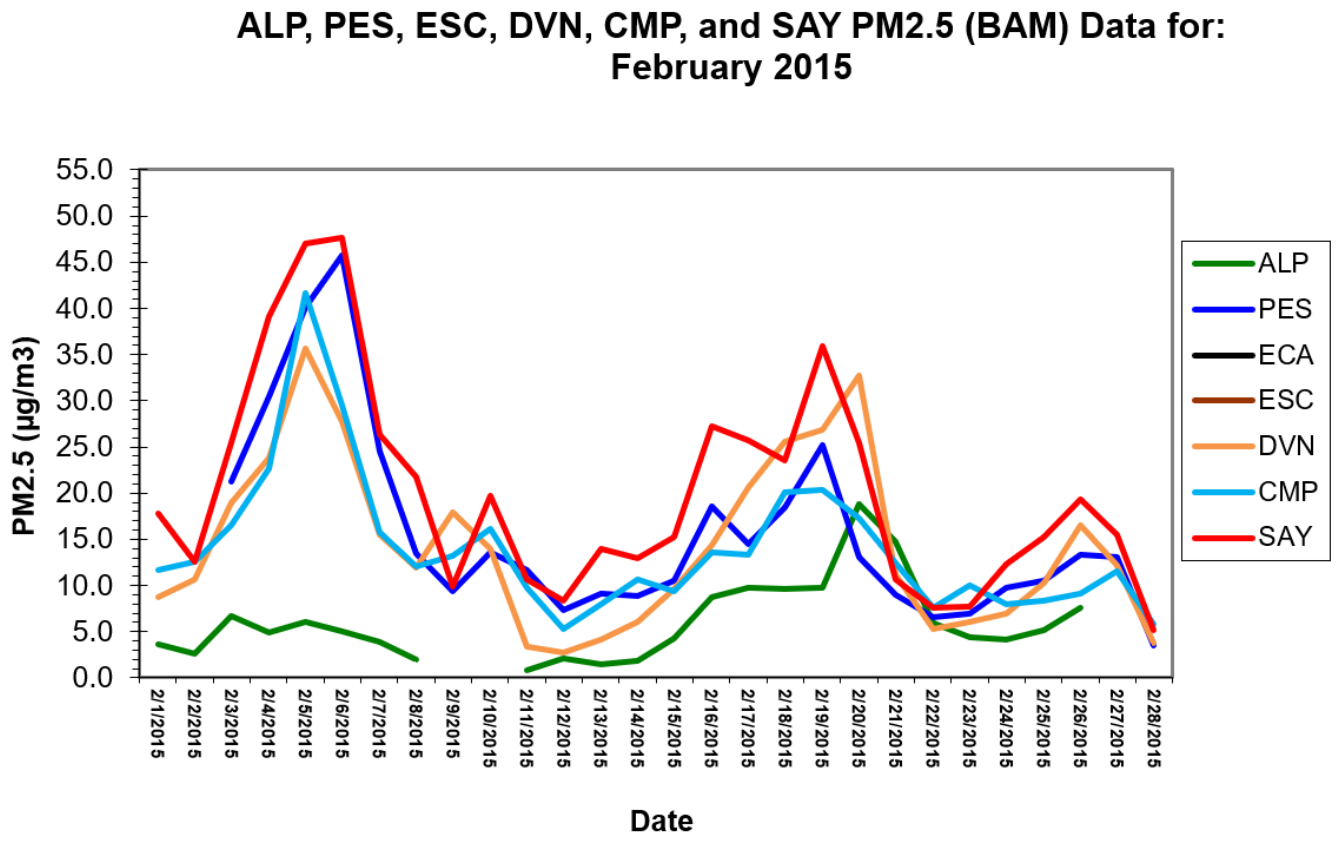


Figure 27 - February 2015 - 24-hour $PM_{2.5}$ averages

ALP: Alpine
PES: Perkins Elementary School
ESC: Escondido
DVN: Donovan (near Otay Mesa)
CMP: Camp Pendleton
SAY: San Ysidro

These emission changes can be partly explained by the meteorology of the coastal areas, which are characterized by the daytime onshore wind flow (water to land) and weak offshore (land to water) at night. The daytime winds, when most emissions can be expected to occur, move locally generated emissions away, limiting the buildup of higher ambient concentrations.

A useful tool for visualizing the winds measured at a given location is a wind rose. These plots illustrate the

percentage of time that the wind blows from a given direction and speed. The direction of the longest spoke shows the wind direction with the greatest frequency, and colored bands show the wind speed ranges. The charts below are wind roses based on data collected in 2015 from Perkins Elementary School. Climatology shows that the winds follow similar patterns over time. The first wind rose below (Figure 28) represents the winds in the Portside Community from midnight to 7 am and indicate that most of the winds are lightly offshore (from the northeast quadrants).

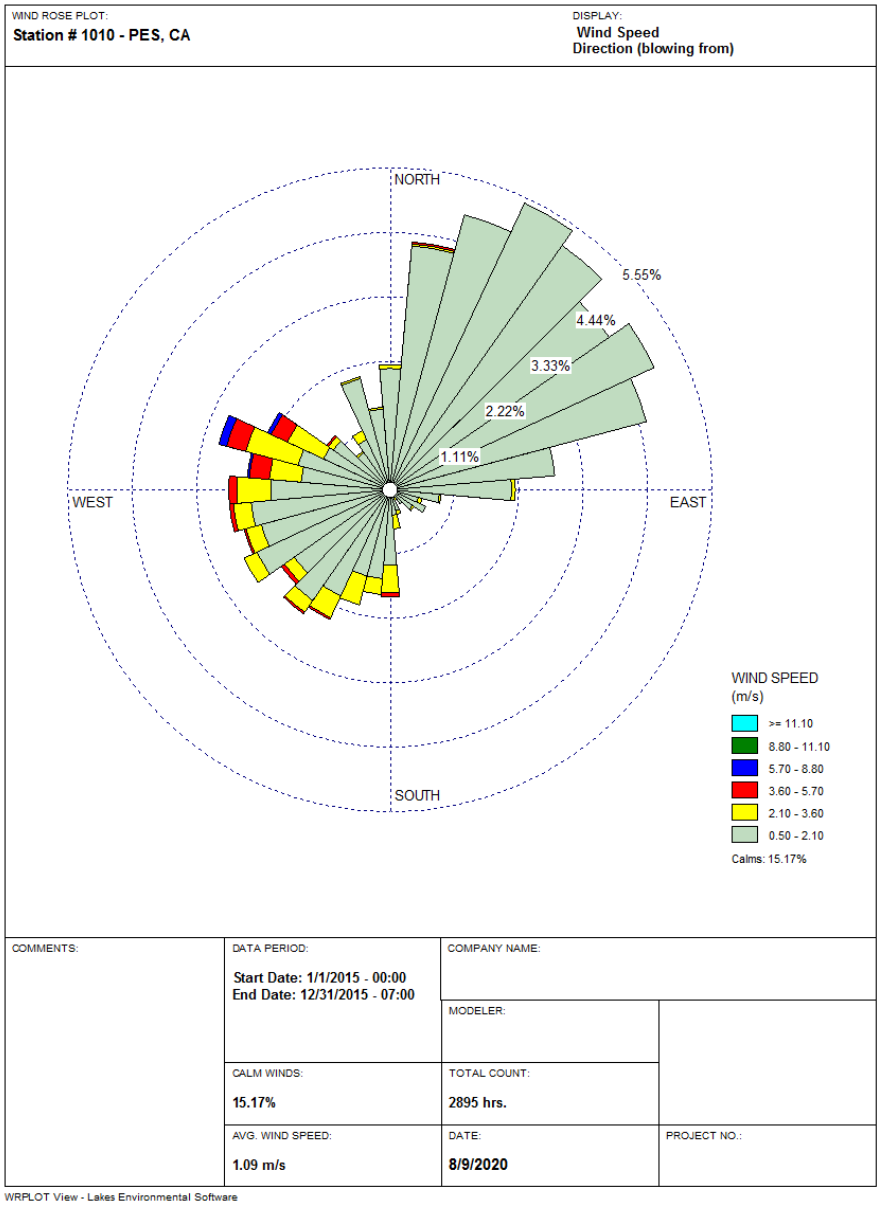


Figure 28 - Winds in the Portside Community from Midnight to 7 am

The next wind rose (Figure 29) shows the winds in the Portside Community from 8 am through 3 pm, where winds are consistently from the westerly and southwesterly quadrants. The winds are typically stronger during

this time as well (sea breeze).

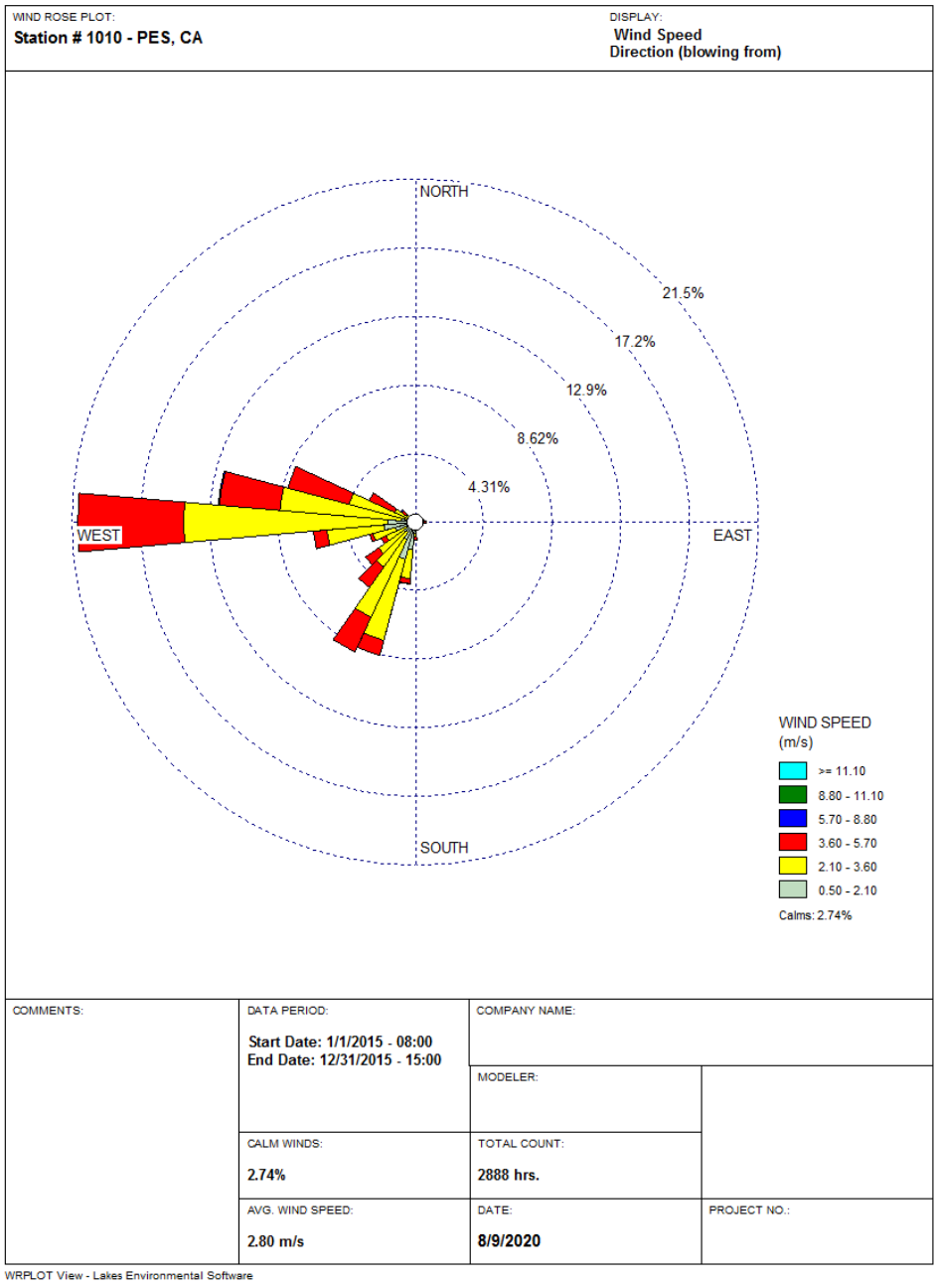


Figure 29 - Winds in the Portside Community from 8 am to 3 pm

The wind rose below (Figure 30) shows the winds from 4 pm through midnight, where winds are slowing down (decreased sea breeze) and starting to turn to offshore (i.e., out of the northeast quadrant).

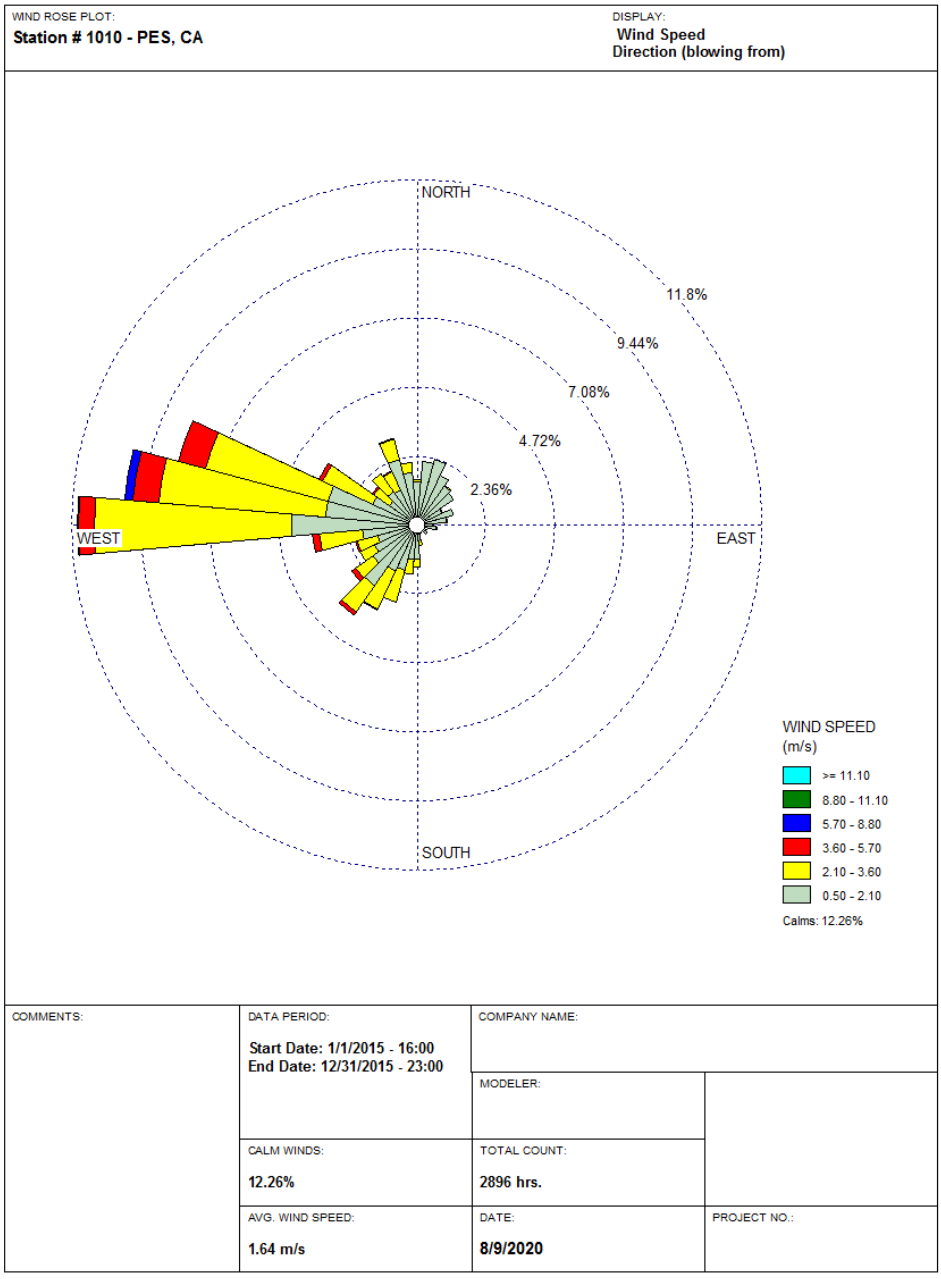


Figure 30 - Wind Rose – 4 pm to Midnight

The fact that long-term measurements of criteria air pollutants (i.e., pollutants with defined NAAQS) in the Portside Community meet all NAAQS highlights the need for detailed measurements of additional pollutants in more locations to help determine the CalEnviroScreen score for the community. As part of AB 617, the APCD has installed and is operating new, real-time (i.e., continuous) black carbon (a surrogate for diesel particulate matter) analyzers at several locations in the Portside Community. These include the Tenth Avenue Marine Terminal (immediately adjacent to the Bay), Chicano Park (central Barrio Logan), Sherman Elementary School (in Sherman Heights), and at Oceanview Blvd. (Oceanview Blvd. at I-15, roughly 1.7 miles east of Perkins

Elementary School). Additionally, one additional monitor was installed in San Ysidro (near the border with Mexico), which represents another Environmental Justice area of interest in San Diego county.

Figure 31 below shows the hourly-averaged black carbon concentrations measured at Sherman Elementary School , the Tenth Avenue Marine Terminal , Oceanview Blvd. , Chicano Park, and San Ysidro from November 2019 through June 2020 (months currently available when all sites were operating and data have been validated). The data shows that black carbon concentrations are highest in the morning hours when the atmosphere is most stable and corresponds to morning commutes and other activities involving diesel engines. This chart further shows that the black carbon concentrations are consistently higher in San Ysidro, showing a strong influence from emissions from Mexico.

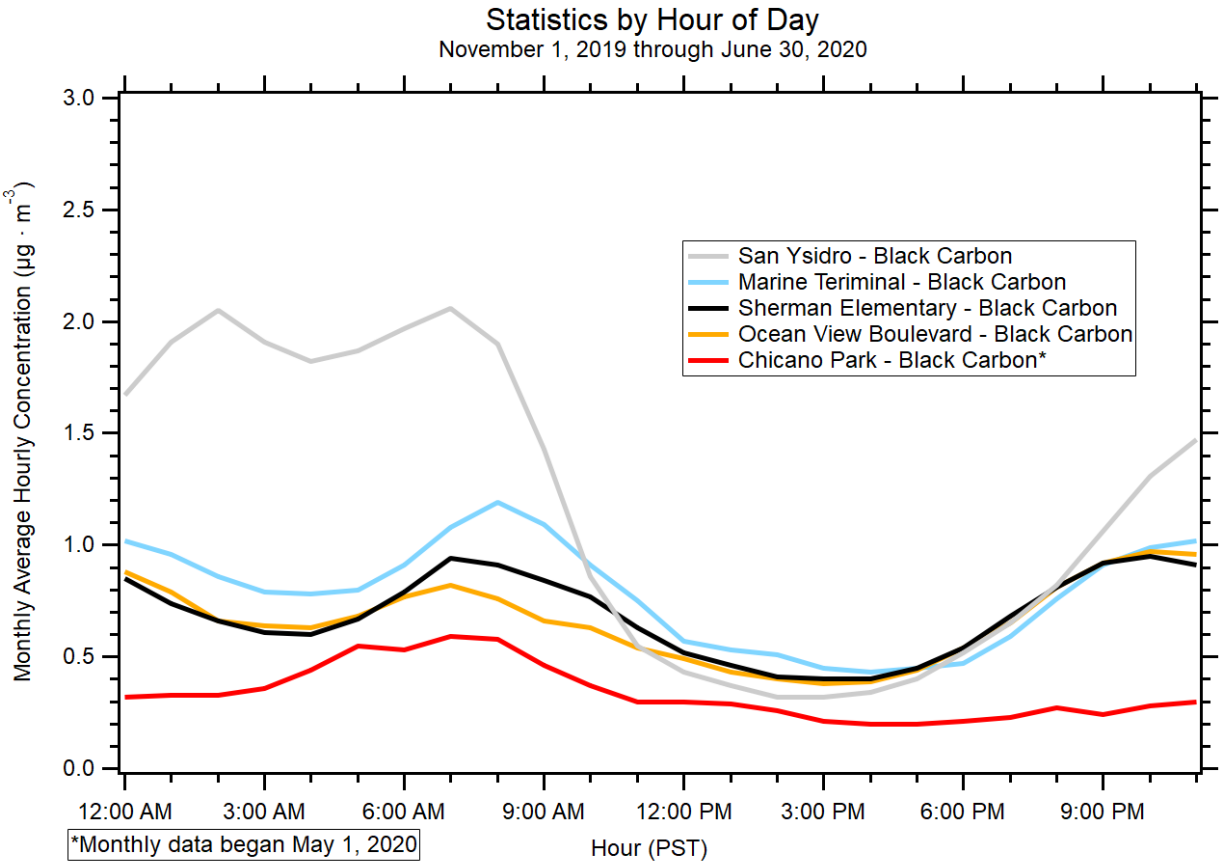


Figure 31 - Hourly Averaged Black Carbon Concentrations by Location

It should be noted that results from the mobile monitoring project conducted by Aclima found similar results between the border area and the Portside Community for black carbon and $PM_{2.5}$. For this online tool from Aclima, please see https://insights.aclima.io/san-diego. The data from the Aclima project was used to verify that the current and future AB617 monitoring locations would be at pollutant hotspot locations in the Portside area. The District believes the instrument versus sensor differences are still too big at this time to make regulatory and/or policy decisions, particularly when the District has no control over the instruments, sensors, and personnel involved.

Figure 32 focuses only on black carbon concentrations in the Portside Community and shows that in the morning, concentrations are highest at the Tenth Avenue Marine Terminal location, which is consistent with the offshore winds so prevalent in the morning hours. The higher concentrations at the Tenth Avenue Marine Terminal may also suggest that diesel powered vessels on the water are contributing to the values measured there.

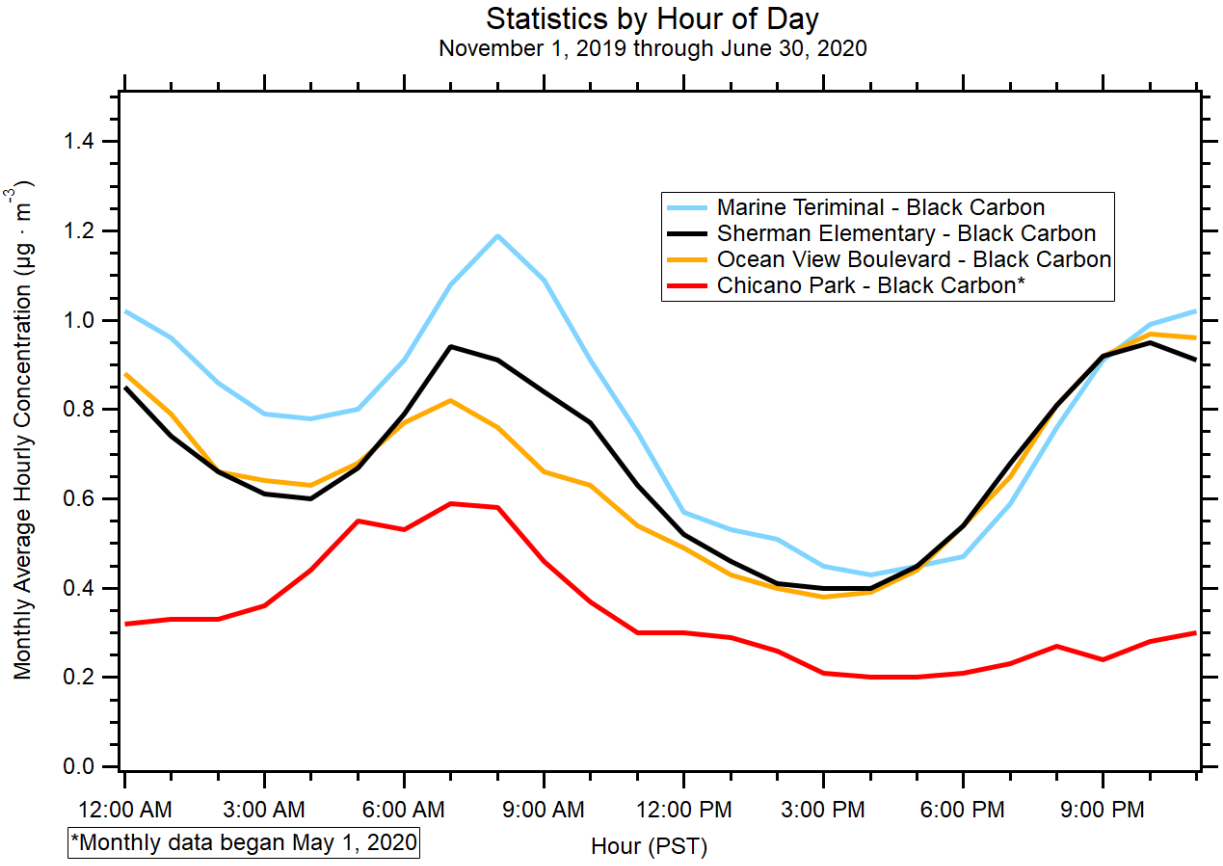


Figure 32 - Black Carbon Concentrations in the Portside Community

The black carbon concentrations decrease in the mid-day hours at all Portside locations as the atmosphere becomes less stable and the sea breeze (onshore winds) increases. During the late afternoon and early evening hours, the concentrations are nearly identical at Portside locations, with the Tenth Avenue Marine Terminal site starting to increase around midnight as the winds turn to the land breeze (offshore winds) regime.

It is also interesting to see how day-to-day activities in the Portside Community contribute to black carbon concentrations. Figure 33 shows the black carbon concentrations by day-of-week at the Tenth Avenue Marine Terminal from November 2019 through June 2020. This chart shows the same morning peak associated with the morning commute and more stable atmospheric conditions. It also shows that Sunday mornings are lower than other days of the week (less overall activity), Saturday afternoons are higher than other days of the week (indicating that there are significant contributions off the water from diesel-powered boats/ships – winds are typically onshore in the afternoon), and higher concentrations late on Friday nights continue into early Saturday

mornings as the winds shift and the atmosphere becomes more stable.

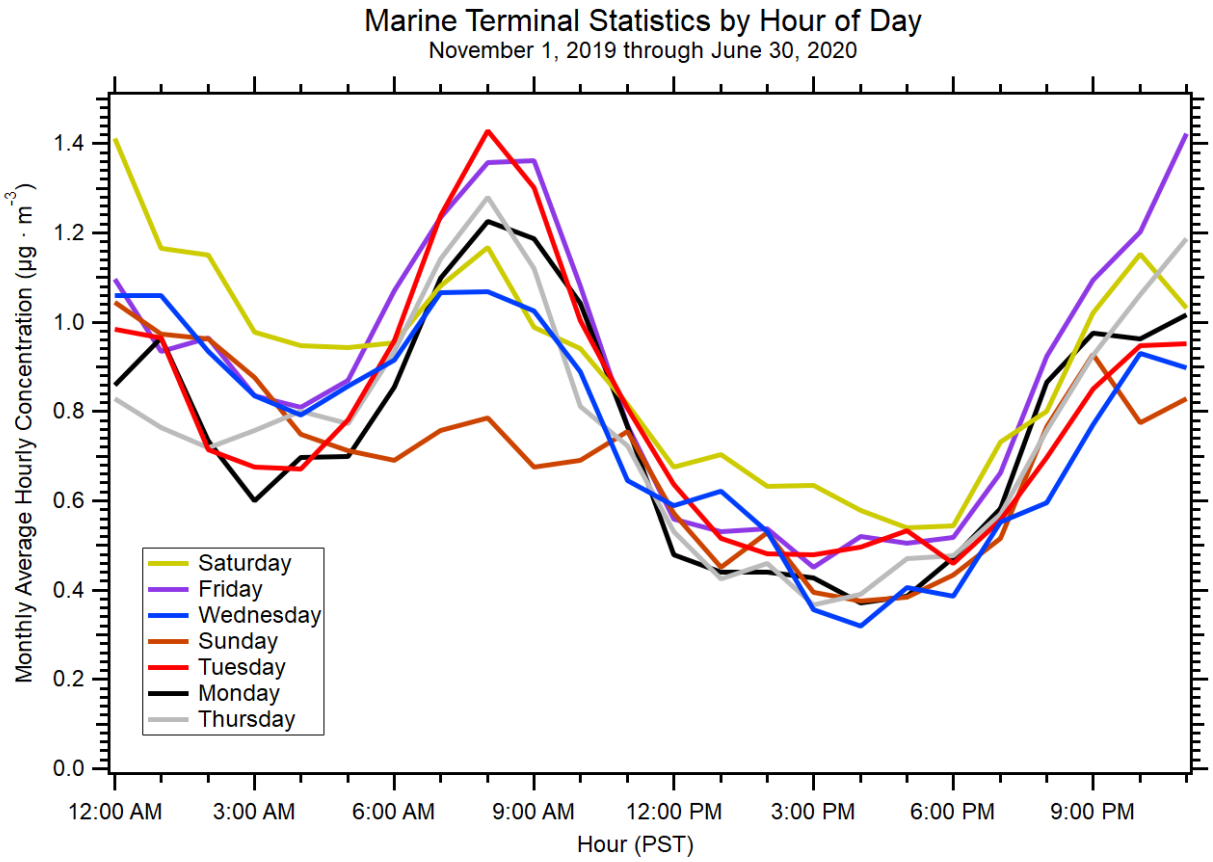


Figure 33 - Black Carbon Concentrations by Day of Week

The COVID health orders issued by the Governor on March 19 afforded the APCD the unprecedented opportunity to compare black carbon emissions under normal driving conditions versus restricted driving conditions. Normal conditions are defined as a standard five-day work week with regular traffic patterns. Figure 34 does show a sustained decline in the Black Carbon emissions from mid-March through June at all black carbon sampling locations. While this does look promising, it is important to note that the black carbon instruments have not been operational for even a year, so no traffic patterns with respect to season can be strictly ruled out at this time.

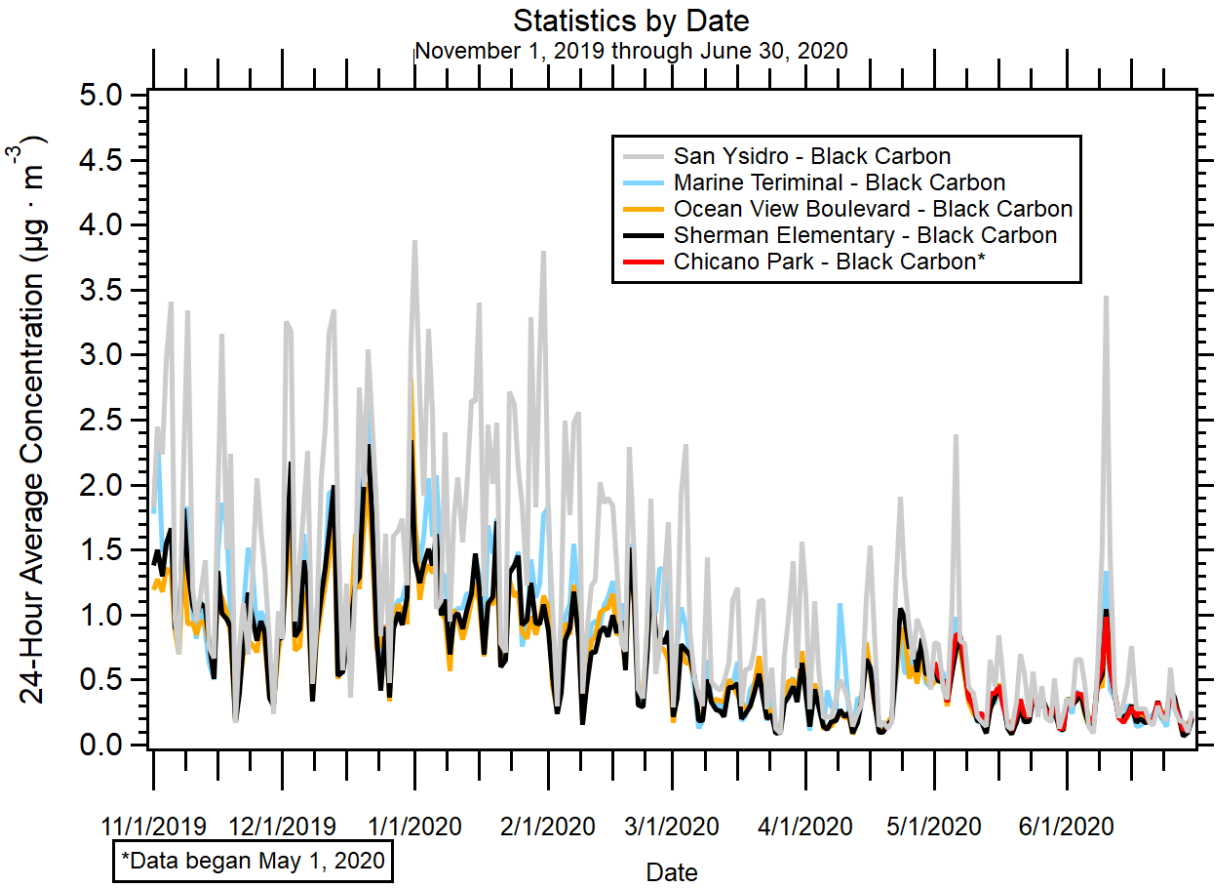


Figure 34 - Black Carbon Emissions November 2019 to June 2020

The Sherman Elementary School site monitors for real-time $PM_{2.5}$ and black carbon. Figure 35 shows the hourly averages of each pollutant from November 2019 through June 2020. During this time, black carbon concentrations were roughly 9% of $PM_{2.5}$ concentrations (which is consistent with the latest emissions inventory for the Portside Community). It will be interesting to see how this ratio holds up over time and from location to location throughout the region as more data are gathered.

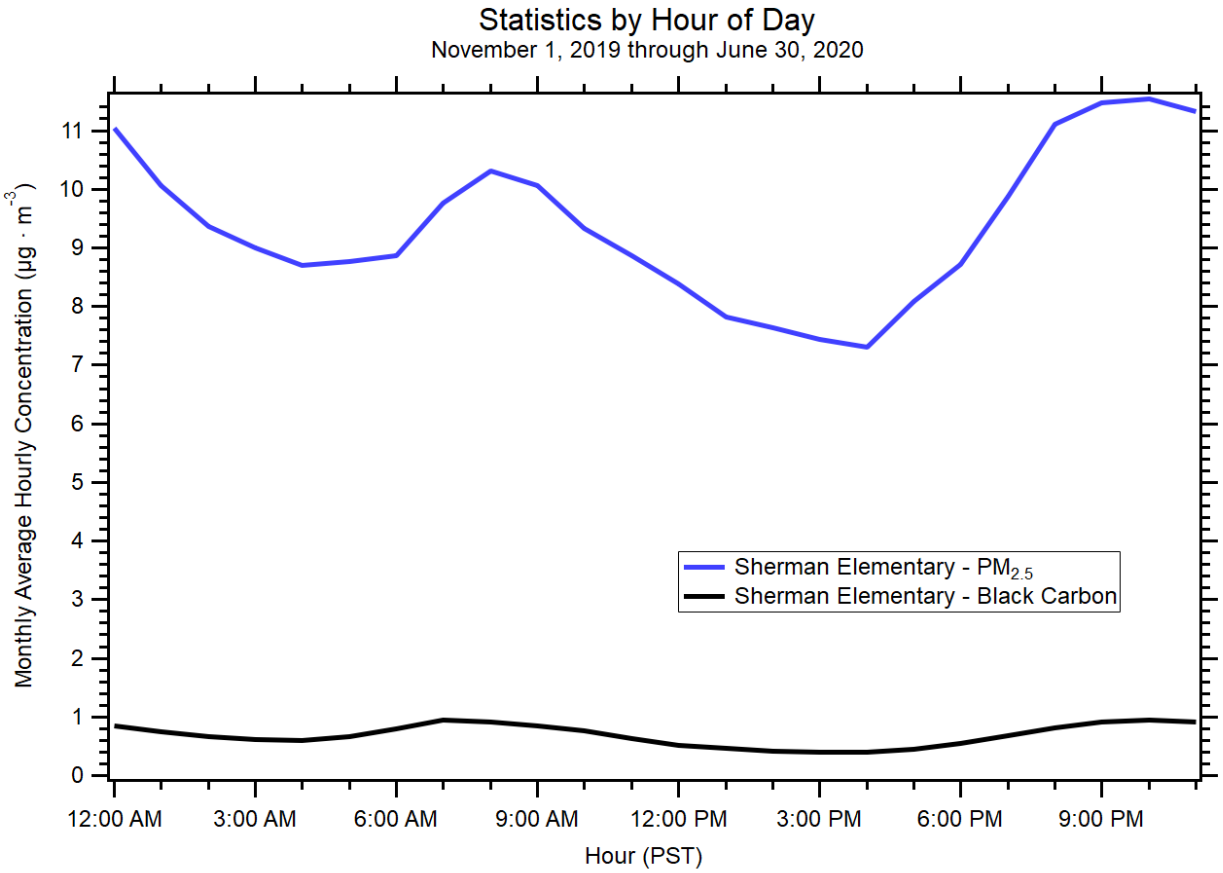


Figure 35 - Hourly pollutant averages from November 2019 to June 2020

Metals Monitoring

The Portside Community have also expressed concerns about airborne metals from activities in and around the area. Although the metals monitoring efforts under the AB617 program is in the early phases, we do have historical metals data from other sites in the APCD's air monitoring network.

The APCD has sampled for Toxics-Metals at the following sites:

- Perkins Elementary School (Portside): 2014-2016
- Donovan (Otay Mesa-South San Diego): 2016-2018
- Lexington Elementary School (El Cajon-East San Diego): 2017-2018

These data are in the National Air Toxics Assessment (NATA) database. Toxics-Metals selected for this analysis included the metals highlighted on the NATA database with the highest risk value.

These metals include:

- Arsenic
- Beryllium
- Cadmium
- Nickel
- Lead – additional metal of interest
- Hexavalent Chromium (currently there is no data available for hexavalent chrome concentrations, so this pollutant has not been reported here).
- The District has entered into a year-long contract with CARB for hexavalent chromium ($Cr+^{6}$) support. This includes a field sampler and subsequent laboratory analysis. Furthermore, CARB will increase the sampling frequency from one day in twelve to one day in six and match this sampling frequency to the other San Diego CARB Metals locations, so all sites can be directly compared to each other.

The NATA data was reviewed, and the key points include:

- There is a seasonal variation in Toxics-Metals concentration. Concentrations are higher in the winter months, which is consistent with atmospheric stability conditions (more stable in colder months than warmer months).
- For most of the reported metals, concentrations are highest at the Donovan (Otay Mesa) site near the US-Mexico border.

Health Risks

The APCD also estimated the health risks from exposure to these specific metals for both long-term, non-cancerous risk and for cancer risk, using the California Air Resources Board's Hot Spots Analysis and Reporting Program's (HARP's) risk assessment tool[57]. Short-term, non-cancerous risk was not estimated, as the air monitoring data available does not include the short-term maximum concentrations needed to estimate

[57] https://ww2.arb.ca.gov/our-work/programs/hot-spots-analysis-reporting-program

this risk. For the long-term, non-cancerous risk, all three sites showed that the average concentrations of the metals are below their reference exposure level (REL, the level at which long-term health effects can be caused from breathing the ambient air), as determined by the California Office of Environmental Health Hazard Assessment (OEHHA)[58]. The Toxicity Weighted Emissions (TWE) for the long-term, non-cancerous risk discussed in Chapter 3 are based upon these RELs. However, risk from toxic air pollutants can also come from the pollutants falling to the ground and entering a person's body through skin contact or through their mouth (from dust that is picked up by a person's hand who then touches their mouth with that hand or from eating food that this dust has fallen on). Taking into account these other ways a pollutant can get into a person's body, the total long-term, non-cancerous risk from arsenic is above the level at which long-term health effects can be caused from the total exposure. Specifically, the total long-term, non-cancerous risk from arsenic is 2.95 times the threshold at Perkins Elementary School, 3.55 times the threshold at Lexington Elementary School, and 4.73 times the threshold at Donovan. The other metals were all below their respective thresholds. For context, under the Air Toxics "Hot Spots" Program, if a stationary source subject to APCD permit requirements had a long-term, non-cancerous risk above a pollutants' threshold, the stationary source would be required to both notify their neighbors about the risk and reduce the risk below that threshold.

Cancer risk is the risk that a person could develop cancer due to the exposure to certain pollutants if that person was exposed to the average concentrations measured for 24-hours a day, 7-days per week, for a 30-year period. The cancer risk was estimated to be 56.8 in one million at Perkins Elementary School, 64 in one million at Lexington Elementary School, and 112 in one million at Donovan. For context, under the Air Toxics "Hot Spots" Program, if a stationary source subject to APCD permit requirements had a maximum cancer risk above 10 in one million, the stationary source would be required to notify their neighbors about the risk, and if the cancer risk were above 100 in one million, the stationary source would be required to reduce their risk below that threshold.

[58] https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary

Figure 36 shows annual averaged concentrations for Arsenic at Perkins Elementary School (PES), Lexington Elementary School (LES – in El Cajon), and the Donovan site in Otay Mesa. The highest concentrations were found at the Donovan site, with Lexington showing lower concentrations, but still higher than Perkins Elementary School (Barrio Logan).

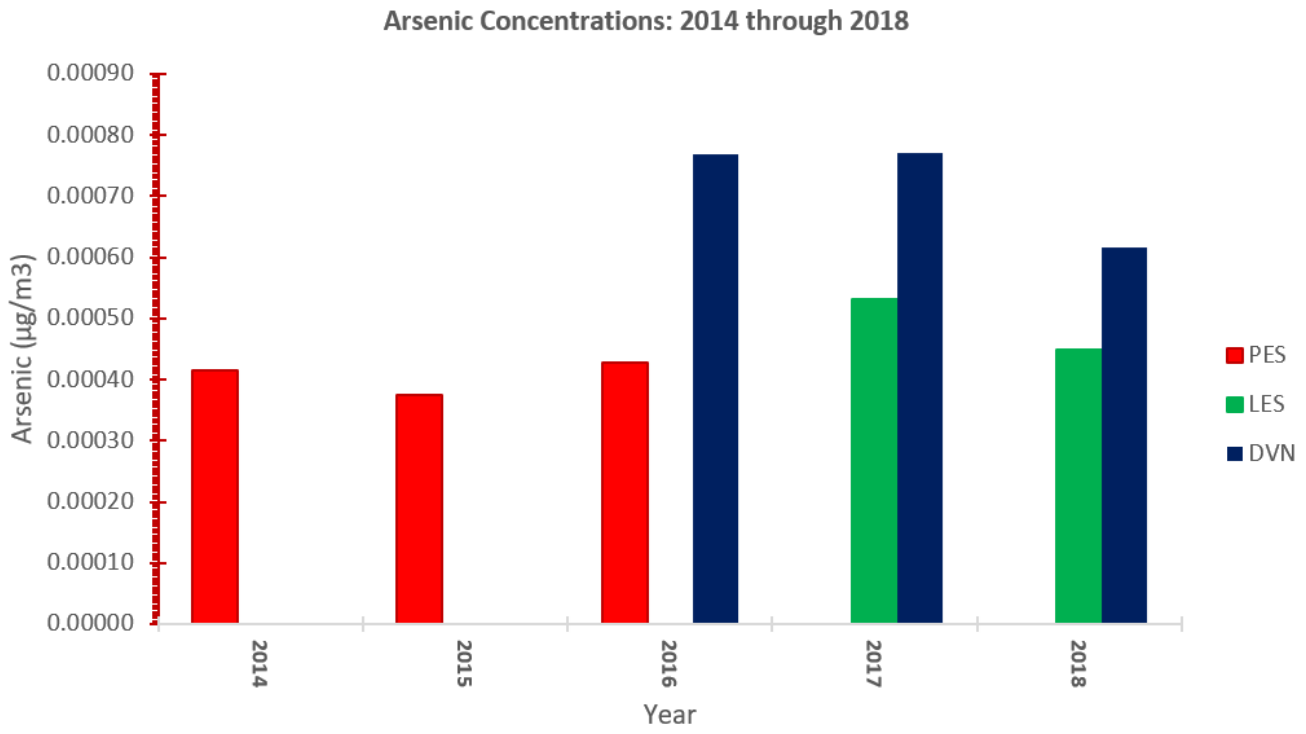


Figure 36 - Arsenic Concentrations 2014 through 2018

PES: Perkins Elementary School
LES: Lexington Elementary School (El Cajon)
DVN: Donovan

Figure 37 shows annual averaged concentrations for Beryllium at Perkins Elementary School (PES), Lexington Elementary School (LES – in El Cajon), and the Donovan site in Otay Mesa. The highest concentrations were found at the Donovan site (0.00002 µg/m3), with Lexington and Perkins sites showing lower concentrations.

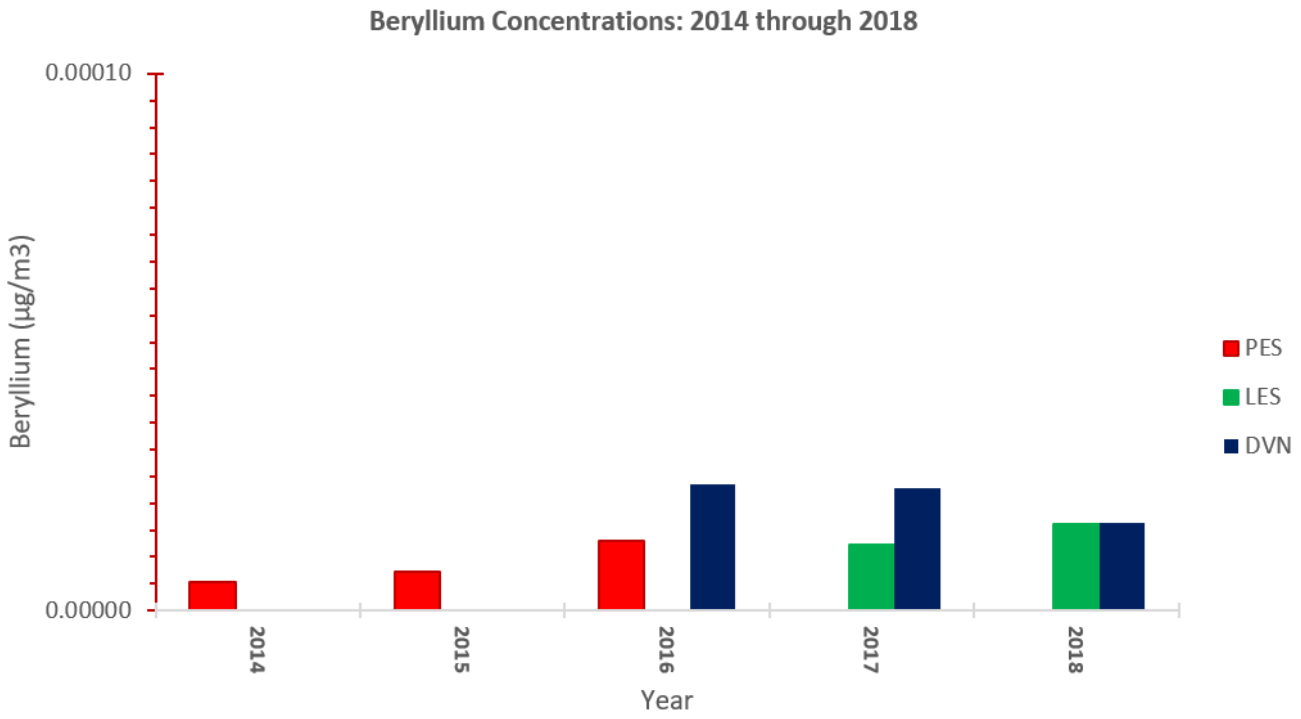


Figure 37 - Beryllium Concentrations 2014 through 2018

PES: Perkins Elementary School
LES: Lexington Elementary School (El Cajon)
DVN: Donovan

Figure 38 shows annual averaged concentrations for Cadmium at Perkins Elementary School (PES), Lexington Elementary School (LES – in El Cajon), and the Donovan site in Otay Mesa. The highest concentrations were found at the Donovan site, which does show a decrease over time (which is also apparent in the Perkins data).

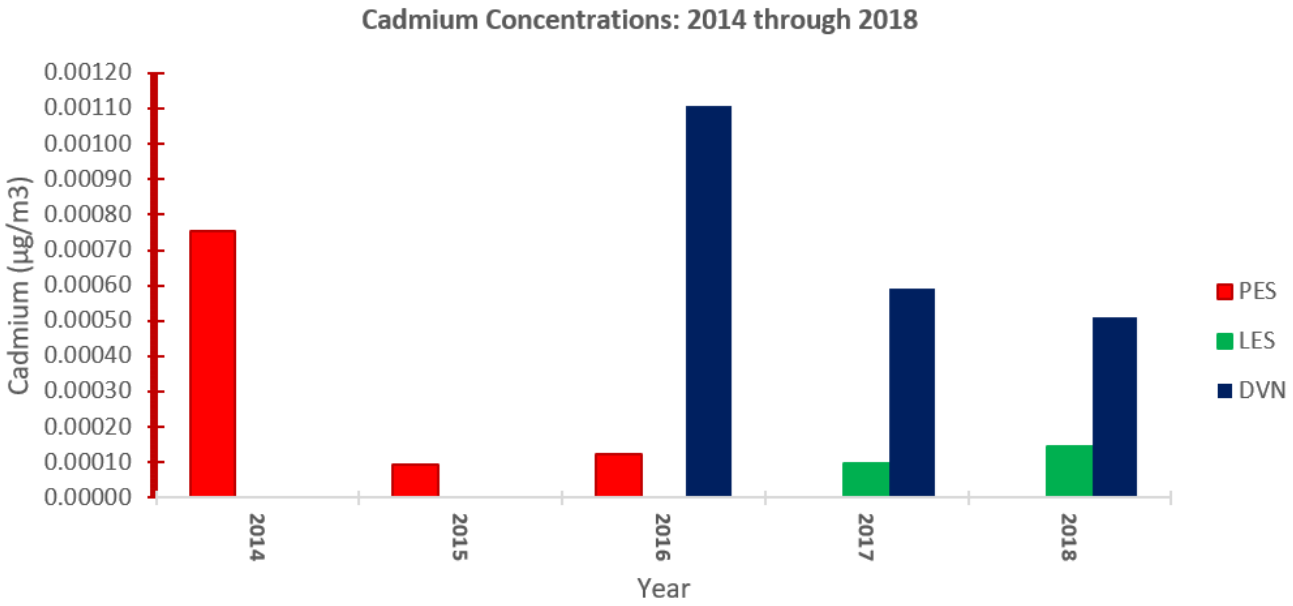


Figure 38 - Cadmium Concentrations 2014 through 2018

PES: Perkins Elementary School
LES: Lexington Elementary School (El Cajon)
DVN: Donovan

Figure 39 shows annual averaged concentrations for Nickel at Perkins Elementary School (PES), Lexington Elementary School (LES – in El Cajon), and the Donovan site in Otay Mesa. The highest concentrations were found at the Donovan site, with measurements at the Perkins and Lexington sites being much lower and relatively steady.

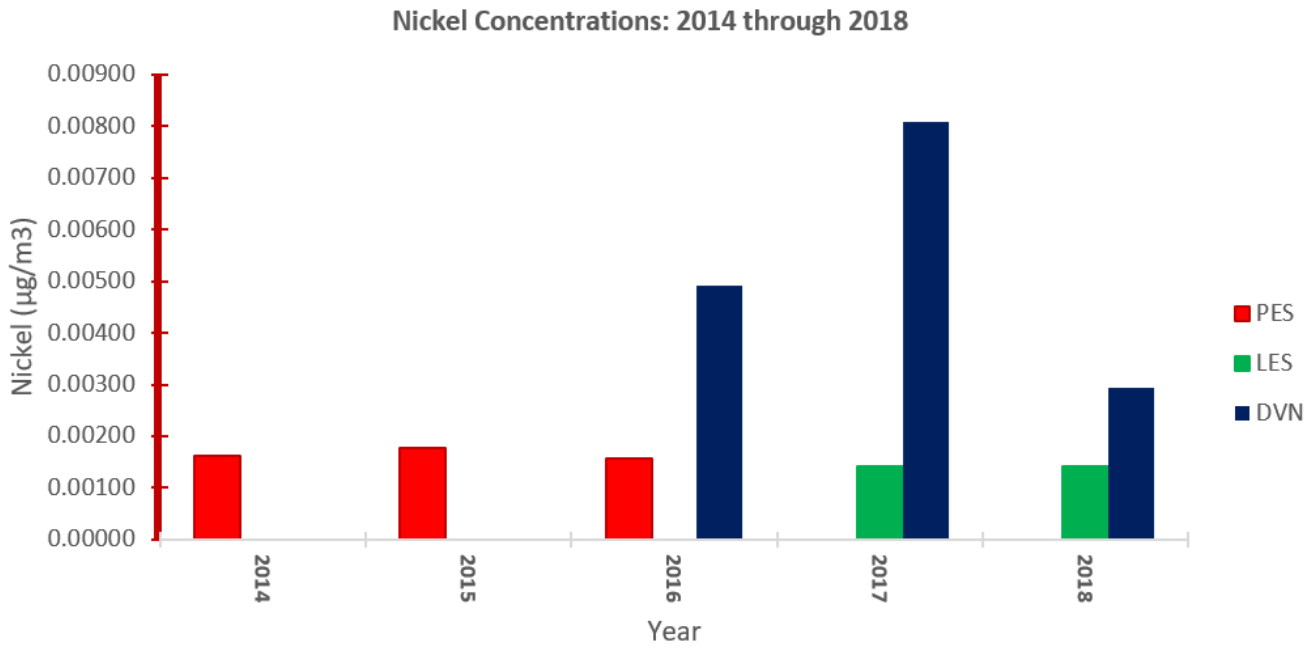


Figure 39 - Nickel Concentrations 2014 through 2018

PES: Perkins Elementary School
LES: Lexington Elementary School (El Cajon)
DVN: Donovan

Airborne Toxic Gases (Toxic Volatile Organic Compounds)

The Portside Community have also expressed concerns about airborne toxic gases (known as toxic Volatile Organic Compounds, or VOCs) from activities in and around the area. Although the AB 617 toxic-VOC monitoring is in the early phases, we do have historical toxic-VOC data from other sites in the APCD's air monitoring network.

The District has sampled for Toxic-VOCs at the following sites:

- Perkins Elementary School: suspended sampling in 2015, due to eviction.
- Otay Mesa: Sampled until 2014 and was relocated to Donovan, due to eviction.
- Donovan site (Otay Mesa area): Began sampling in 2014, suspended sampling 2016 and 2017 for instrument replacement.
- Escondido: Sampling suspended in 2015, due to renovation of the entire area by the landlord.
- Sherman Elementary School: Started sampling in October 2019.

The Toxic-VOCs selected for analysis included the VOCs highlighted on the NATA database with the highest risk value. These VOCs include:

- Benzene (and the other BTEX compounds; Toluene, Ethylbenzene, m/p-Xylene, o-Xylene)
- Naphthalene
- Carbon Tetrachloride
- P-Dichlorobenzene
- 1,3-Butadiene

The data was reviewed, and the key points include:

- The VOC concentrations trend downward over time. For example, benzene concentrations at Perkins Elementary School decreased from 0.290 ppbv in 2010 to 0.200 from 2015.
- Similarly, Toluene concentration decreased from 0.690 ppbv to 0.347 ppbv from 2010 to 2015 at Perkins Elementary School.
- BTEX concentrations are lower in the Downtown community (PES) compared to the Otay region (DVN & OTM) and Escondido.
- Other VOCs sampled in the Portside Community are also lower.
- One exception is carbon tetrachloride, which is typically around 0.09 ppbv for all sites and for all years.
- The Toxic-VOCs, specifically BTEX compounds are higher (approximately double) at the old Otay Mesa site. This site was located at the border and was impacted by local vehicle traffic. This is representative of a source sample rather than ambient data. The BTEX compounds dropped significantly (e.g. Benzene dropped from ~0.5 ppbv to ~0.2 ppbv) when the site was relocated to Donovan.
- Toxic-VOCs were sampled at Perkins Elementary School until 2015. Sampling started at our new Sherman Elementary School site in October 2019. The higher concentrations from the Sherman Elementary School site in 2019 is likely due to seasonal variations. BTEX compounds are higher in the winter, and all measurements at Sherman Elementary School were collected in October, November, and December of 2019.

The APCD also estimated the health risks from exposure to these specific toxic VOCs for both long-term, non-cancerous risk and cancer risk, using the California Air Resources Board's Hot Spots Analysis and Reporting Program's (HARP's) risk assessment tool[59]. Short-term, non-cancerous risk was not estimated, as the air monitoring data available does not include the short-term maximum concentrations needed to estimate this risk. For the long-term, non-cancerous risk, all five sites showed that the average concentrations of these VOCs are below their reference exposure level (REL, the level at which long-term health effects can be caused from breathing the ambient air), as determined by the California Office of Environmental Health Hazard Assessment (OEHHA)[60]. The Toxicity Weighted Emissions (TWE) for the long-term, non-cancerous risk discussed in Chapter 3 are based upon these RELs. The total long-term, non-cancerous risk (which include the other ways a pollutant can get into a person's body) is below the level at which long-term health effect can be caused by the total exposure.

Cancer risk is the risk that a person could develop cancer due to the exposure to certain pollutants if that person was exposed to the average concentrations measured for 24-hours a day, 7-days per week, for a 30-year period. The cancer risk was estimated to be 141 in one million at Donovan, 193 in one million at Escondido, 195 in one million at Sherman Elementary School, 199 in one million at Perkins Elementary School, and 261 in one million at Otay Mesa. For context, under the Air Toxics "Hot Spots" Program, if a stationary source subject to APCD permit requirements had a maximum cancer risk above 10 in one million, the stationary source would be required to notify their neighbors about the risk, and if the cancer risk were above 100 in one million, the stationary source would be required to reduce their risk below that threshold.

[59] https://ww2.arb.ca.gov/our-work/programs/hot-spots-analysis-reporting-program

[60] https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary

Figure 40 shows the annual average benzene concentrations for the monitoring locations mentioned above. This chart shows that benzene concentrations were decreasing at Perkins Elementary School (PES) between 2013 and 2015. The Sherman Elementary School (SES) averages for 2019 show higher values, due to the sampling being conducted in the more stable months of the year. This chart also shows that the average benzene concentrations at Perkins Elementary School in Barrio Logan were slightly higher than in Escondido (ESC), and these sites were showing decreasing concentrations between 2013 and 2015. The highest concentrations of benzene measured were at the Otay Mesa site (OTM), which was located directly at the Otay Mesa border crossing. The Donovan site (DVN), a few miles north of the border shows lower concentrations than the OTM site.

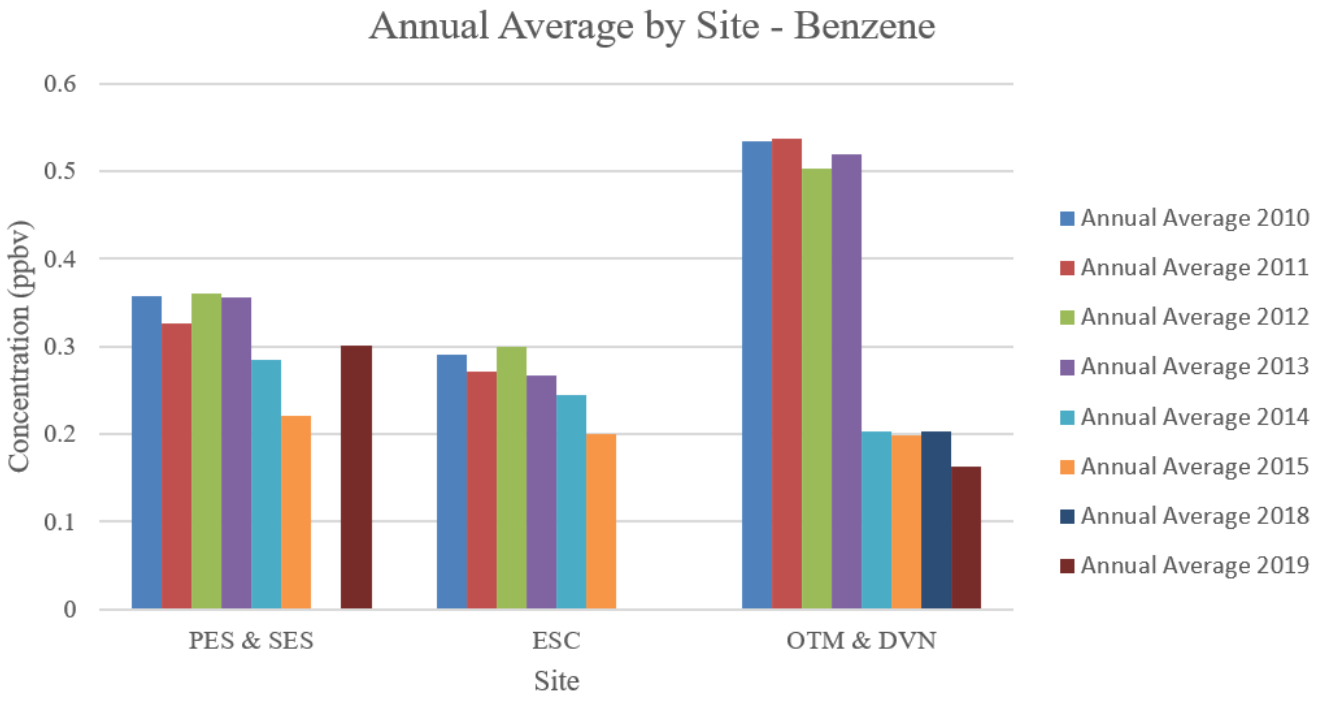


Figure 40 - Annual Average Benzene by Site

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Figure 41 shows the annual average toluene concentrations for the monitoring locations mentioned above. This chart shows that toluene concentrations were decreasing at Perkins Elementary School (PES) between 2010 and 2015. The Sherman Elementary School (SES) averages for 2019 show higher values, due to the sampling being conducted in the more stable months of the year. This chart also shows that the average toluene concentrations at Perkins Elementary School in Barrio Logan were lower than in Escondido (ESC), and these sites were showing decreasing concentrations between 2010 and 2015. The highest concentrations of toluene measured were at the Otay Mesa site (OTM), which was located directly at the Otay Mesa border crossing. The Donovan site (DVN), a few miles north of the border shows lower concentrations than the OTM site.

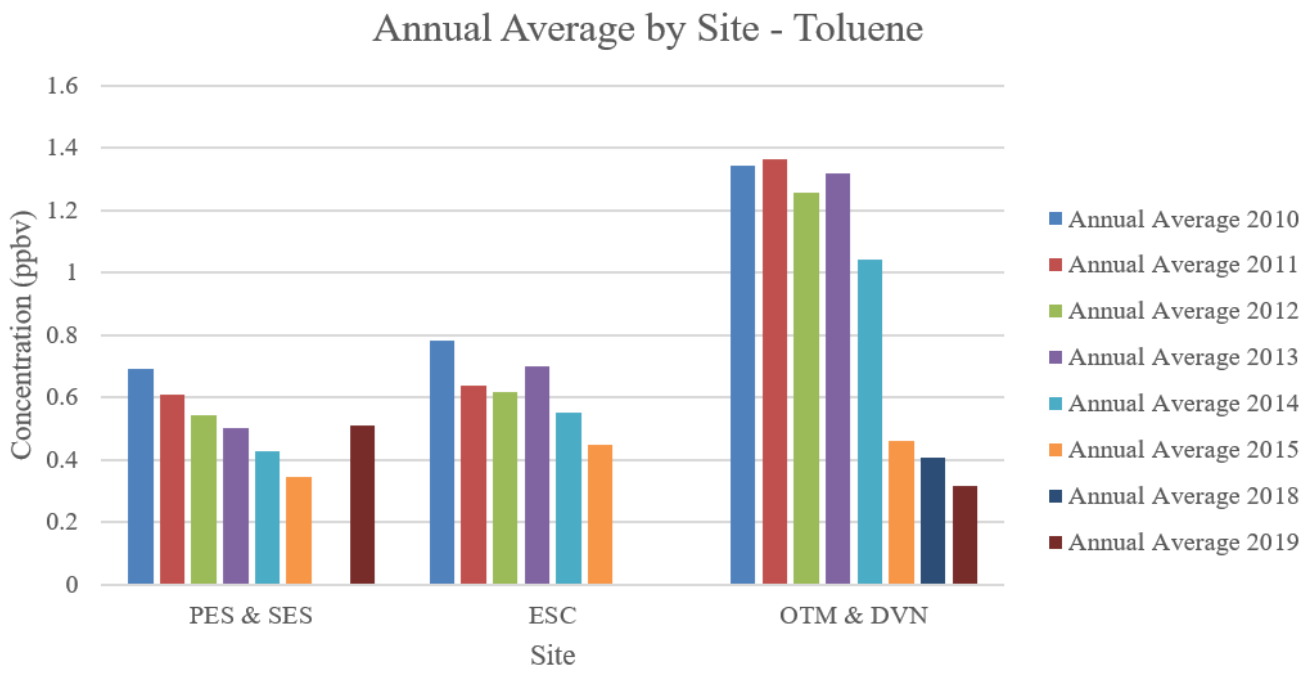


Figure 41 - Annual Average Toluene Concentrations

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Figure 42 shows the annual average ethylbenzene concentrations for the monitoring locations mentioned above. This chart shows that ethylbenzene concentrations were decreasing at Perkins Elementary School (PES) between 2013 and 2015. The Sherman Elementary School (SES) averages for 2019 show higher values, due to the sampling being conducted in the more stable months of the year. This chart also shows that the average ethylbenzene concentrations at Perkins Elementary School in Barrio Logan were lower than in Escondido (ESC), and these sites were showing decreasing concentrations between 2013 and 2015. The highest concentrations of ethylbenzene measured were at the Otay Mesa site (OTM), which was located directly at the Otay Mesa border crossing. The Donovan site (DVN), a few miles north of the border shows lower concentrations than the OTM site.

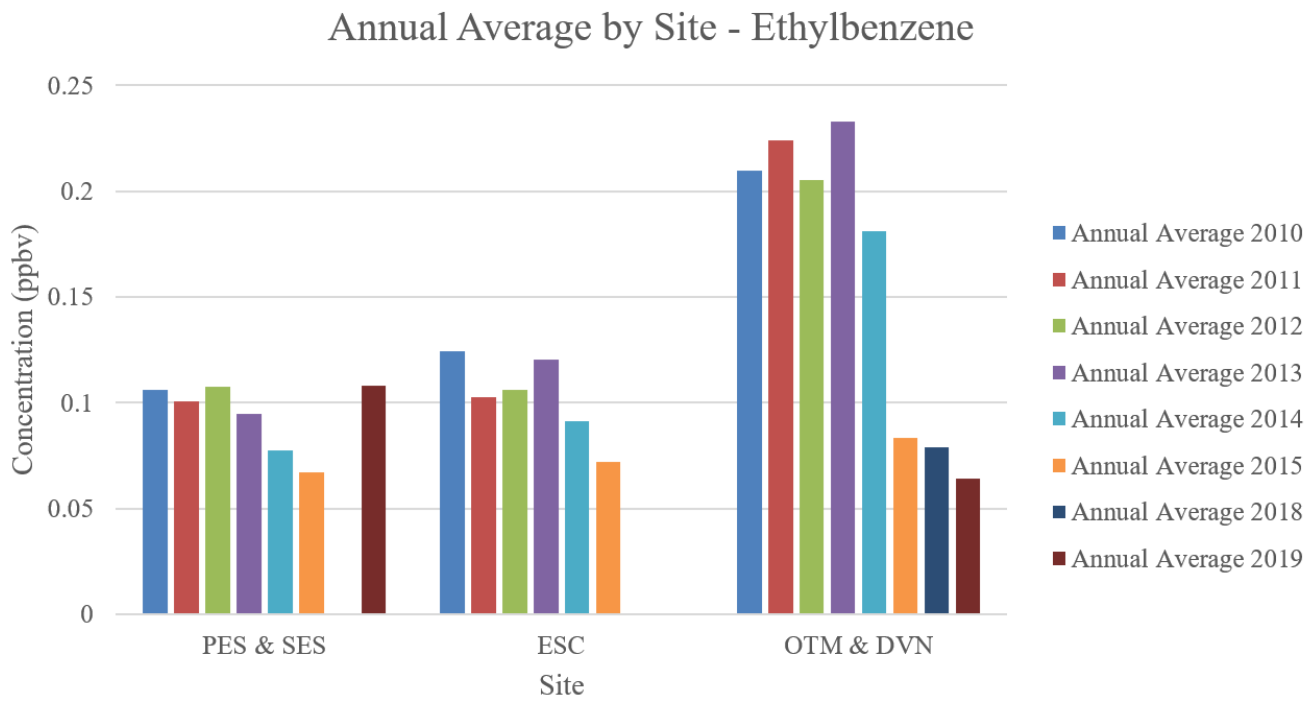


Figure 42 - Annual Average Ethylbenzene Concentrations by Site

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Figure 43 shows the annual average m,p-xylene concentrations for the monitoring locations mentioned above. This chart shows that m,p-xylene concentrations were decreasing at Perkins Elementary School (PES) between 2013 and 2015. The Sherman Elementary School (SES) averages for 2019 show higher values, due to the sampling being conducted in the more stable months of the year. This chart also shows that the average m,p-xylene concentrations at Perkins Elementary School in Barrio Logan were lower than in Escondido (ESC), and these sites were showing decreasing concentrations between 2013 and 2015. The highest concentrations of m,p-xylene measured were at the Otay Mesa site (OTM), which was located directly at the Otay Mesa border crossing. The Donovan site (DVN), a few miles north of the border shows lower concentrations than the OTM site.

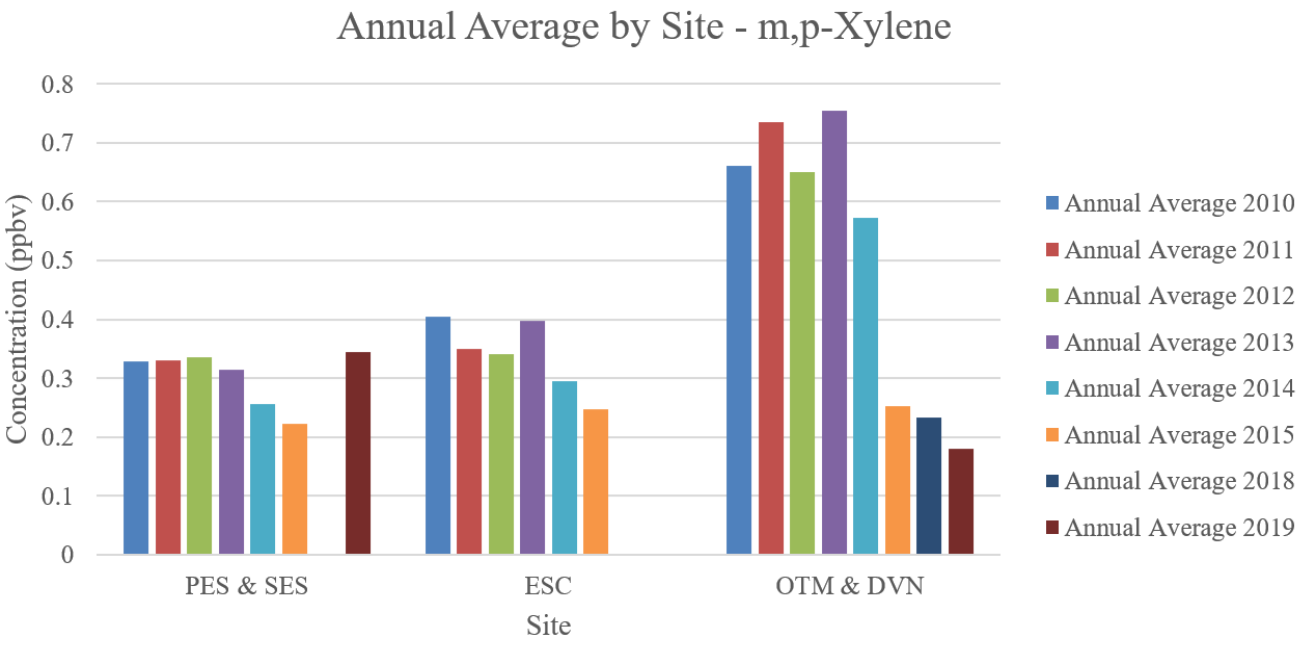


Figure 43 - Average m,p-Xylene Concentrations by Site

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Figure 44 shows the annual average o-xylene concentrations for the monitoring locations mentioned above. This chart shows that o-xylene concentrations were decreasing at Perkins Elementary School (PES) between 2013 and 2015. The Sherman Elementary School (SES) averages for 2019 show higher values, due to the sampling being conducted in the more stable months of the year. This chart also shows that the average o-xylene concentrations at Perkins Elementary School in Barrio Logan were lower than in Escondido (ESC), and these sites were showing decreasing concentrations between 2013 and 2015. The highest concentrations of o-xylene measured were at the Otay Mesa site (OTM), which was located directly at the Otay Mesa border crossing. The Donovan site (DVN), a few miles north of the border shows lower concentrations than the OTM site.

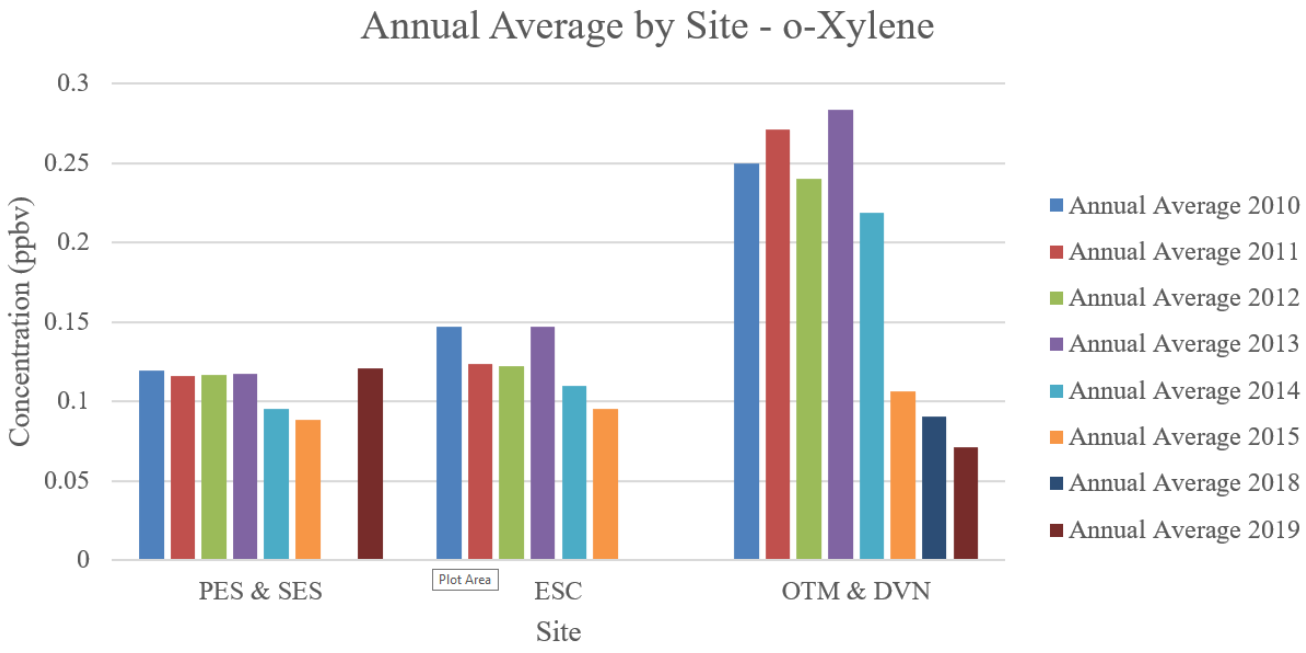


Figure 44 - Annual average o-Xylene concentrations by Site

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

A summary of the BTEX compounds (benzene, toluene, ethylbenzene, m/p-xylene, and o-xylene) measured in the Portside Community sites of Perkins Elementary School and Sherman Elementary School is shown below. Figure 45 shows that average BTEX compounds were decreasing at the Perkins site between 2010 and 2015. The limited set of BTEX compound measurements at the Sherman site are shown for reference, although these measurements were all collected in the winter months, when pollutant concentrations tend to be higher due to higher atmospheric stability.

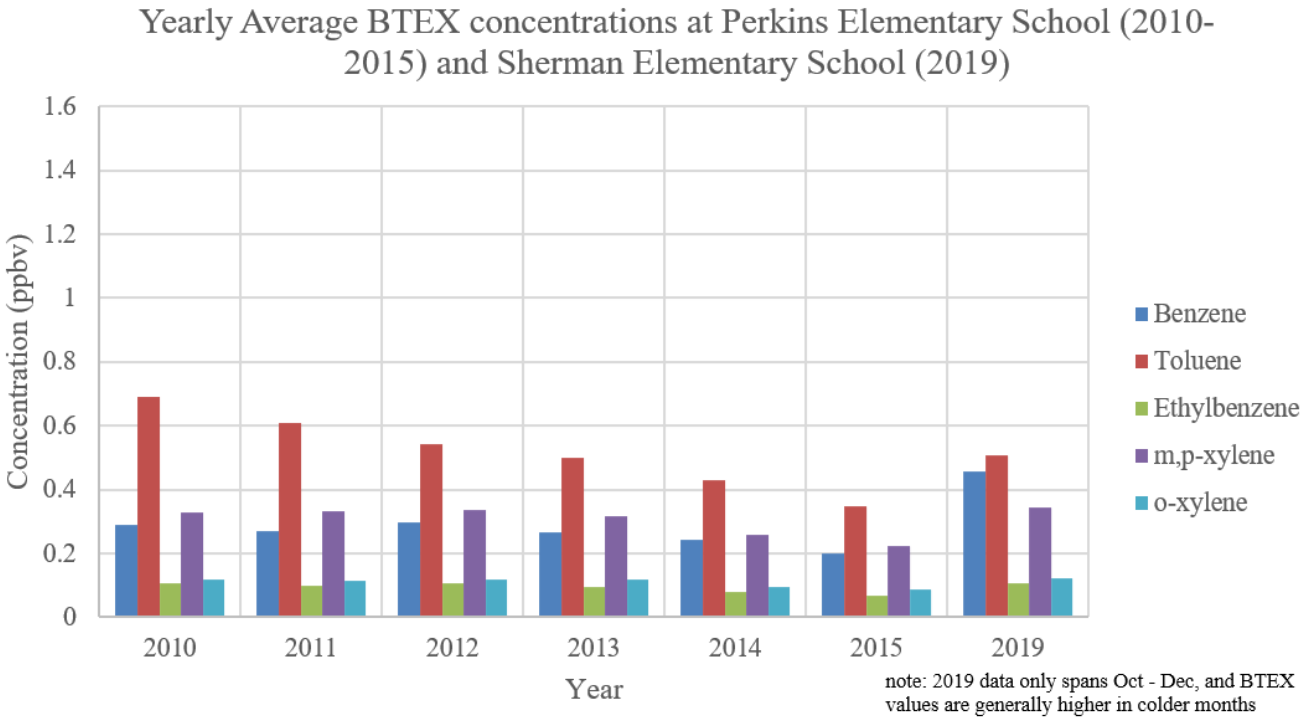


Figure 45 - Yearly Average BTEX Concentrations at Perkins and Sherman Elementary School

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Figure 46 shows that the annual average naphthalene concentrations were relatively consistent at Perkins Elementary School (PES) between 2013 and 2015 (after decreasing between 2012 and 2013). The Sherman Elementary School (SES) averages for 2019 show lower values than the Perkins site. This chart also shows that the average naphthalene concentrations at Perkins Elementary School in Barrio Logan were higher than in Escondido (ESC), which showed decreasing concentrations between 2013 and 2015. Concentrations of naphthalene measured at the Otay Mesa site (OTM) and Donovan (DVN) were highest between 2013 and 2019, with only a modest decrease between the two locations.

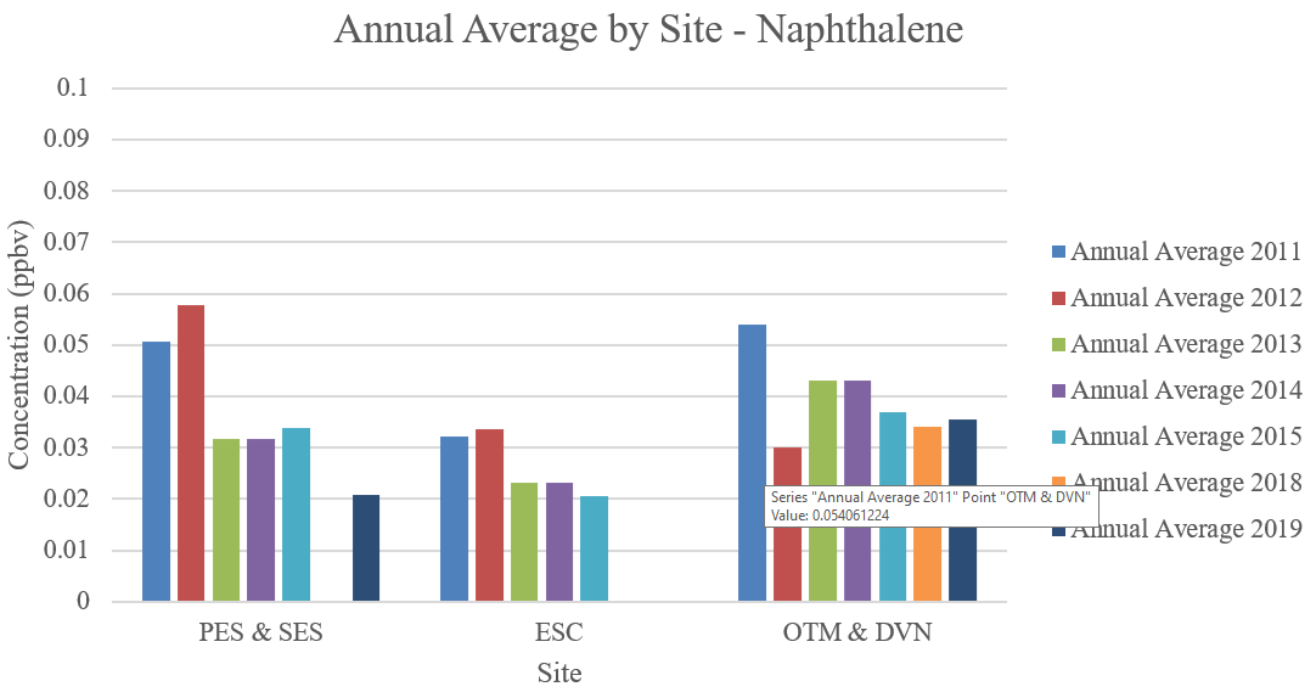


Figure 46 - Average Naphthalene by Site

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Figure 47 shows that annual averages of carbon tetrachloride measured at the sites mentioned above. The chart does show that all sites are roughly equal for this compound, which was banned worldwide in an update to the Montreal Protocol in 2010 to help protect the earth's stratospheric ozone layer. Worldwide concentrations are expected to continue to drop as this compound is no longer being manufactured.

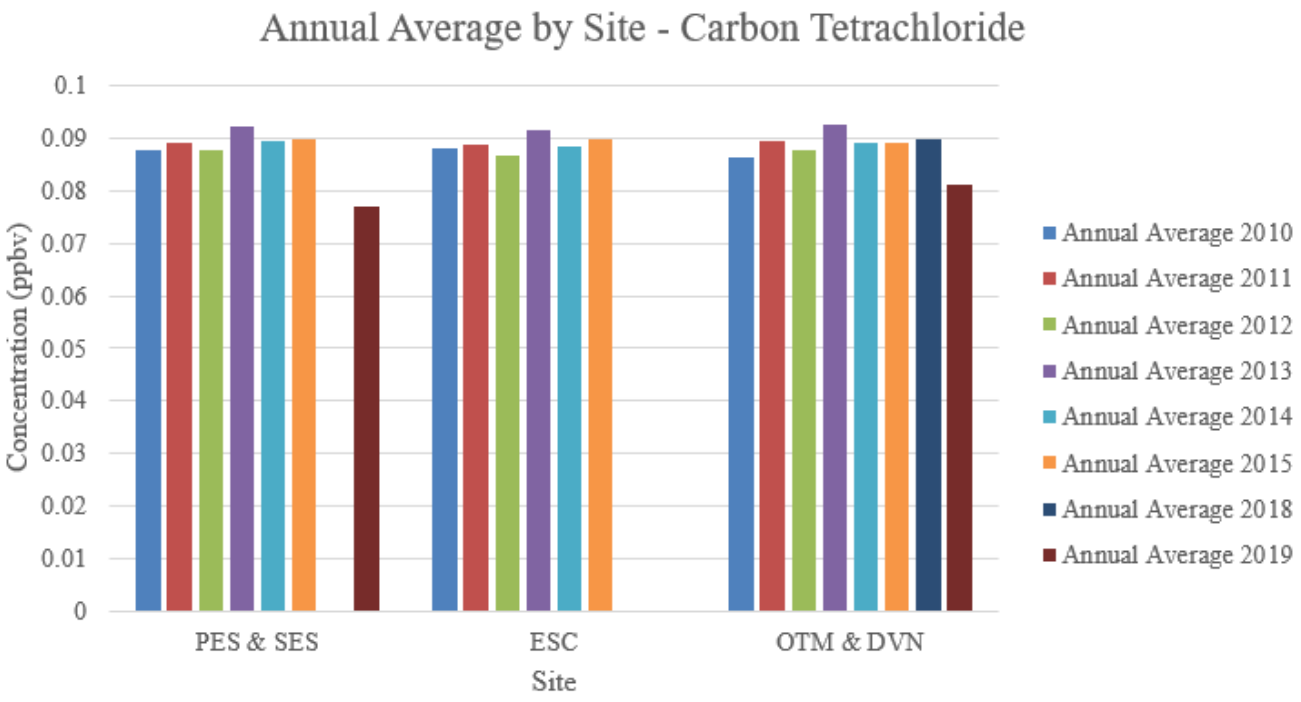


Figure 47 - Annual Average Carbon Tetrachloride by Site

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Figure 48 shows the annual average p-dichlorobenzene concentrations for the monitoring locations mentioned above. This chart shows that p-dichlorobenzene concentrations were decreasing at Perkins Elementary School (PES) between 2012 and 2014 (2015 is a little higher than 2014). The Sherman Elementary School (SES) averages for 2019 show higher values, due to the sampling being conducted in the more stable months of the year. This chart also shows that the average p-dichlorobenzene concentrations at Perkins Elementary School in Barrio Logan were lower than in Escondido (ESC). The highest concentrations of p-dichlorobenzene measured were at the Otay Mesa site (OTM), which was located directly at the Otay Mesa border crossing. The Donovan site (DVN), a few miles north of the border shows lower concentrations than the OTM site.

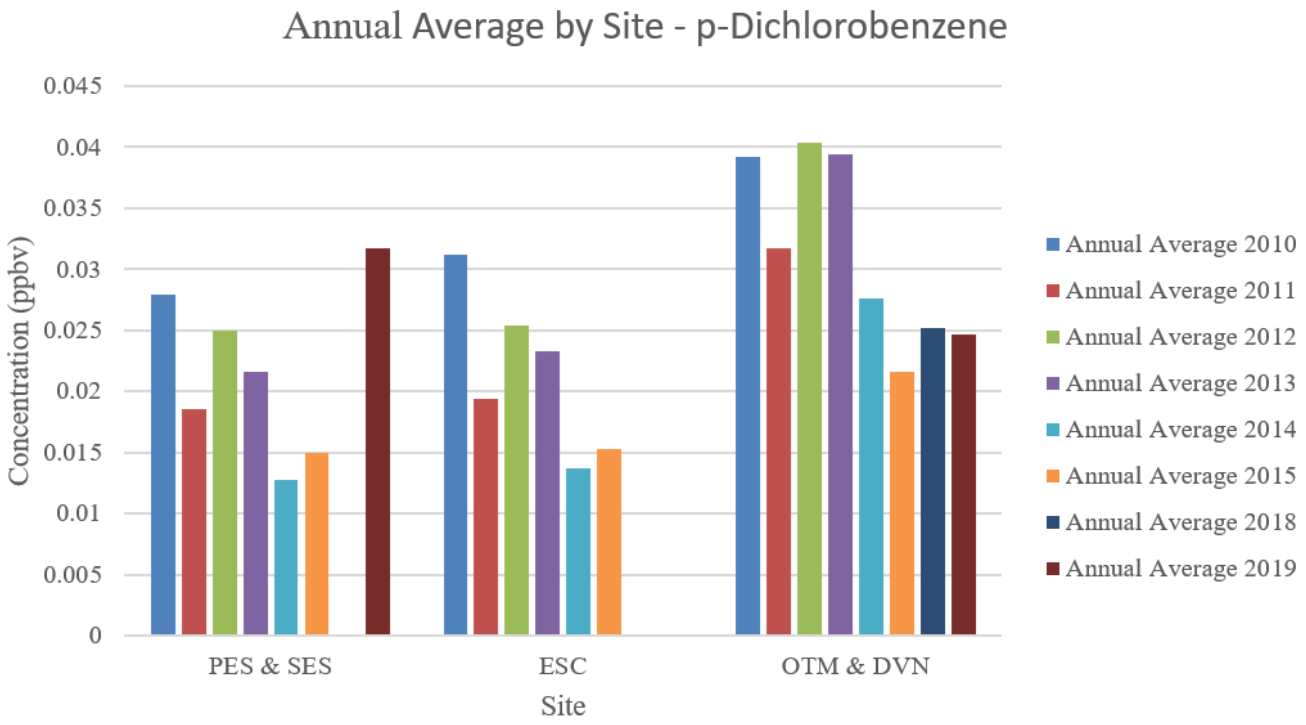


Figure 48 - Average p-Dichlorobenzene Concentrations by Site

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Figure 49 shows the annual average 1,3-dutadiene concentrations for the monitoring locations mentioned above. This chart shows that 1,3-dutadiene concentrations were decreasing at Perkins Elementary School (PES) between 2012 and 2015. The Sherman Elementary School (SES) averages for 2019 show higher values, due to the sampling being conducted in the more stable months of the year. This chart also shows that the average 1,3-dutadiene concentrations at Perkins Elementary School in Barrio Logan were lower than in Escondido (ESC). The highest concentrations of 1,3-utadiene measured were at the Otay Mesa site (OTM), which was located directly at the Otay Mesa border crossing. The Donovan site (DVN), a few miles north of the border shows lower concentrations than the OTM site.

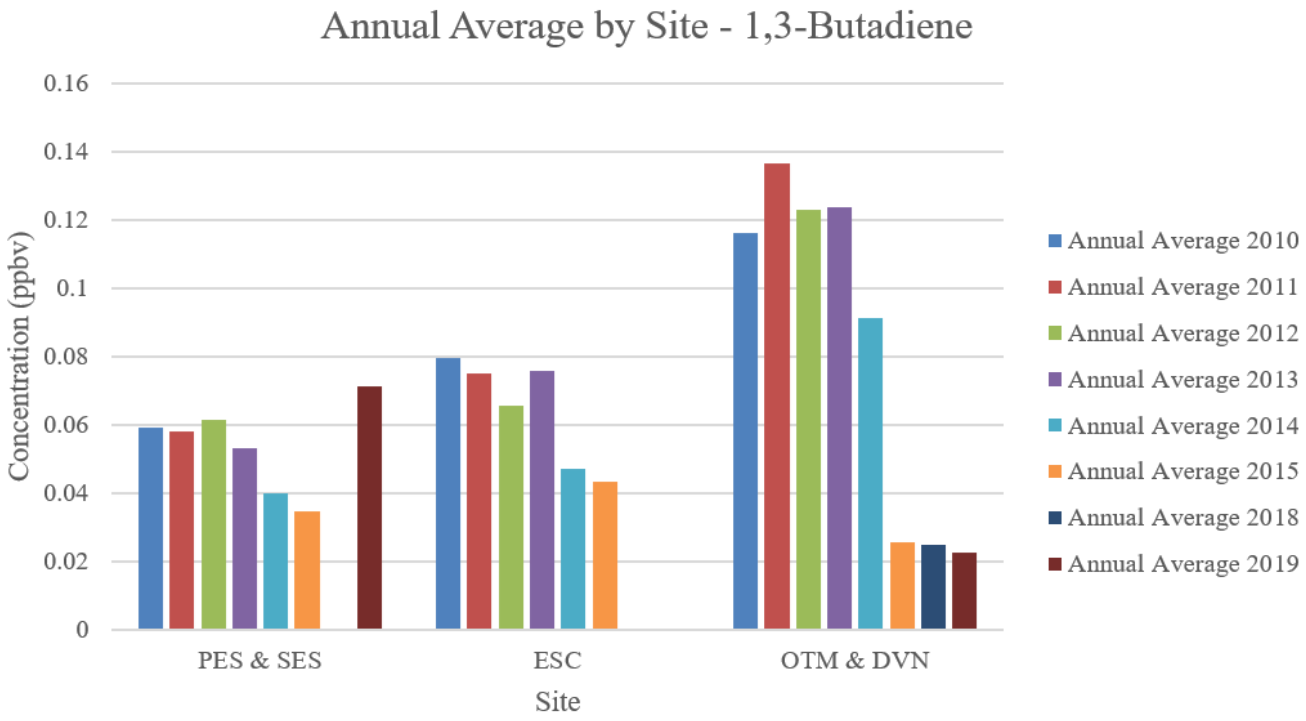


Figure 49 - Annual average 1,3-Butadiene concentrations by Site

PES: Perkins Elementary School
SES: Sherman Elementary School
ESC: Escondido
OTM: Otay Mesa Site (2011-2014)
DVN: Donovan (2015-2019)

Most of the data provided in this document is based on the District's monitoring stations, which are primarily intended for measuring regional air quality. Although these stations provide historical air quality data, currently the District has limited data as it relates to the community-focused and community-driven monitoring stations. The District is committed to continuing to work collaboratively with the Steering Committee to obtain community-level emission data and further quantify the emissions impacting the Portside community.

Table 12 lists the air monitoring site locations in the Portside Community that have been in operation and the proposed future air monitoring site locations.

Table 12 - Monitoring Sites in the Portside Community

Site Name	Address	Lat./Long.	Operational Timeline
Sherman Elementary School	301 22nd St., San Diego, CA 92102	32°42'36.63"N 117° 8'33.59"W	Operating
10th Avenue Marine Terminal	801 Terminal St., San Diego, CA 92101	32°42'2.56"N 117° 9'39.97"W	Operating
Caltrans-Chavez	917-19 Cesar E Chavez Pkwy., San Diego, CA 92113	32°42'3.69"N 117° 8'40.11"W	Operating
Fire Station #19	3434 Ocean View Blvd., San Diego, CA 92113	32°42'7.66"N 117° 7'10.69"W	Operating
Caltrans - 29th Street	2898 1/3 Boston Ave., San Diego, CA 92113	32°41'38.82"N 117° 7'54.30"W	Summer 2021
Burbank Elementary School	2146 Julian Ave., San Diego, CA 92113	32°42'4.24"N 117° 8'17.47"W	Summer 2021
National City Train Museum	922 West 23rd St., National City, CA 91950	32°39'34.30"N 117° 6'40.54"W	Summer - Autumn 2021
National City Middle School	TBD	TBD	TBD
Sweetwater High School	TBD	TBD	TBD
Navy RV Parking Lot	TBD	32°40'39.60"N 117° 6'55.96"W	Winter 2022

Although continued air monitoring is needed, the proposed emissions reduction strategies identified under this CERP will significantly benefit all residents in the Portside community, surrounding areas, and all of San Diego County.

CHAPTER 5
APCD ENFORCEMENT PROGRAM

Chapter 5 – APCD Enforcement Program

Overview

The San Diego County Air Pollution Control District's (District or APCD) Enforcement Program is designed to ensure sources of air pollution achieve compliance with all applicable local, state, and/or federal rules and regulations to protect public health and the environment.

The Enforcement Program involves the following elements to manage air pollution within the San Diego County, and to ensure a level playing field for all regulated entities to prevent unfair advantages for violators.

- Field Inspections
    - Stationary Sources
    - Mobile Source
    - Asbestos
    - Portable Equipment Registration Program
- Air Quality Complaint Investigations
- Enforcement Documents
- Compliance Assistance

Field Inspections

During field inspections, District inspectors evaluate various types of equipment and operations, determine compliance with all applicable rules and regulations, and take enforcement actions when a violation is documented. Field inspections are essential to support the District's enforcement efforts. The District administers various inspection programs that will be discussed later in detail. Figures 50 and 51 show the number of inspections conducted Countywide and in the Portside Community.

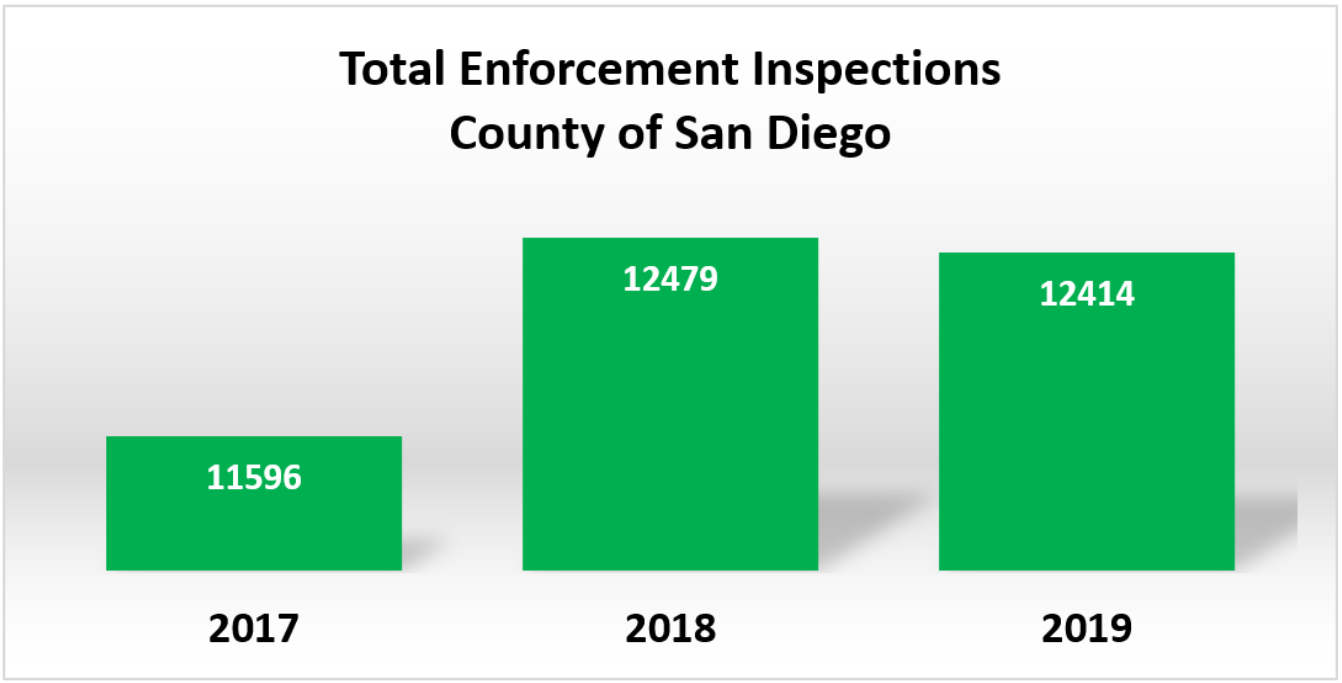


Figure 50 - Countywide Inspection Totals

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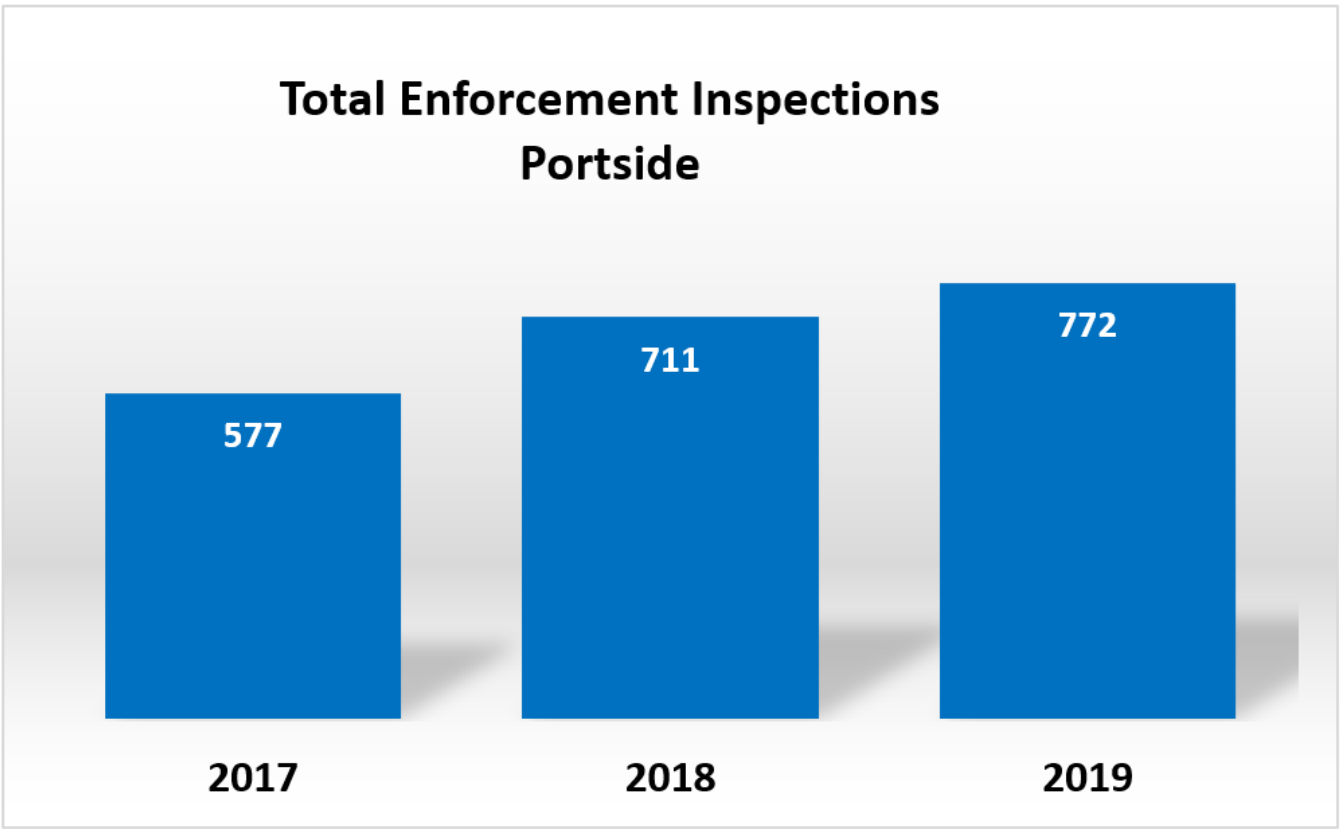

Figure 51 - Portside Inspection Totals

Stationary Source Inspections

Stationary sources of air pollution include manufacturing and industrial operations, power plants, coating operations, gas stations, engines, boilers, and aggregate facilities, which are subject to local rules and state and/or federal regulations. The APCD permits regulated stationary sources of air pollution and conducts inspections, typically on an annual basis.

Under the APCD's inspection program, the County is divided into geographical areas (or sectors). Currently there are 19 sectors that were divided based on the number and nature of stationary sources. Each sector is assigned to an air quality field inspector and the sectors are periodically rotated to provide inspectors different perspectives and levels of experience. The map in Figure 52 shows the stationary source sectors, excluding gas stations.

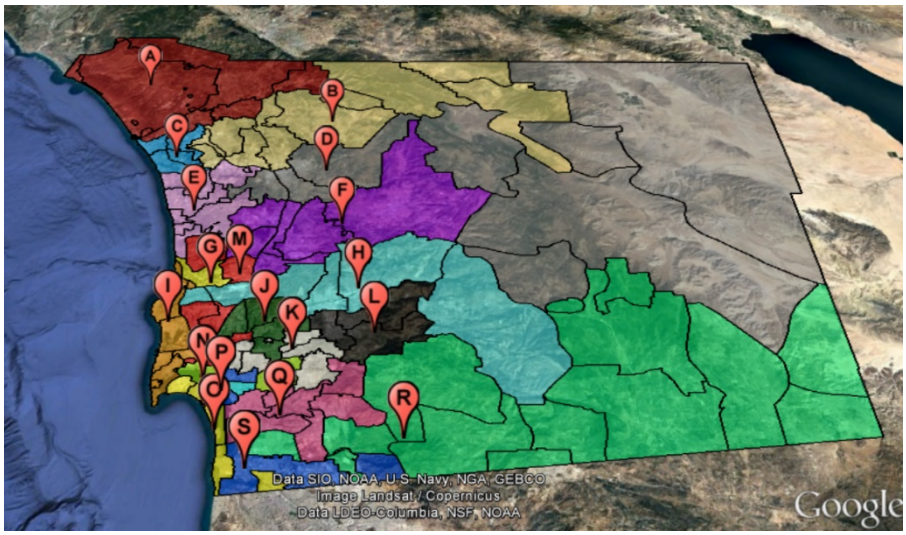

Figure 52 - Stationary Source Inspection Sectors

Due to the number of gas stations (approximately 1,000) in San Diego County, the District has established sectors exclusively for gas station facilities to ensure it maintains the quality of its services. The map in Figure 53 below shows the four gas station sectors which are assigned to field inspectors.

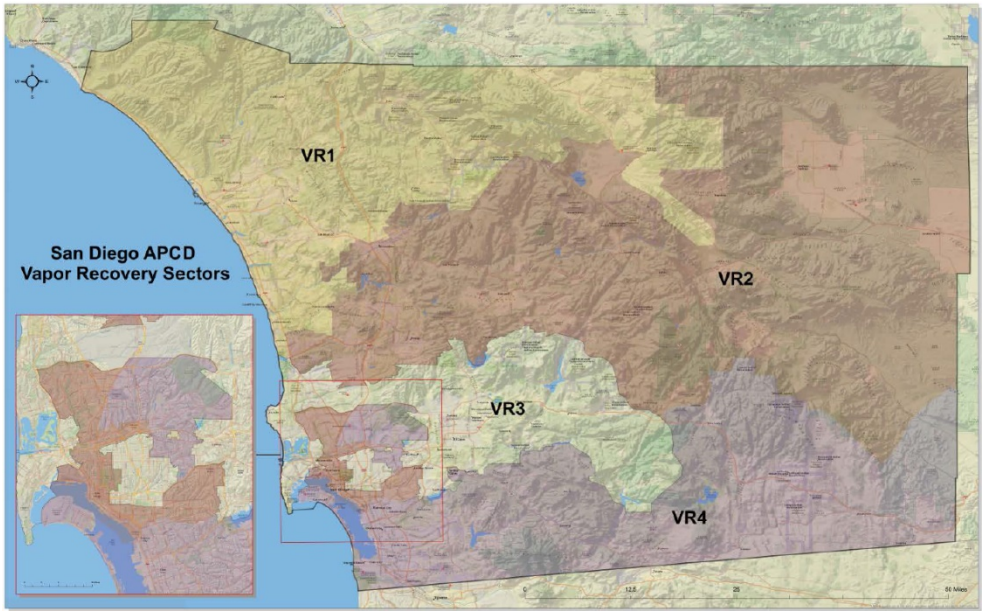

Figure 53 - Vapor Recovery Inspection Sectors

Although most stationary sources are inspected annually, certain sources are inspected more frequently. Sources subject to Title V of the Clean Air Act (except for peaking power plants) are inspected twice and sometimes four times per year. Additionally, the District has historically and continues to conduct more frequent inspections in the Portside Community, as it has been considered a disadvantaged community prior to the implementation of the Community Air Protection Program. Figures 54 and 55 show the number of stationary source inspections conducted Countywide and in the Portside Community.

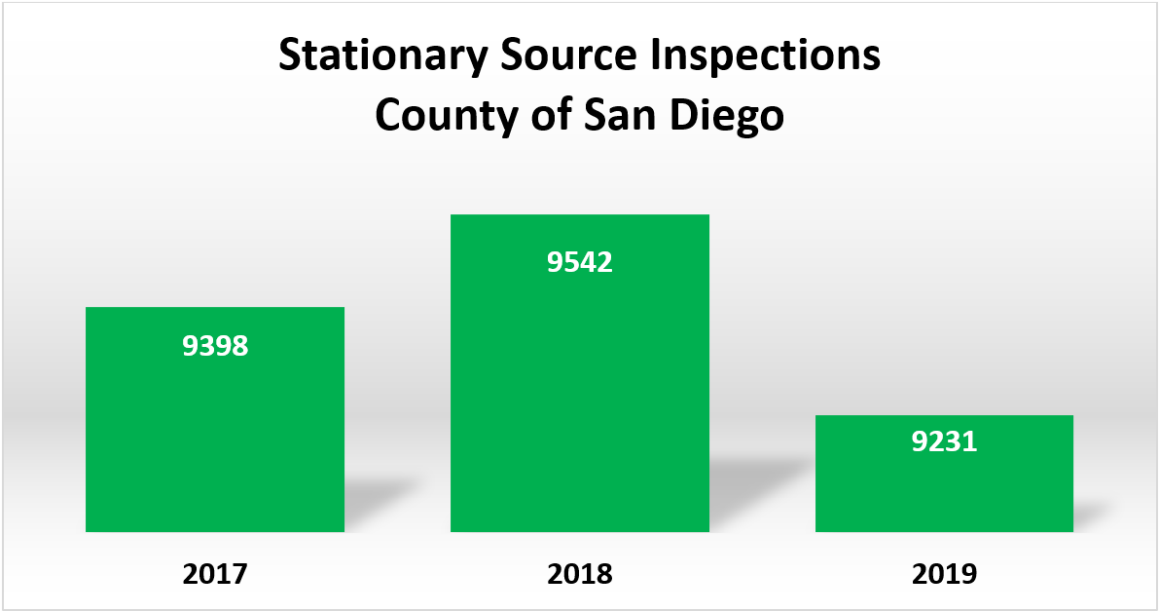

Figure 54 - Countywide Stationary Source Inspection Totals

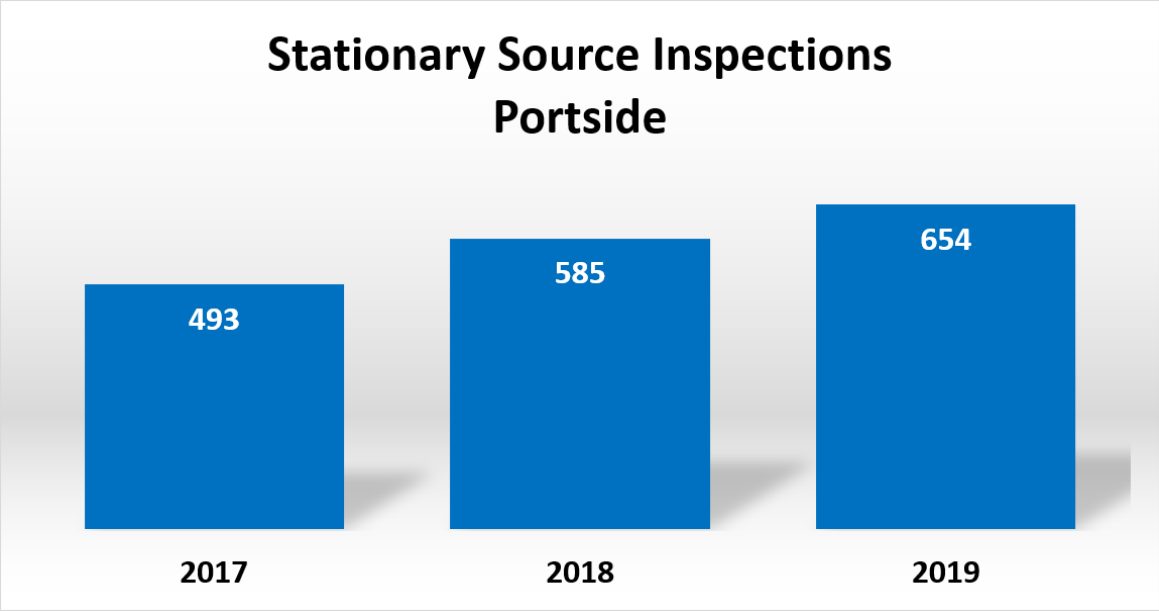

Figure 55 - Portside Stationary Source Inspection Totals

The Portside Community comprises the neighborhoods of Barrio Logan, Logan Heights and Sherman Heights in the City of San Diego, and West National City within National City which includes zip codes 92113, 91950, and 92102. The District tracks these zip codes in addition to the county-wide data for the purposes of capturing compliance data in the Portside Community.

There is a total of 7,978 active permits in San Diego County and out of these permits, 494 (or about 6 percent) are for sources located in the Portside Community. These permits include all stationary source permits, local registrations issued by the District, and permits issued for portable equipment. Figure 56 shows the type and number of permits for sources located in Barrio Logan.

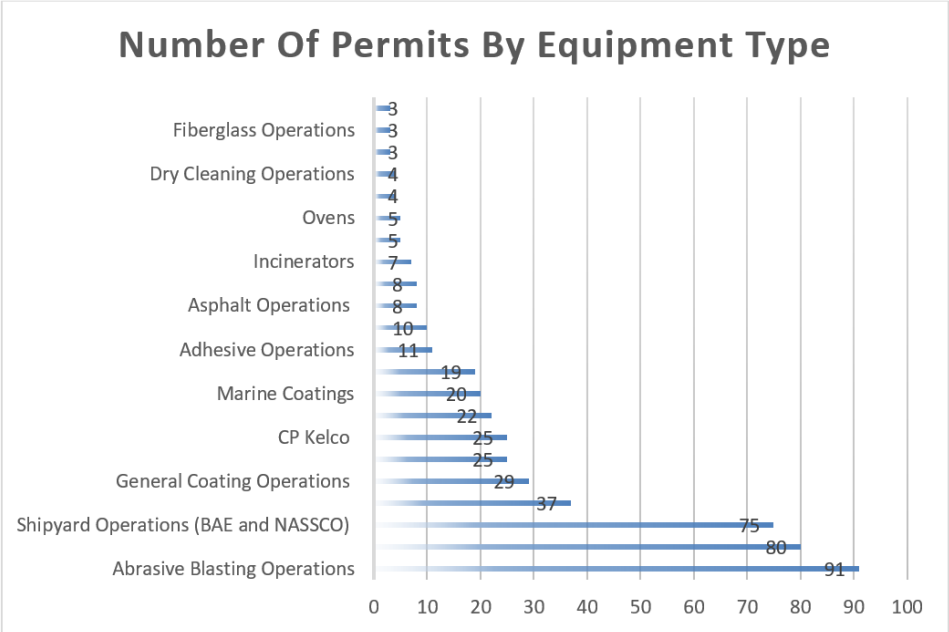

Figure 56 - Number of Permits by Equipment Type

Noteworthy is that the District has been conducting quarterly inspections at the following facilities within the Barrio Logan area and biannual inspections at the San Diego Naval Base, located close to the Portside Community (Figure 57). The District inspects these facilities more frequently than other facilities as they are the largest of the permitted sources, accounting for about 25 percent of the permits in the area.

Figure 57 - Facilities Inspected More Frequently

- BAE Systems and General Dynamics NASSCO- Shipyard operations
- Chevron USA Inc and Andeavor– Bulk Terminals
- CP Kelco- Ingredients Manufacturing
- San Diego Naval Base – Military

Figure 58 shows the ratio of stationary source inspections conducted to the number of permits in the County and in the Portside Community between 2017 and 2019.

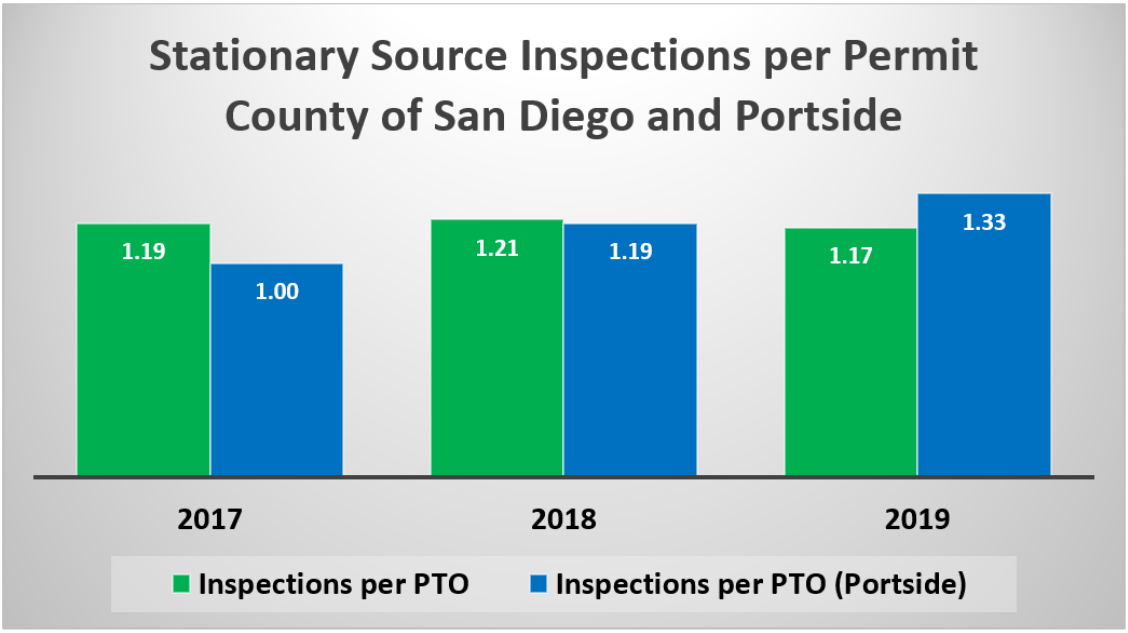

Figure 58 - Ratio of Inspections to Permits

To further promote engagement with the community, the District assigned a bilingual inspector to the Portside area and recently added an additional bilingual inspector to increase its presence and improve communication within San Diego County's Environmental Justice areas.

Mobile Source Inspections

Historically, the District primarily regulated stationary sources of air pollution while the California Air Resources Board (CARB) had jurisdiction over mobile sources. However, like most other California regions, the District faces challenges in reducing emissions from mobile sources, which are the primary source of air pollution within San Diego County. Over half of the total daily ozone-precursor emissions are attributable to mobile sources. Figure 59 shows the top sources of NOx emissions for San Diego County.

To address the severity of these air quality challenges, in 2014 the District signed a Memorandum of Understanding (MOU) with CARB to enforce certain mobile source regulations.

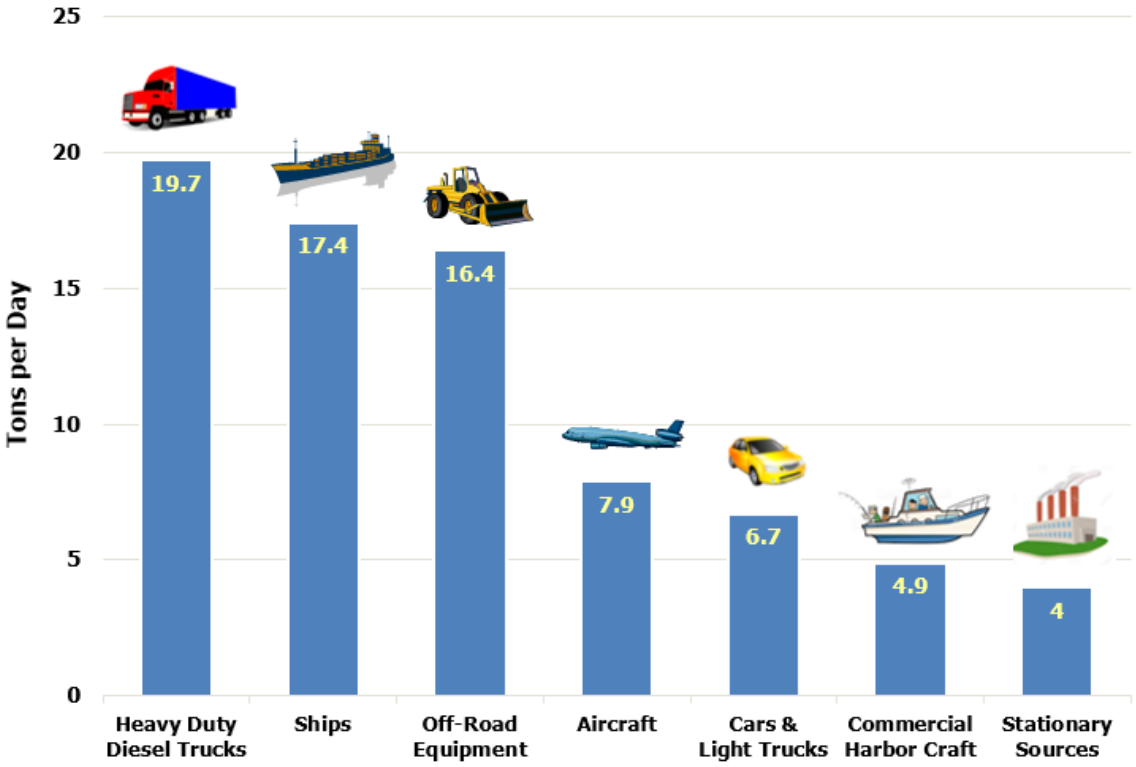

Figure 59 - Region's Top Sources of NOx Emissions

The MOU grants the District authority to enforce specific mobile source regulations including the In-Use Off-Road Diesel Vehicle Regulation (Off-Road Construction Equipment), Statewide Truck and Bus Regulation, Heavy-Duty Diesel Smoke Emission Testing (HDVIP), Heavy-Duty Vehicle Emission Control System Inspections (ECL), and the In-Use Diesel-Fueled Transport Refrigeration Units (TRU). These rules focus on reducing emissions and exposure to toxic diesel pollutants which adversely impact public health.

CARB's 2019 Enforcement Report states: "*the California's Truck and Bus Regulation is perhaps CARB's most important regulation for reducing smog forming pollutants, protecting disadvantaged communities from toxic diesel particulate emissions, and achieving ambient ozone air quality standards. For years, compliance rates were only 70 to 80 percent, leaving hundreds of thousands of non-compliant trucks operating in California*." For this reason, the District and CARB believe that having authority to enforce this regulation locally brings significant benefits to the communities.

The District has been striving to increase the compliance rates for mobile source regulations by partnering up with CARB, enhancing outreach and training efforts, and increasing the number of inspections locally. To accomplish these goals, the District established a mobile source team in 2017, which now consists of a Supervising Inspector and four Air Quality Inspectors. Additionally, the other 23 compliance field inspectors have been trained to conduct certain mobile source inspections. Figure 60 shows critical milestones for the mobile source enforcement program.

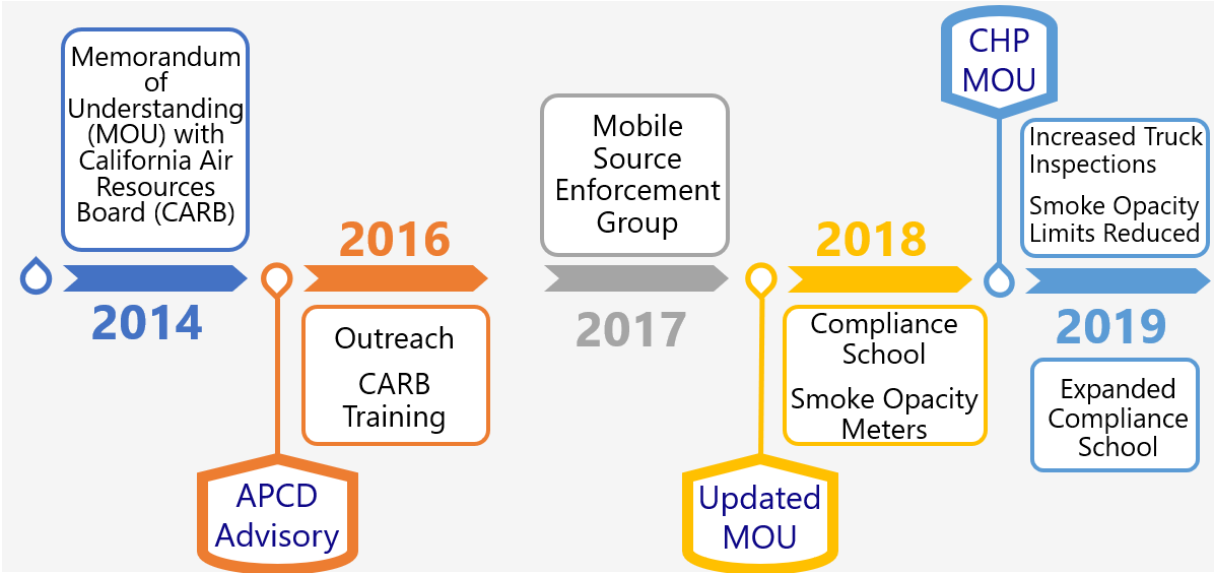

Figure 60 - District's Mobile Source Milestones

The Mobile Source team primarily conducts field inspections (Figure 61) to verify compliance with the mobile source regulations in the MOU and takes enforcement actions when a violation is documented. In 2017, the MOU was revised to allow the District to settle citations issued for Off-Road equipment and TRU violations. Settling these citations in-house enhanced the program as it enabled the District to closely work with operators locally to correct any deficiencies and deter future non-compliance.

The District has been verifying compliance with On-Road regulations primarily at California Highway Patrol (CHP) weigh stations (San Ysidro/Otay Mesa Border, San Onofre on Interstate 5, and near Rainbow on Hwy 15). Initially the District was required to conduct these inspections at CHP stations with CARB inspectors, however, to increase the number of inspections, the District signed a MOU with CARB and CHP in 2018 to conduct these inspections with CHP officers only. Although these inspections are primarily conducted at CHP stations (outside the Portside Community), a lot of these vehicles end up in the Portside Community, therefore these inspections contribute to the overall emission reduction effort at the Portside Community.

Figure 61 - Mobile Source Inspection

An important element of the inspections conducted at the CHP weigh stations includes inspecting and testing heavy duty vehicle emission control systems. For this reason, in 2018 the District purchased two smoke opacity meters to conduct smoke opacity testing on trucks that produce visible exhaust smoke. The smoke opacity standards were updated in 2019 lowering the standard to 5 percent for trucks equipped with diesel particulate filters. Figure 62 shows a heavy-duty truck undergoing a smoke opacity test.

Figure 62 - Smoke Opacity Test

Additionally, the District established four geographical sectors seen in Figure 63 and assigned each sector to a mobile source inspector to closely monitor construction sites, locations where idling is likely to occur (such as the Portside Community), and packing houses where TRUs operate.

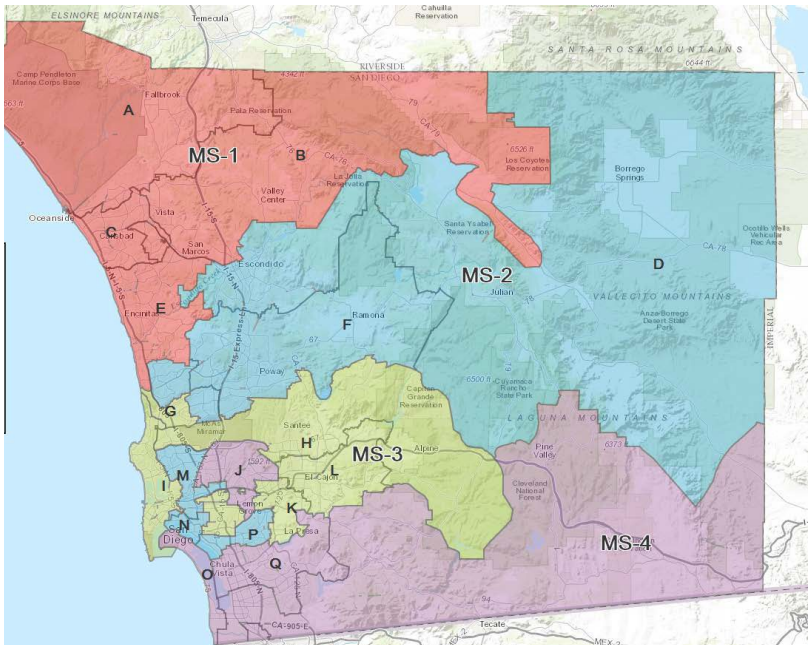

Figure 63 - Mobile Source Inspection Sectors

In 2018, the District started conducting more frequent idling inspections in the Portside Community. These inspections were primarily conducted in response to increasing idling complaints, but violations were rarely found. Subsequently, in 2019, the District solicited input from community members during Steering Committee Meetings to better identify locations where idling activity is high. District staff began conducting bi-weekly idling inspections targeting these areas and issued several idling citations. The District continues conducting bi-weekly idling inspections in the Portside Communities.

Figure 64 provides an overview of the local mobile source enforcement program between 2017 and 2019 in San Diego County. It shows the number of inspections conducted for On-Road and Off-Road vehicles, number of citations issued, and overall compliance rate for each year.

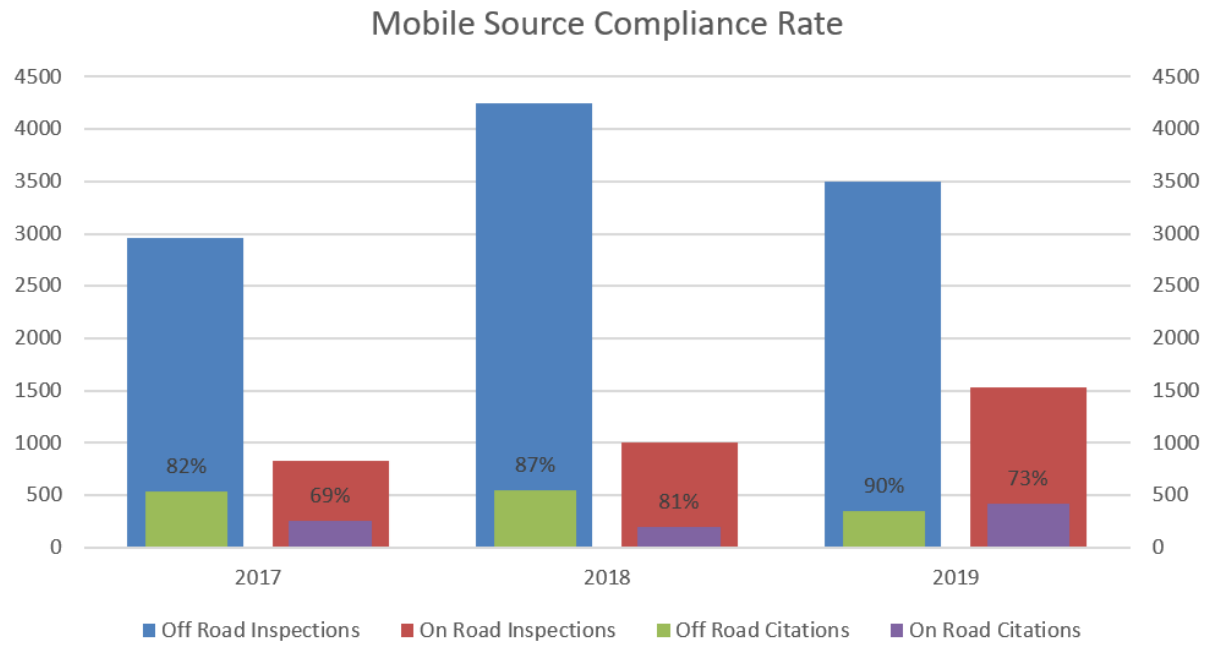

Figure 64 - Mobile Source Compliance Rate

The District expects an increase in compliance rates due to the standards in Senate Bill 1. CARB's 2019 Enforcement Report states: "*With a new program implemented in 2020 designed to automatically block registration of non-compliant trucks, pursuant to Senate Bill 1, we expect to see substantial improvement in compliance rates over the next several years*."

Since 2019, the District has been posting a compliance report (available here[61]) which contains inspections, complaint investigations and enforcement documents issued to facilities located in the Portside area. This report promotes transparency and engagement with community members. The District is enhancing its reporting tools to make data available in real-time.

Asbestos Inspections

Asbestos is a naturally occurring mineral fiber that is resistant to heat and fire and has been used extensively in building construction materials such as sprayed-on surface materials, pipe insulation, resilient floor tiles, and roofing materials. If not properly controlled, asbestos fibers can be released into the air when asbestos-containing materials are disturbed during building demolition or renovation activities. Inhalation of the airborne asbestos fibers can cause serious health problems including chronic lung disease and cancer. In fact, there is no known safe level of exposure to asbestos.

[61] Portside Community Compliance Information Report
https://www.sdapcd.org/content/dam/sdc/apcd/PDF/AB_617/Portside-Compliance-Information-Report.xlsx

In response to these health risks, in 1971 the U.S. Environmental Protection Agency (EPA) identified asbestos as a hazardous air pollutant and subsequently instituted a partial ban on its use, prohibiting the manufacture of certain products containing more than one percent asbestos. However, asbestos is still allowed in the manufacture of many construction materials today and even new buildings may contain asbestos-bearing materials. Therefore, federal and local requirements are in place to limit the public's exposure to asbestos fibers during renovation and demolition of buildings, regardless of their age.

Asbestos is federally regulated through the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Pursuant to the NESHAP, building materials that are suspected to contain asbestos must be sampled and laboratory tested prior to renovation or demolition activities. Laboratory testing is required because the presence of asbestos cannot be detected visually by the unaided eye and it may be excluded from safety data sheets under certain conditions. If identified, regulated asbestos-containing materials must be removed under controlled conditions prior to demolition or renovation activities so that asbestos fibers are not released into the air.

The federal regulation was administered locally by the District through Rules 361.140-361.156 (National Emissions Standards for Asbestos), adopted in 1995. In 2017, Rules 361.140-361.156 were repealed and the District adopted Rule 1206 to clearly define terms, better explain inspection and reporting requirements, clarify when a renovation or demolition is subject to the regulation, require the asbestos survey results to be readily available, and specify work practice requirements to limit asbestos exposure. Additionally, to better protect public health, the rule applicability threshold decreased from 160 square feet to 100 square feet of regulated asbestos-containing material to be removed. Figure 65 are examples of asbestos containment set-up and removal.

The District's asbestos program is essential to protect public health and enhance the quality of the environment by reducing exposure to hazardous air pollutant emissions. This program is even more critical in communities with older buildings and structures that have a higher probability of containing asbestos materials.

Figure 65 - Asbestos Removal

Local and federal regulations require notifications for certain projects involving asbestos. Between 2017 and 2019, the District received on average 1,000 notifications per year. Figure 66 and 67 show the number of asbestos inspections conducted in the County and Portside Community between 2017 and 2019.

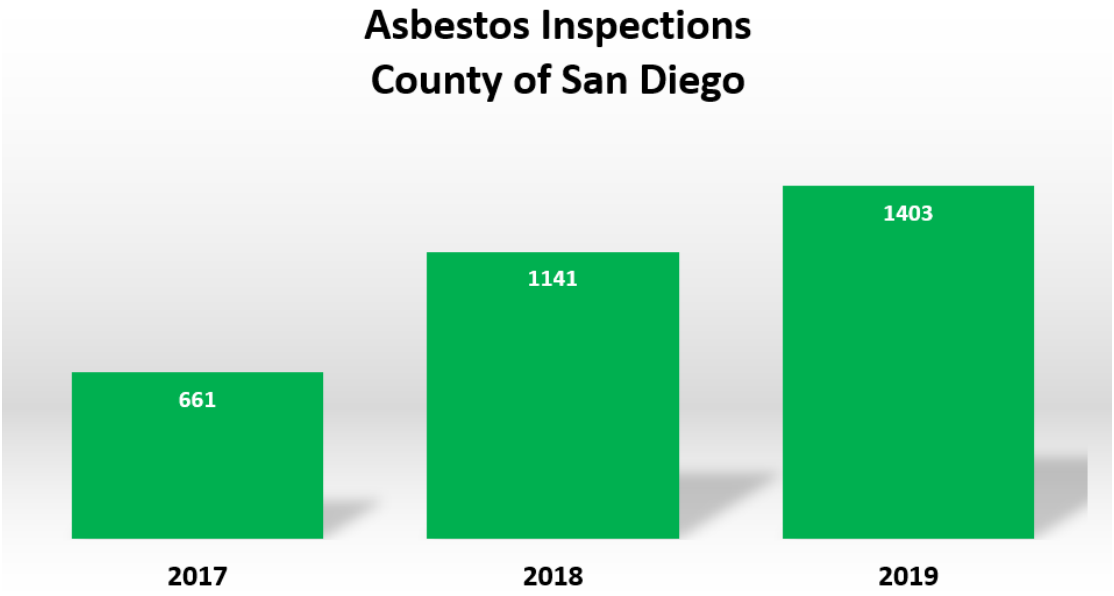

Figure 66 - Countywide Asbestos Inspections

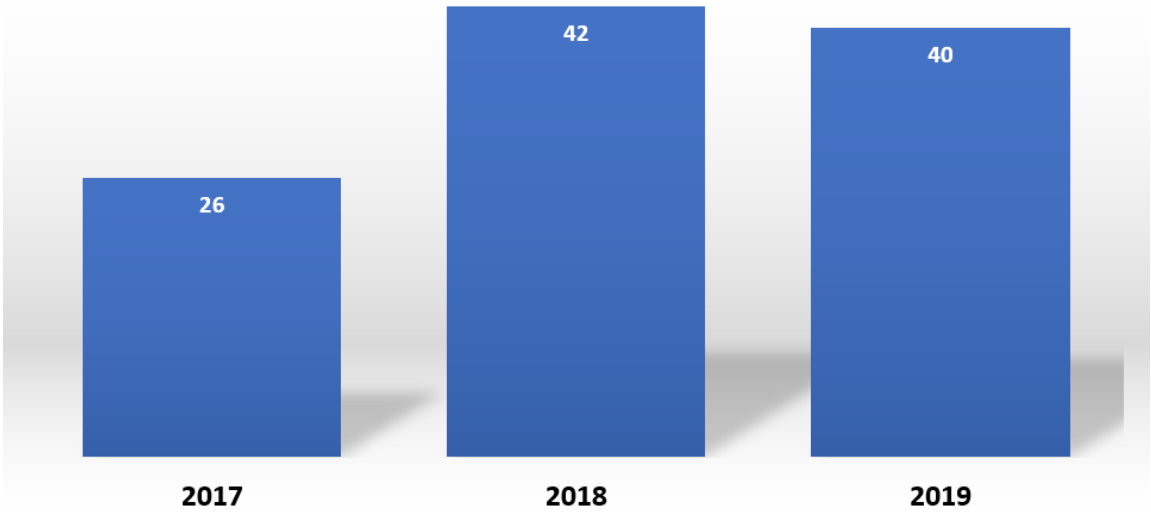

Figure 67 - Portside Asbestos Inspections

In 2019 the District purchased an asbestos analyzer (microPHAZIR) to test asbestos-containing materials in the field and consequently minimize exposure to asbestos fibers (Figure 68).

Figure 68 - microPHAZIR

Portable Equipment Registration Program (PERP)

The Portable Equipment Registration Program (PERP), as set in Title 13 California Code of Regulations (CCR), Chapter 9, Article 5, enables owners and operators of portable engines and other types of portable equipment to register their units under a single statewide PERP registration. The statewide registration allows equipment owners to operate portable equipment throughout California without having to obtain individual permits from local air districts.

The District enforces PERP regulations locally and Figures 69 and 70 show the number of inspections conducted in the County and in the Portside Community. The number of inspections fluctuates as it depends on the number of projects that can utilize PERP equipment.

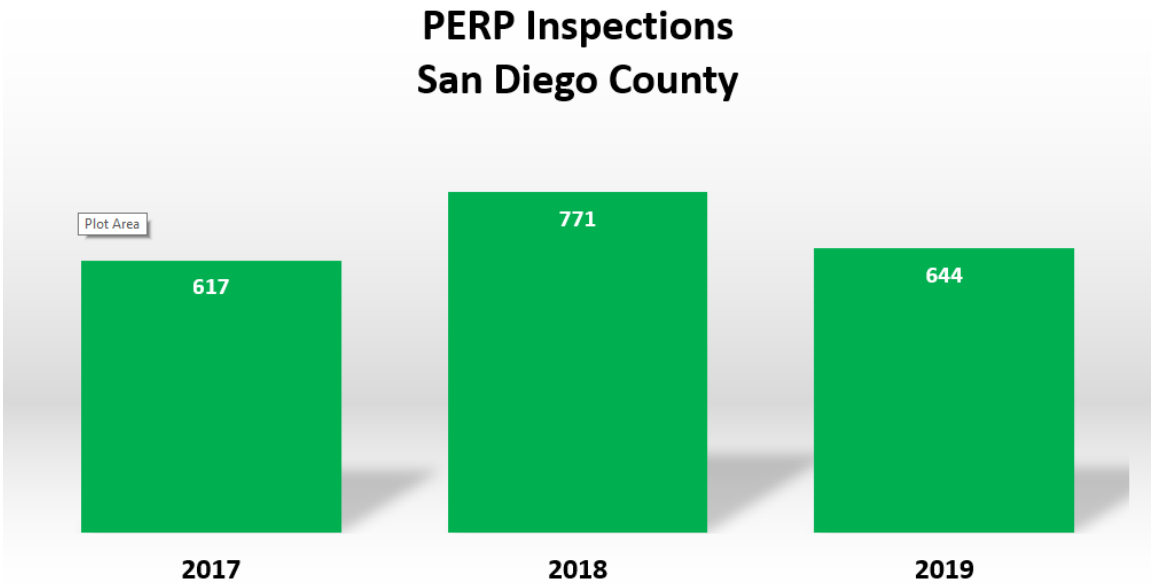

Figure 69 - Countywide PERP Inspections

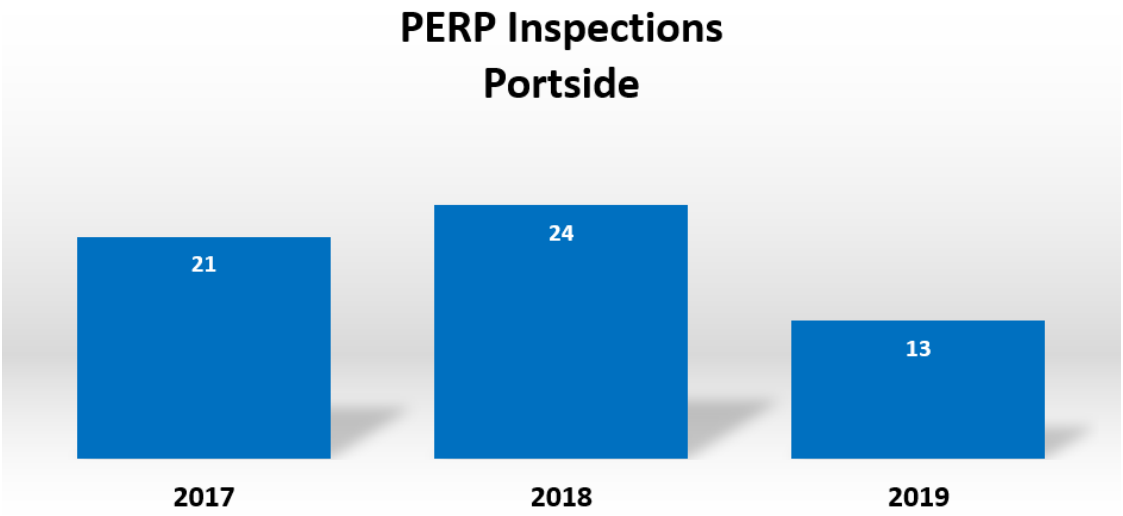

Figure 70 - Portside PERP Inspections

In addition to the PERP program, the District administers its own registration program under Rule 12.1 - Portable Equipment Registration adopted in 1997. This rule is equivalent to the PERP regulation in that it provides owners of portable engines and other specified equipment a voluntary mechanism to register their units without having to obtain a Permit to Operate for each location, but it only applies to equipment operated in San Diego County.

Air Quality Complaint Investigations

The District administers a program to receive and respond to air quality complaints submitted by members of

the public concerning emissions of air contaminants including smoke, dust, and odors. This program provides an effective mechanism to engage with members of the communities we serve and to determine compliance of District rules and regulations.

Complaints can be submitted to the District via the *Tell Us Now* mobile app (Figure 71), by phone (858-586-2650), or e-mail at apcdcomp@sdcounty.ca.gov. All services are available in English and Spanish.

Figure 71 - Tell Us Now App

On average, the District receives about 800 complaints annually. Figures 72 and 73 show the number of complaints received and the number of inspections conducted. The number of complaints is different than the number of complaint inspections as one inspection can address multiple complaint investigations. Conversely, some complaints require multiple investigations.

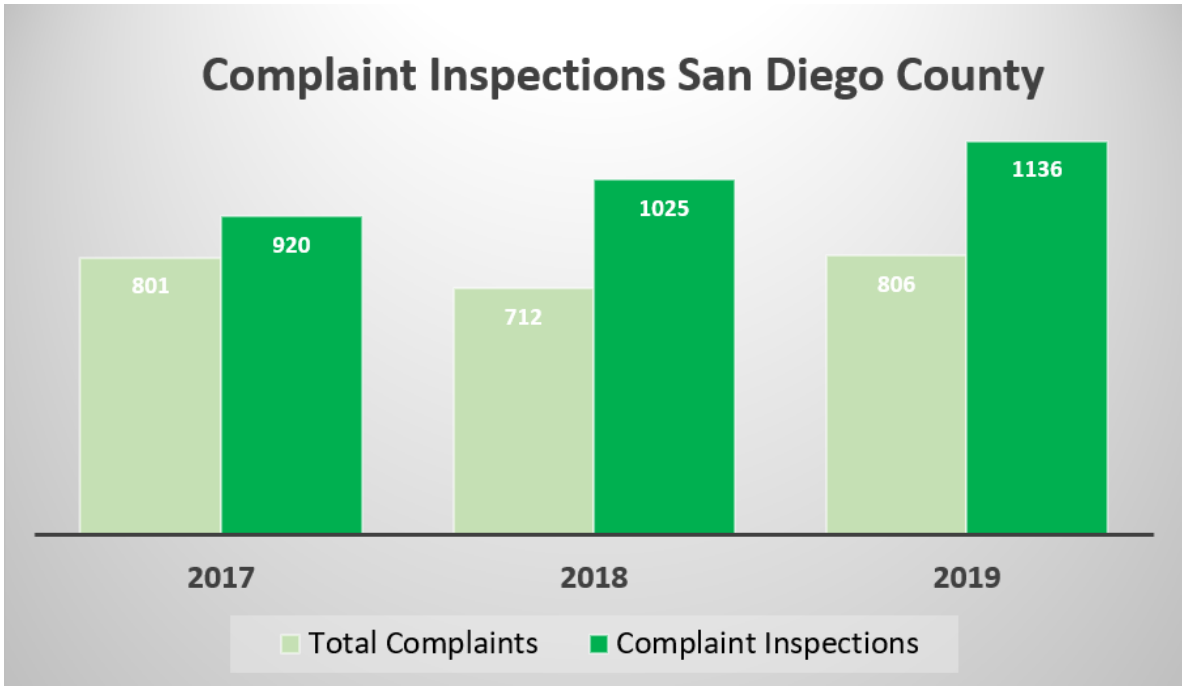

Figure 72 - Countywide Complaint Inspections

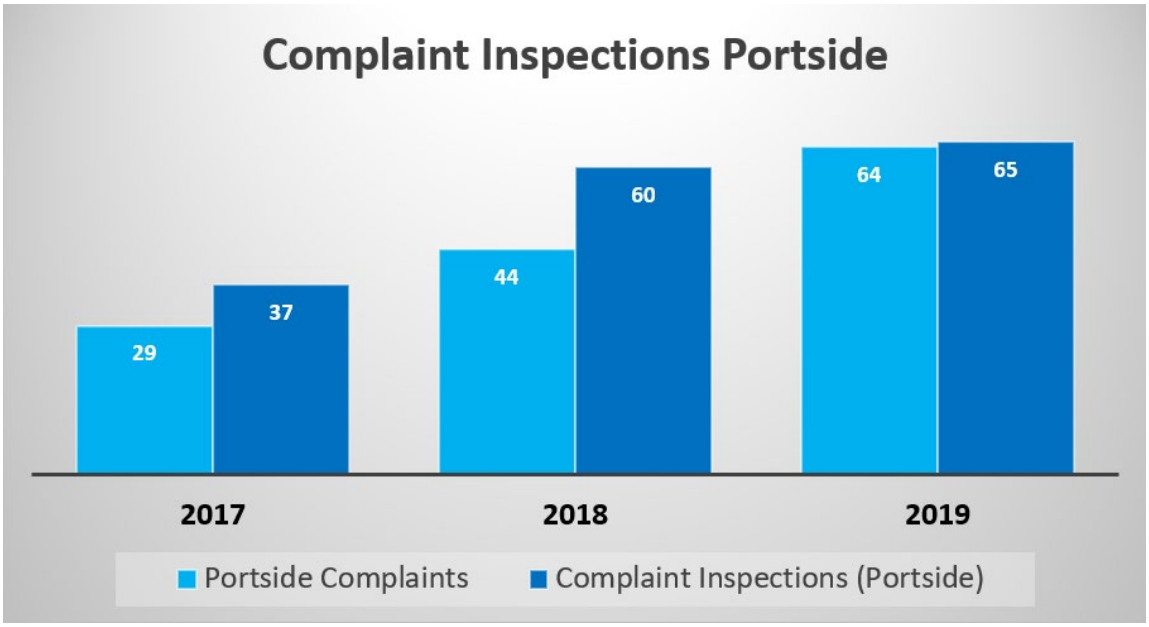

Figure 73 - Portside Complaint Inspections

Figure 74 shows the number of complaints from the Portside Community as it relates to the overall number of complaints. The District has enhanced its outreach efforts to further connect and serve the Portside Community. Part of this effort has been to explain the District's complaint program and provide information on how to submit a complaint. The number of complaints from the Portside Community has been increasing since the adoption of AB 617 in July 2017, doubling from 4 percent of countywide complaints to 8 percent.

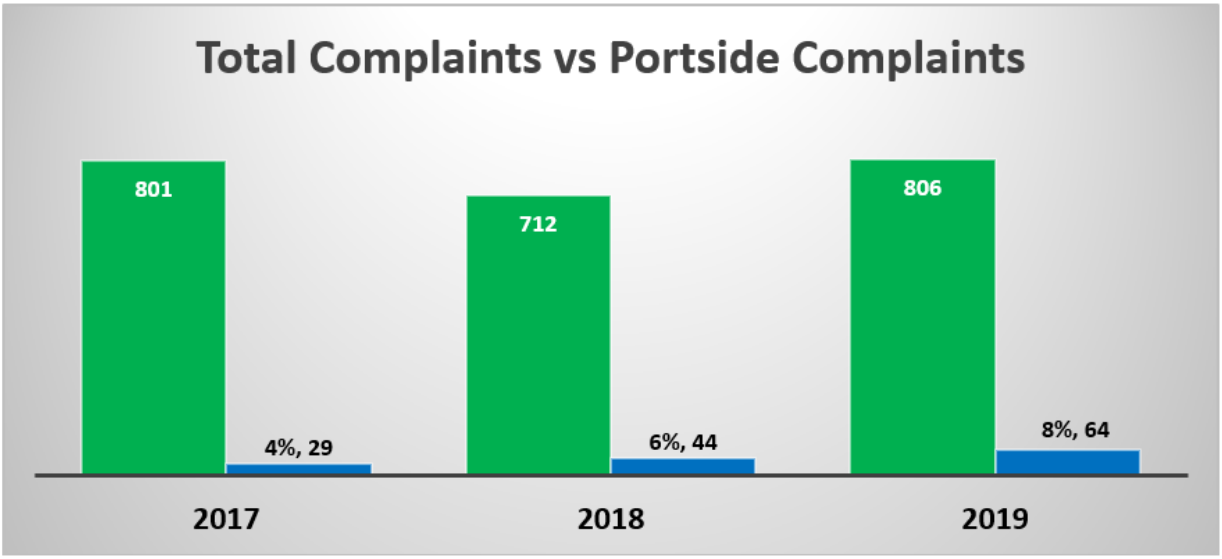

Figure 74 - Countywide vs Portside Complaints

The nature of complaints varies but overall, most complaints are related to smoke and odors. In the Portside Community, 25 percent of complaints are categorized as Other as compared to 8 percent countywide. Of the 25 percent, 44 percent are related to idling. Figures 75 and 76 show the nature of the complaints received between 2017 and 2019 countywide and the Portside area, respectively.

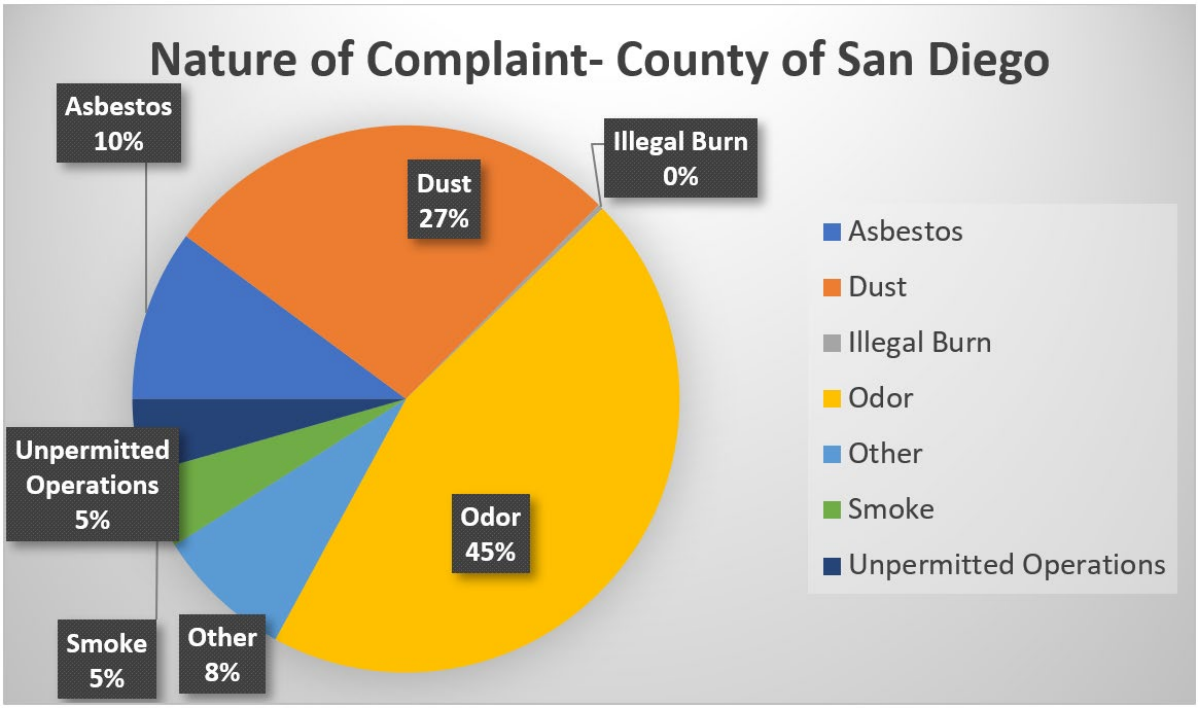

Figure 75 - Nature of Complaints Countywide

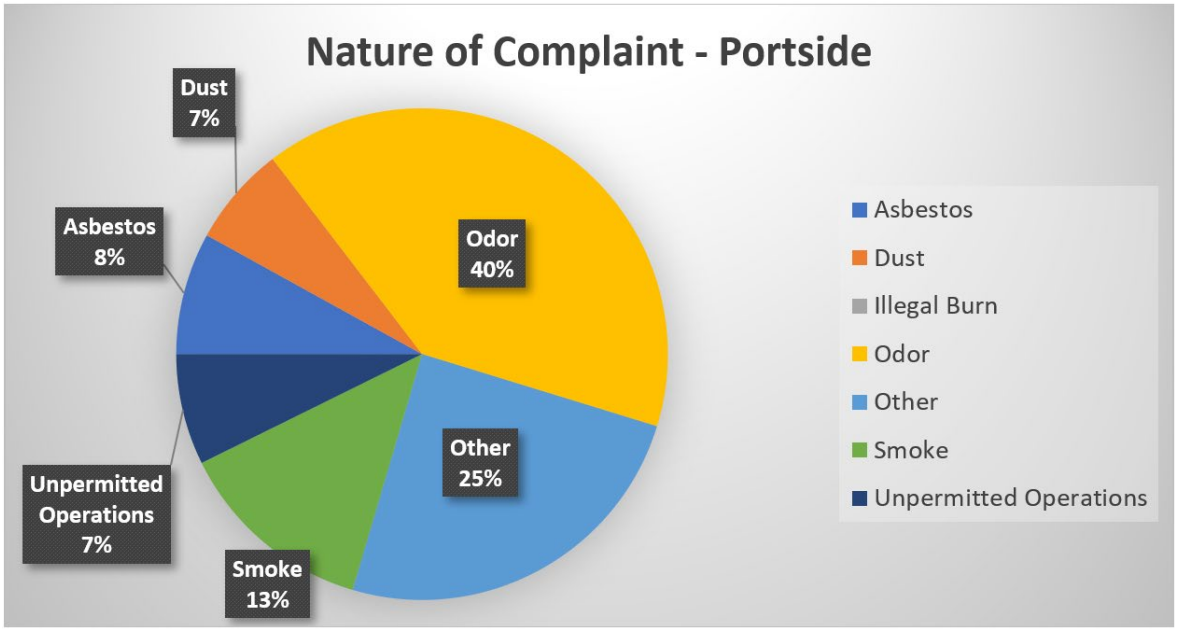

Figure 76 - Nature of Complaints Portside

The District takes complaint investigations seriously and prioritizes these investigations. As shown in Figures 77 and 78, the average response time has been less than a day.

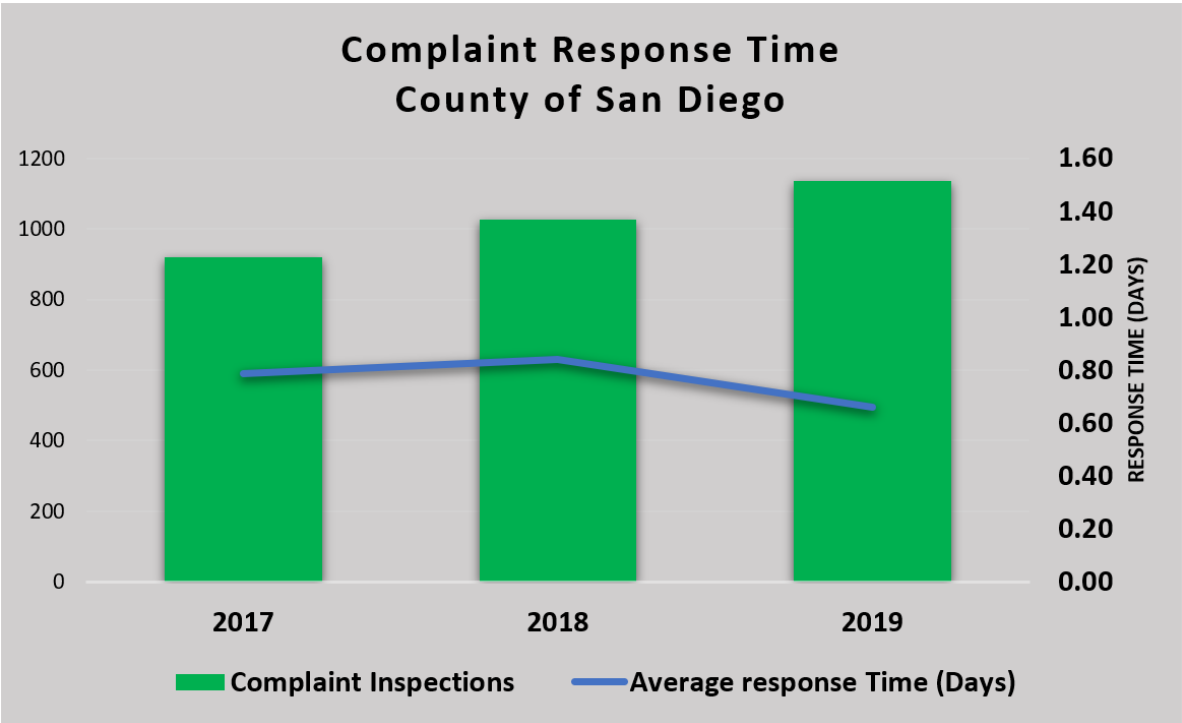

Figure 77 - Countywide Complaint Response Time

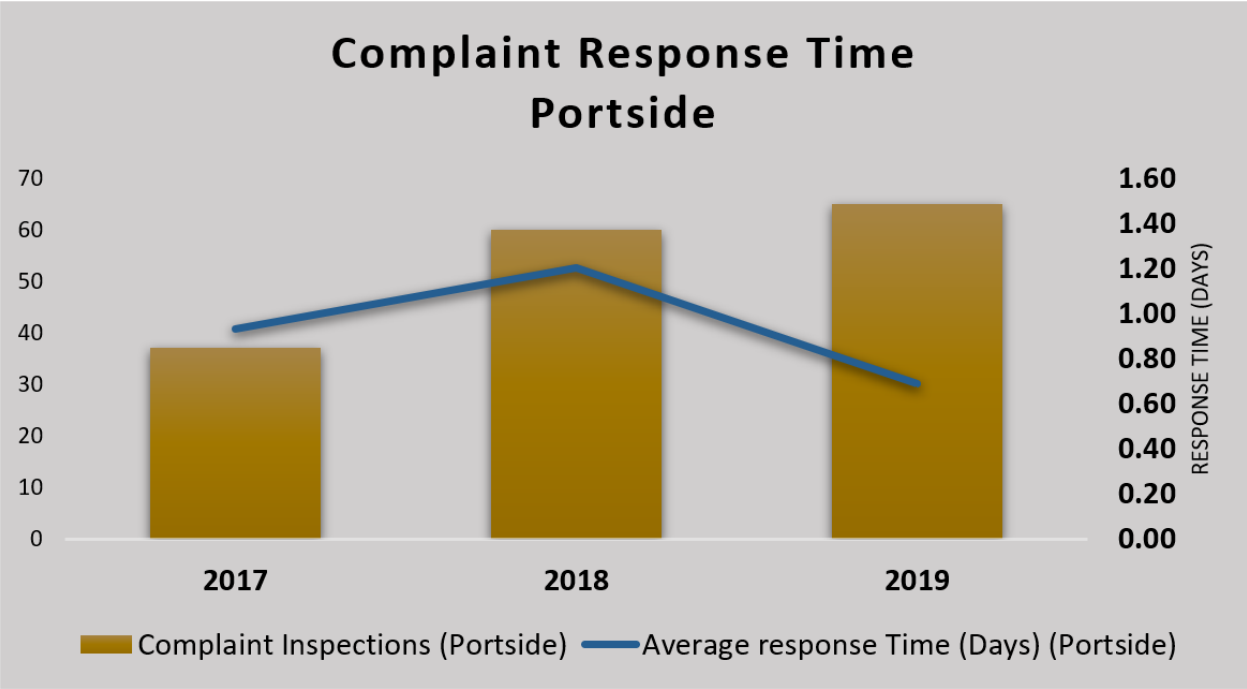

Figure 78 - Portside Complaint Response Time

The District is further enhancing and automating its complaint investigation program by developing systematic controls and reporting tools to make complaint related data including nature of complaint and resolution available to the public in real-time.

Enforcement Documents

The District's enforcement program is designed to deter non-compliance and assist the violator to come back into compliance.

When taking enforcement actions, the District uses one of the following documents to formally notify the entity of the violation:

- Notice to Comply (NTC) which is issued for minor violations in accordance with District Rule 6. Violations documented utilizing Notices to Comply do not result in monetary penalties if the entity corrects the deficiency in a timely manner.
- Notice of Violation (NOV) which formally identifies a violation of rules and/or regulations. NOV typically results in monetary penalties and may result in civil suit, or in serious cases, criminal prosecution.
- Mobile Source Citations (citations) are issued to document violations of regulations listed in the MOU between the District and CARB.

Figures 79- 86 provide data on the number of NOV, NTC, and citations issued between 2017 and 2019 and the amount of penalties collected.

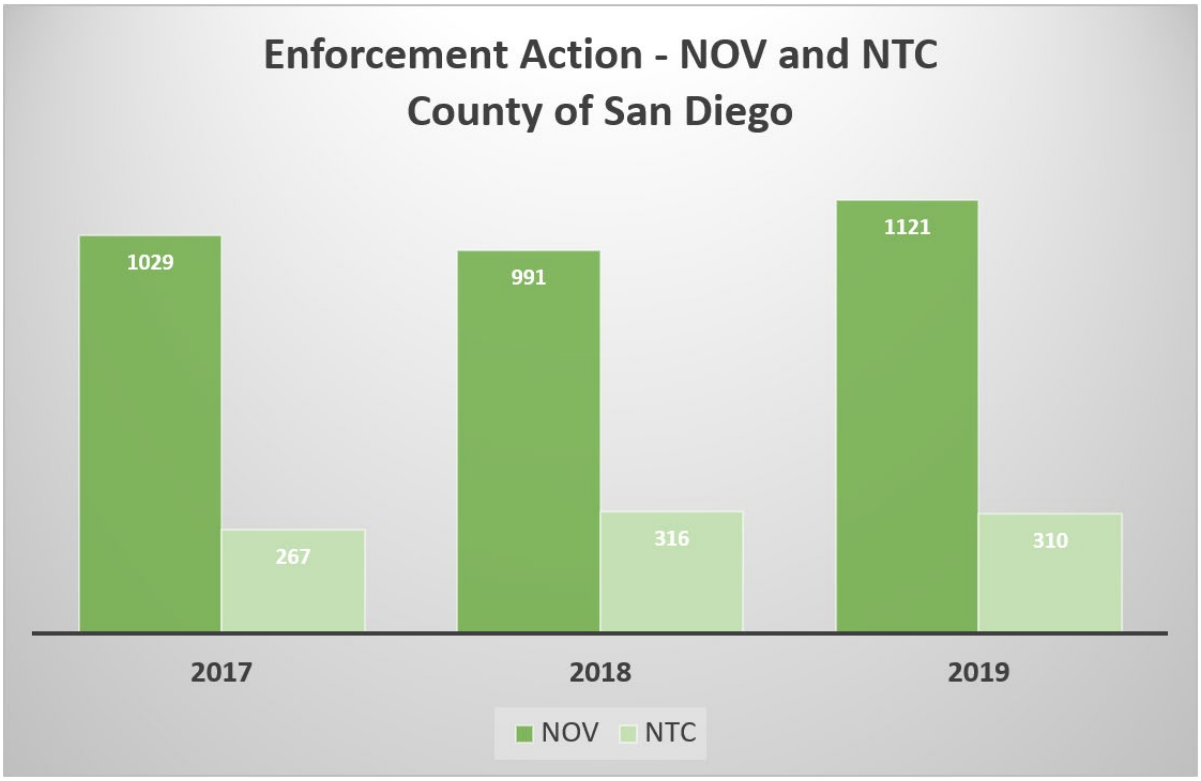

Figure 79 - Countywide Enforcement Actions 2017-2109

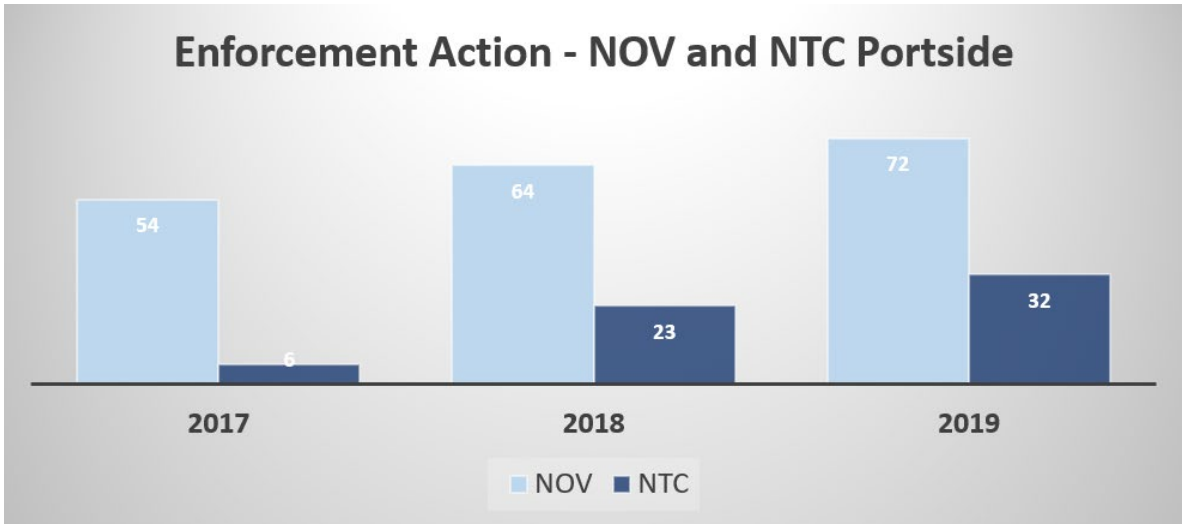

Figure 80 - Portside Enforcement Action

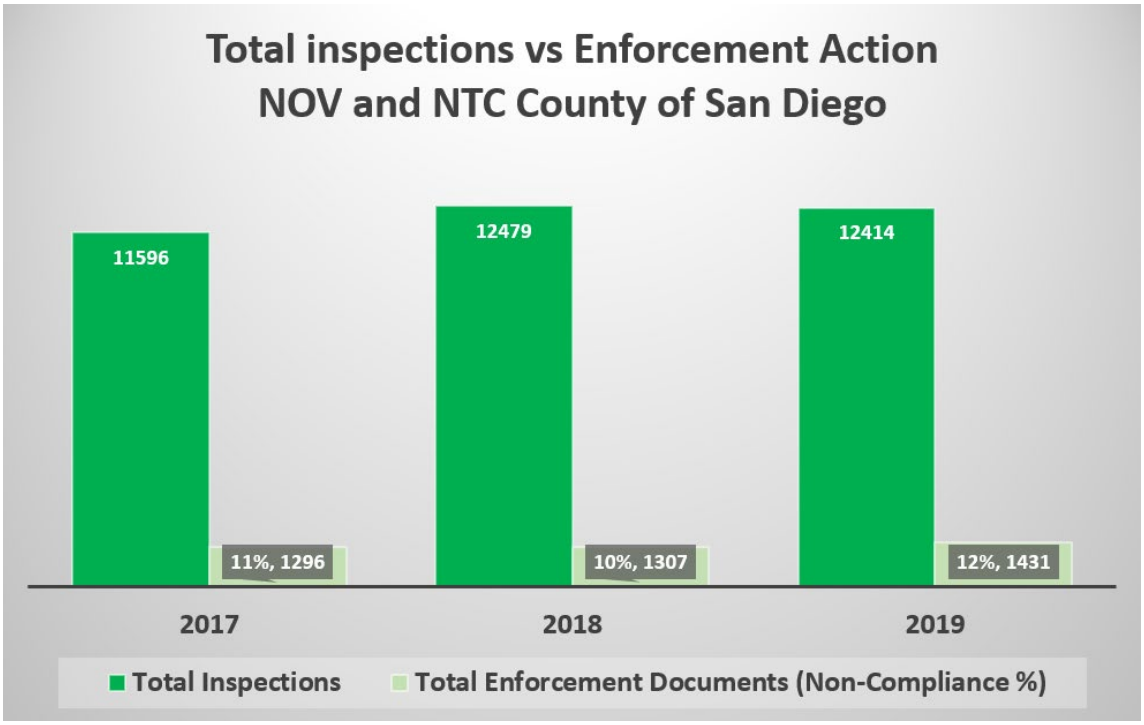

Figure 81 - Countywide Compliance Rates

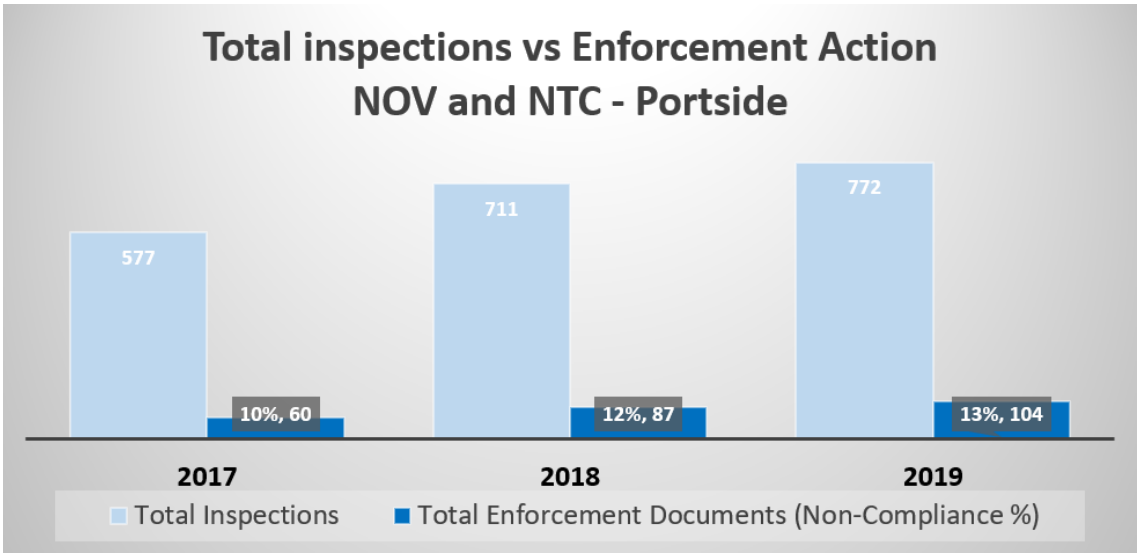

Figure 82 - Portside Compliance Rates

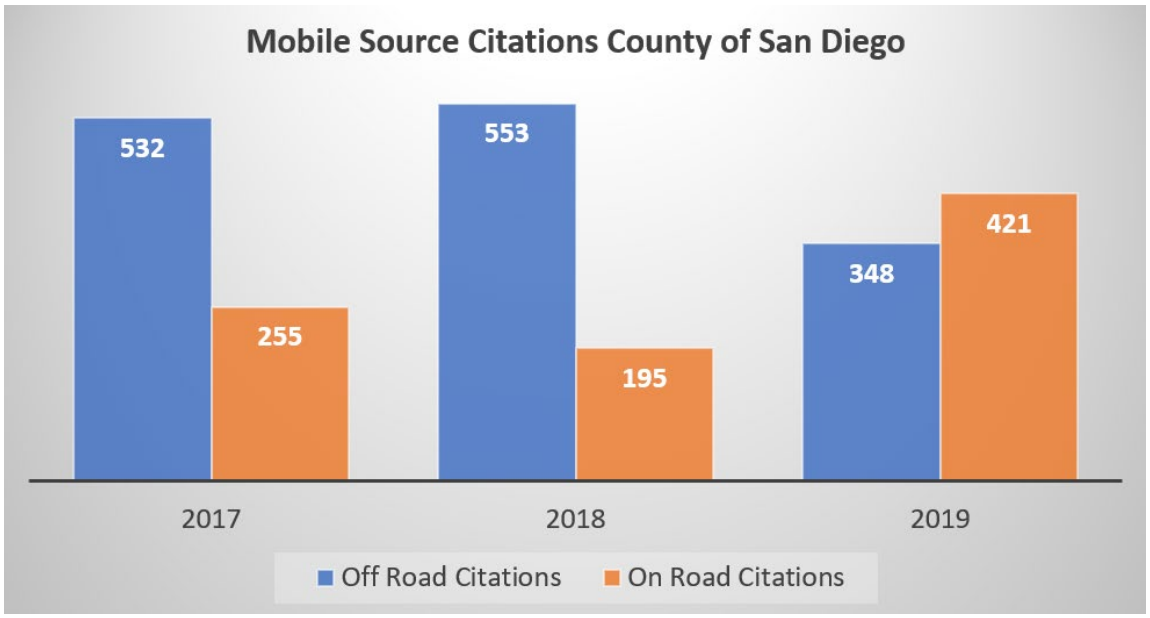

Figure 83 - Countywide Mobile Source Citations

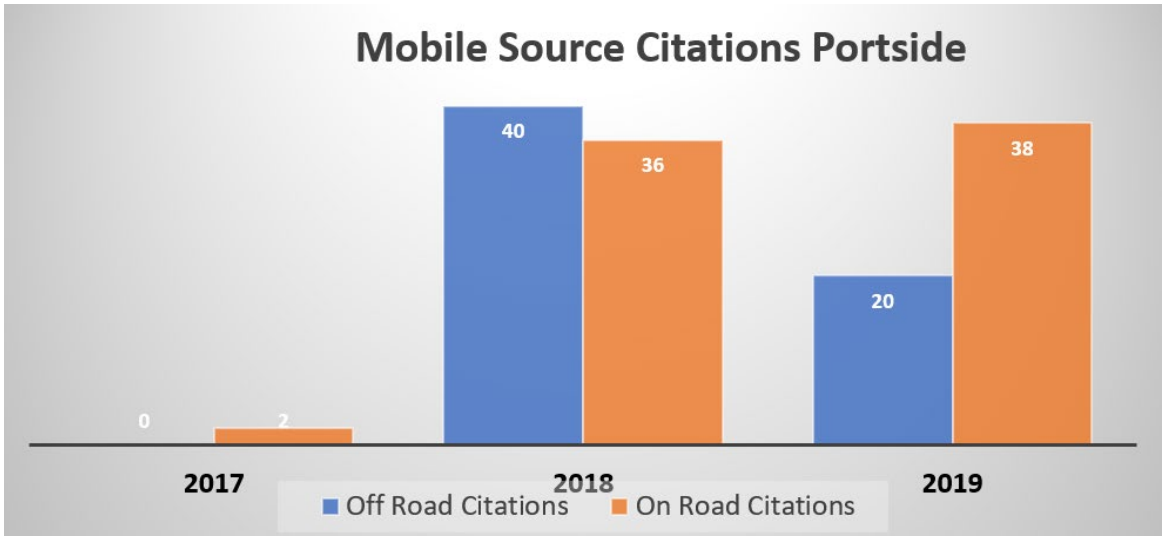

Figure 84 - Portside Mobile Source Citations

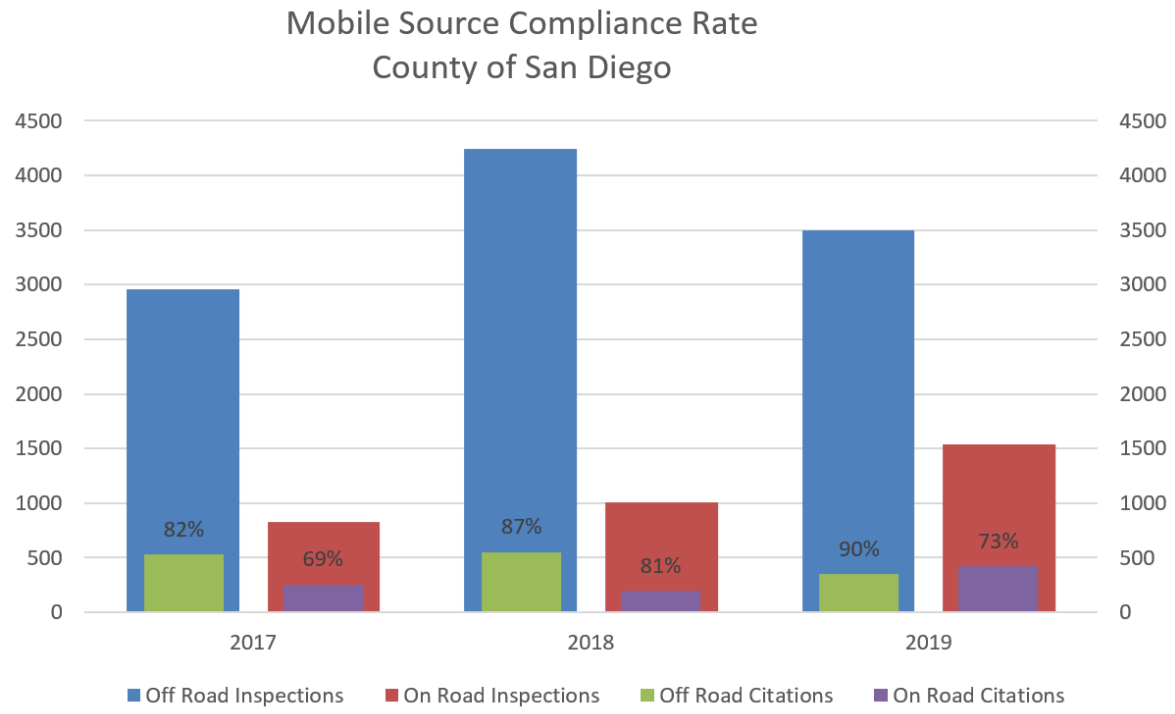

Figure 85 - Countywide Mobile Source Compliance Rate

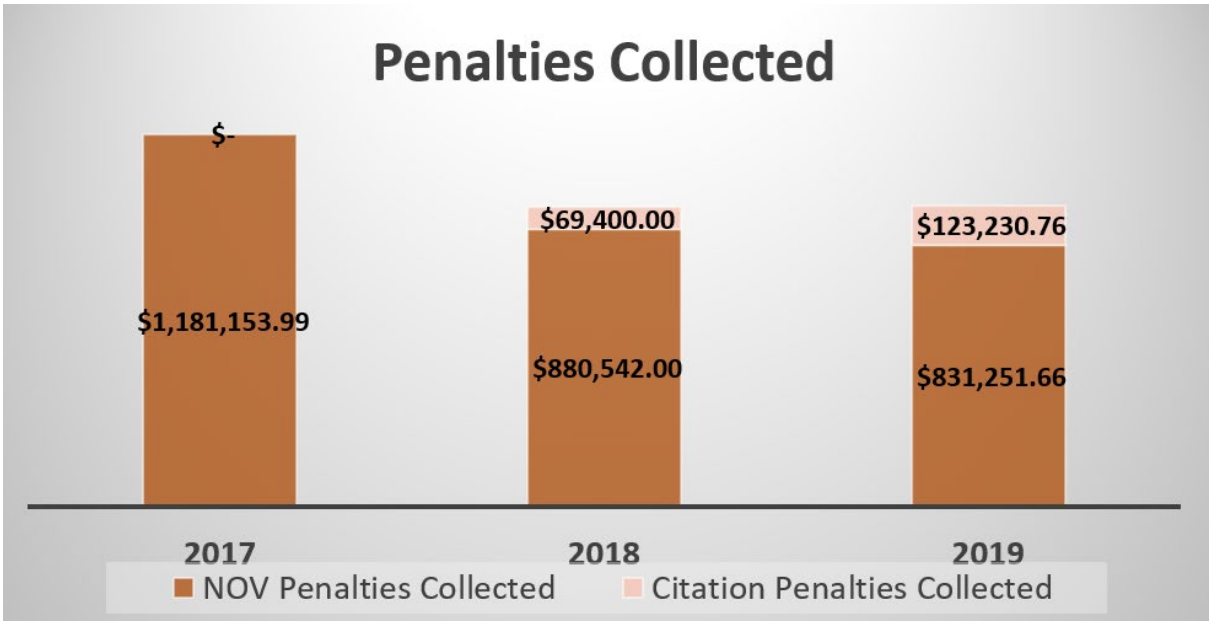

Figure 86 - Countywide Penalties Collected

Compliance Assistance

The District administers a compliance assistance program to provide training opportunities and general assistance to regulated entities. This program can prevent violations of APCD regulations and ensure a level playing field for all regulated entities as some facilities do not have access to environmental consultants or other

professionals who can explain regulatory requirements and provide general assistance.

Under this program, the District provides the following services:

- Provides training classes for mobile source and gas station operators as well as contractors that work on projects involving asbestos-containing materials. Other training opportunities are also provided on an as needed basis to address specific needs.
- Addresses general inquiries from the regulated community.
- Prepares compliance advisories.
- Provides templates for recordkeeping forms and emission calculations.
- Conducts courtesy inspections to prepare business for compliance inspections.
- Prepares training videos regarding various regulatory requirements.

Summary

The District is committed to continuing to expand and evolve its enforcement program to increase compliance rates, increase outreach efforts, which can prevent violations, and maximize compliance through deterrence, especially in disadvantaged communities. The District is working towards implementing systematic controls and enhancing its reporting tools to make enforcement and complaint data available in real-time to promote transparency and accountability in its enforcement programs. The District is also committed to further explore options for Supplemental Environmental Projects in addition to CARB's program in order to benefit communities impacted by air pollution.

CHAPTER 6
CARB ENFORCEMENT PLAN FOR PORTSIDE COMMUNITY

Chapter 6 – CARB Enforcement Plan for Portside Community

Introduction

AB 617[62] requires that Community Emissions Reduction Programs (CERPs) include an enforcement plan to ensure that San Diego County Air Pollution Control District (Air District) and the California Air Resources Board (CARB) enforcement efforts support reducing emissions and improving air quality and public health in the Portside Environmental Justice Neighborhoods community. This enforcement plan reviews three years of stationary and mobile source enforcement data to assess local air quality issues within the Portside Environmental Justice Neighborhoods boundaries.

Enforcement responsibilities for mobile sources are shared between CARB and the Air District. The Air District and CARB staff may conduct inspections of stationary and mobile sources jointly in Portside Environmental Justice Neighborhoods. Details on mobile sources regulation enforced by the District are in section II. Mobile sources.

Historical mobile source enforcement data is shared with the Portside Environmental Justice Neighborhoods community in this plan to help identify and affirm enforcement strategies and address community concerns related to CARB enforcement programs. The primary function of enforcement is to ensure compliance with air pollution control regulations and to minimize local and regional impacts from air pollution. This section explains CARB's enforcement authority over mobile sources.

Mobile Sources

CARB is the primary authority responsible for developing and enforcing regulations to control emissions from portable and mobile sources and consumer products in California, except in cases where federal law preempts CARB's authority. Although CARB has authority to regulate emissions from these sources, it does not have authority to enforce where vehicles drive or park.

Beginning in 2014, CARB and the Air District entered into a Memorandum of Understanding (MOU) that allows the San Diego Air Pollution Control District to enforce portable and mobile sources regulations. The MOU was amended and current version started implementation in 2017. Per this agreement, inspections and enforcement for the following sources may be conducted by both CARB and Air District staff:

- Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (California Code of Regulations, title 13, section 2485) (Commercial Vehicle Idling Regulation)
- Regulation for In-Use Off-Road Diesel Vehicles (California Code of Regulations, title 13, sections 2449, 2449.1, 2449.2, and 2449.3) (In-Use Construction Equipment Regulation)
- Heavy Duty Diesel Smoke Emission Testing and Heavy-Duty Vehicle Emission Control System Inspection (California Code of Regulations, title 13, sections 2180 through 2184) (HDVIP and ECL)

[62] (California Health and Safety Code § 44391.2(c)(3))

- Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate (California Code of Regulations, title 13, section 2477) (Transport Refrigeration Regulation)
- Regulation to Control Emissions from In-Use On-Road Diesel-Fueled Heavy-Duty Drayage Trucks" (California Code of Regulations, title 13, section 2027) (Drayage Truck Regulation).
- Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools" (California Code of Regulations, title 13, section 2480) (School Bus Idling Regulation)
- Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use On-Road Diesel-Fueled Vehicles" (Title 13, California Code of Regulations, Section 2025) (Statewide Truck and Bus Regulation)

CARB Statewide Enforcement Programs for Mobile Sources

CARB enforcement programs cover the vehicles we drive, the diesel engines that power our economy, consumer products that we purchase, and greenhouse gas (GHG) emissions from our industries and activities throughout the State. The goal of CARB enforcement programs is to achieve comprehensive compliance in every regulation the Board adopts. Through enforcement, CARB works to bring responsible parties into compliance, and in doing so, achieve a level playing field across industry so that no individual entity can benefit from non-compliance at the expense of another; and to deter industry from future violations.

CARB applies enforcement programs in accordance with the enforcement policy, which was updated in 2017. CARB uses data and inspections to identify potential non-compliance, and then investigates each case. Once a violation is identified, the responsible party is notified, and the situation is evaluated. CARB works with the responsible party to achieve compliance and measure the relevant facts and circumstances of each case, relative to the eight factors set in law and described in CARB's enforcement policy, to determine an appropriate penalty. The case is settled when the responsible party has achieved compliance and paid an appropriate penalty. If the case cannot be settled, CARB legal staff refer the case to California's Attorney General for litigation.

Field inspectors are a critical component of CARB's enforcement program. The inspectors work across the state to inspect trucks and other equipment for compliance with CARB's regulations. CARB inspectors examine equipment at numerous locations throughout California, such as at California Highway Patrol (CHP) scale facilities, warehouses, fleet yards, construction sites, random roadside locations, truck stops, rest areas, ports, and rail yards.

In addition, CARB has a Supplemental Environmental Project (SEP) Policy that allows community-based projects to be funded from a portion, up to 50 percent, of the penalties received during settlement of enforcement actions. SEPs can improve public health, reduce pollution, increase environmental compliance, and bring public awareness to neighborhoods most burdened by environmental harm. CARB Enforcement policy can be accessed at https://ww2.arb.ca.gov/resources/documents/supplemental-environmental-projects-policy

Enforcement Programs Descriptions

Heavy-Duty Diesel Vehicle (HDDV) Program Descriptions

Heavy-Duty Vehicle Inspection Program (HDVIP)

The HDVIP program requires inspection of heavy-duty trucks and buses for excessive smoke and tampering, and engine certification label compliance. Any heavy-duty vehicle traveling in California, including vehicles registered in other states and foreign countries may be tested. CARB inspection teams perform tests at border crossings, CHP weigh stations, fleet facilities, and randomly selected roadside locations. Owners of trucks and buses found in violation are subject to minimum penalties starting at $300 per violation and up to $1,000 a day.

Off-Road Construction Equipment (Off-road regulation)

Construction equipment is a major contributor to air pollution, especially when large construction projects are adjacent to neighborhoods. To address this source of air pollution, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. The off-road regulation requires off-road fleets to meet fleet average emission standards and be equipped with best available control technology (BACT).

The Tractor-Trailer Greenhouse Gas Regulation (Smart Way)

This regulation requires 53-foot or longer dry van or refrigerated van trailers and the tractors that pull them on California highways to use certain equipment that the U.S. EPA Smart Way program has verified or designated to meet their efficiency standards and reduce fuel consumption.

Solid Waste Collection Vehicles (SWCVs)

The Solid Waste Collection Vehicle regulation required vehicle owners to upgrade solid waste collection vehicles by December 31, 2010. On January 24, 2019, the Board approved amendments that now require reporting for SWCVs with 2006 model year and older engines to avoid unnecessary registration delays at the California Department of Motor Vehicles (DMV) starting in 2020 due to Senate Bill 1 requirements. The approved amendments also added heavy diesel-fueled on-road single engine cranes to the regulation and became effective on July 1, 2019. These specialized cranes are required to phase-in 2010 or newer model year engines from 2019 to 2027.

Transport Refrigeration Unit (TRU)

TRUs are refrigeration systems powered by diesel internal combustion engines designed to refrigerate or heat perishable products that are transported in various containers, including semi-trailers, truck vans, shipping containers, and rail cars. Because diesel particulate matter is an identified toxic air contaminant, CARB adopted an airborne toxic control measure (ATCM) for TRUs and TRU generator sets. CARB staff inspect TRUs to ensure that the units are meeting labeling and in-use performance standards identified in the TRU regulation.

Drayage

The Drayage Truck Regulation is part of CARB's ongoing efforts to reduce particulate matter (PM) and oxides of nitrogen (NOx) emissions from diesel-fueled engines and improve air quality associated with goods movement. Heavy-duty vehicles that carry goods to or from a port or intermodal facility are required to be equipped with a 2007 or newer model year engine. This requirement becomes stricter in 2023, when drayage

trucks are required to be equipped with a 2010 or newer model year engine, because drayage trucks will be required to meet the standards of the Statewide Truck and Bus regulation.

Statewide Truck and Bus (STB)

The Statewide Truck and Bus regulation requires diesel trucks with a gross vehicle weight rating (GVWR) greater than 14,000 pounds that operate in California to install diesel particulate filters, or replace older engines with cleaner engine technology, on a schedule based on the model year of the engine and GVWR, Figure 87. The following timeline outlines the engine requirements HDDV must meet to be in compliance with the regulation.

Idling

Idling and opacity inspections are performed to ensure an HDDV is compliant with emission standards and is not violating CARB's Idling regulation. Idling for more than five minutes is prohibited unless the HDDV is certified clean idle and the vehicle is more than 100 feet away from a school or restricted area (exceptions apply). Vehicle owners and drivers in violation are subject to minimum penalties starting at $300 per violation and up to $1000 per day.

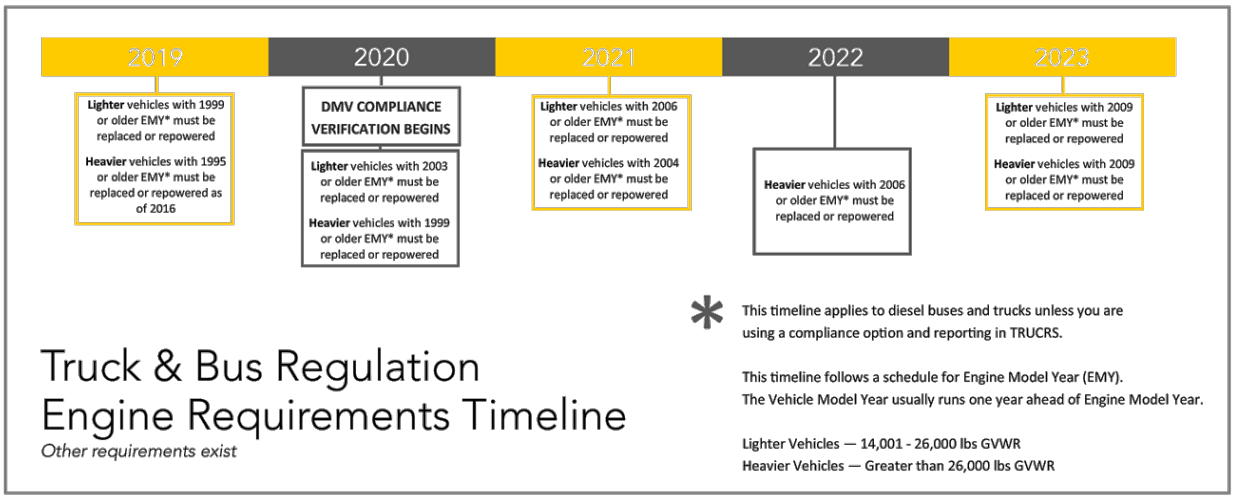

Figure 87 - Truck and Bus Regulation Engine Requirements Timeline

More information on CARB's Heavy-Duty Diesel Vehicle Programs is available at arb.ca.gov/truckstop.

Fuels Inspections

California's reformulated gasoline requirements are designed to reduce emissions from evaporation and the burning of gasoline, and Low Carbon Fuel Standard (LCFS) requirements are designed to reduce greenhouse gas (GHG) emissions by reducing the carbon content of fossil fuels. To enforce these programs, CARB staff conduct inspections and review reporting information. When CARB identifies a violation, staff pursue compliance through corrective action and through the issuance and settlement of Notice of Violations (NOV's).

Vehicles and Engines

The New Vehicle/Engine Programs evaluate the emission control systems of new vehicles, engines, and evaporative emission control systems produced for California. When all emissions related requirements are met,

CARB issues an Executive Order certifying the vehicle/engine/evaporative emission control system as compliant with California's emissions requirements. Vehicles and engines are not legal for sale in California until certified.

CARB Marine Enforcement Program Descriptions

Ocean Going Vessel (OGV) Fuels Regulation

This regulation is intended to reduce particulate matter, diesel particulate matter, oxides of nitrogen, and sulfur oxide emissions from ocean-going vessels. Such vessels are required to switch to a low sulfur distillate fuel within 24 nautical miles of the California coast.

At-Berth Regulation (Shore Power)

The purpose of the At-Berth Regulation is to reduce PM and NOx emissions from diesel auxiliary engines on container ships, passenger ships, and refrigerated-cargo ships while berthing at regulated California Ports.

Cargo Handling Equipment (CHE)

The Mobile Cargo Handling Equipment Regulation was adopted in 2005 to reduce toxic and criteria emissions such as diesel PM and NOx to protect public health. As part of CARB's continuing efforts to reduce emissions of air pollution in California, CARB staff conduct compliance inspections of CHE used at ports and intermodal rail yards. Cargo handling equipment transfers goods or perform maintenance and repair activities and includes equipment such as yard trucks, rubber-tired gantry cranes, top handlers, side handlers, forklifts, and loaders. CARB staff also conduct smoke audits on CHE at regulated facilities to insure equipment is maintained to manufacturer specifications.

Commercial Harbor Craft (CHC)

There are several types of harbor craft in California, including crew and supply boats, fishing vessels, ferries, excursion vessels, tug boats, barges, dredges, and other vessel types. The Commercial Harbor Craft Regulation was adopted in 2007 to reduce emissions of diesel particulate matter, oxides of nitrogen, and Reactive Organic Gases from diesel engines used on CHC operated in Regulated California Waters (within 24 nautical miles of the California coast).

Consumer Products Programs Description

Composite Wood Products

CARB's ATCM to control formaldehyde emissions from composite wood specifically focuses on three products: hardwood plywood, particleboard, and medium density fiberboard. Investigators in the Composite Wood Products program purchase samples of regulated products from outlets all over California. They inspect products and packaging for compliance with labeling requirements and send selected products to the laboratory for testing.

Consumer Products

Consumer products are chemically formulated products used by household and institutional consumers. Some examples are detergents, cleaning compounds; polishes, floor finishes; cosmetics and personal care products; home, lawn, and garden products; disinfectants and sanitizers; aerosol paints and automotive specialty products.

Consumer products do not include other paint products, furniture coatings, or architectural coatings. Investigators in the Consumer Products program purchase samples of regulated consumer products from outlets all over California. They inspect product containers for compliance with registration and dating requirements and send selected products to the laboratory for testing.

Complaints

Enforcement staff investigate tips about non-compliance and complaints about smoking vehicles and other sources of air pollution. Reporting potential violations of air quality requirements can provide important information for enforcement efforts. Although every complaint is followed-up on, it is important to note that not all complaints are actionable. This can be due to a lack of necessary information, such as a specific location, or contact information for CARB enforcement staff to obtain additional information. Public can submit complaints through CalEPA website https://calepa.ca.gov/enforcement/complaints/

CARB's Three-Year Enforcement History

CARB prepared a three-year retrospective review of enforcement activities in the Portside Environmental Justice Neighborhoods. The following sections contain a description of enforcement programs implemented in the community by CARB for years 2017 through 2019; this report includes compliance rate results for inspections conducted within a 0.5-mile buffer outside of the AB 617 Portside Environmental Justice Neighborhoods community boundary, specifically within 92113, 91950, and 92102 zip codes.

The inspection history includes several program inspections conducted in and around the Portside Environmental Justice Neighborhoods community. The maps shown in this section indicate the approximate locations and number of inspections conducted for mobile sources enforcement in the Portside Environmental Justice Neighborhoods Community in 2017, 2018 and 2019. The goal of the maps is to visually display the location of program inspections to help determine gaps in CARB enforcement activity as well as where enhanced enforcement is necessary to deter potential violators within the community.

CARB will work closely with the community steering committee to better determine areas of non-compliance within the Portside Environmental Justice Neighborhoods area. The high compliance rate observed in the three-year history may demonstrate the need for more targeted inspections to identify compliance issues.

Heavy-Duty Diesel Vehicles

Over the last three years, CARB has conducted 559 inspections on Heavy-Duty Diesel Vehicles (HDDV) within Portside Environmental Justice Neighborhoods. Table 7 represents a year-by-year breakdown of enforcement action for CARB HDDV programs in the community between 2017 and 2019 (inspections per year are program based and some occur concurrently).

These inspections occurred across six CARB HDDV enforcement programs. The programs not included in Table 7 are enforced by San Diego Air Pollution Control District and reported in the section titled Mobile Source Inspections, or there are no records of enforcement actions within the Portside Environmental Justice Neighborhoods area.

Table 13 - Enforcement History of Heavy-Duty Vehicles in Portside Environmental Justice Neighborhoods

Program	2017					2018					2019				
	Inspections	Compliant Units	Emission violations	Non-Emission violations	Compliance Rate	Inspections	Compliant Units	Emission violations	Non-Emission violations	Compliance Rate	Inspections	Compliant Units	Emission violations	Non-Emission violations	Compliance Rate
Drayage	-	-	-	-	-	1	1	0	0	100%	-	-	-	-	-
HDVIP	56	56	0	0	100 %	24	20	3	1	83%	24	16	4	4	67%
Off-Road	134	106	1	27	79%	12	9	0	3	75%	-	-	-	-	-
Smart Way	16	16	0	0	100 %	-	-	-	-	-	-	-	-	-	-
TRU	20	9	10	1	50%	6	6	0	0	100%	-	-	-	-	-
Truck & Bus	70	49	21	0	70%	50	40	10	0	80%	8	6	2	0	86%
Idling (commercial)	125	125	0	0	100%	9	9	0	0	100%	-	-	-	-	-
Off-road construction vehicles	1	1	0	0	100%	3	3	0	0	100%	-	-	-	-	-
Total	**422**	**362**	**32**	**28**	**86%**	**105**	**88**	**13**	**4**	**91%**	**32**	**22**	**6**	**4**	**77%**

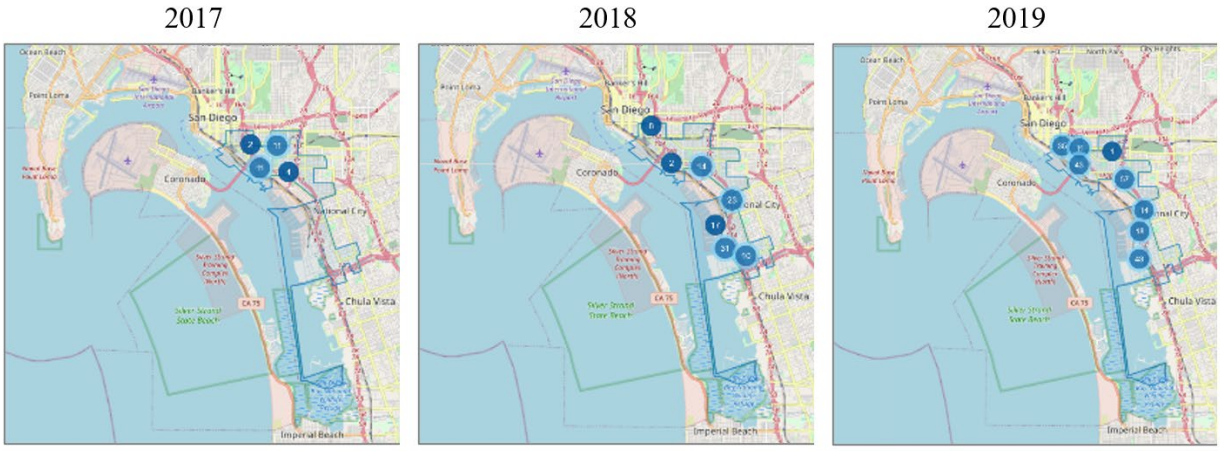

Figure 88 - CARB Heavy-Duty Vehicle Program Inspection Locations (2017-2019)

Preliminary analysis of Heavy-Duty Vehicle program inspections suggests that the compliance rate within the Portside Environmental Justice Neighborhoods community is high. For a breakdown of violations per CARB enforcement program see Table 7, *Enforcement History of Heavy-Duty Vehicles in the Portside Environmental Justice Neighborhoods*, from 2017-2019.

Overall, based on field inspections, Heavy-Duty Vehicle programs have more than a 75 percent compliance rate when averaged over a three-year period. For inspection locations reference see Figure 88, *CARB Heavy-Duty Vehicle Program inspection locations* (2017-2019).

During the baseline three-year period, 87 citations were issued to Heavy-Duty Vehicles within the Portside Environmental Justice Neighborhoods community. Further breakdown of the citations data indicates that 51 citations were issued for emission violations and 36 citations were issued for non-emission violations. Note that the difference between emission and non-emission violations (citations) is that emission violations contribute to air pollution while non-emissions violations do not. An example of a non-emission violation would be a truck not complying with labeling requirements.

CARB is working to compile information on the resolution of violations issued in Portside Environmental Justice Neighborhoods and will provide this data to the community steering committee as it becomes available.

Truck and Bus Regulation, Senate Bill 1

In response to the regulation, CARB began a streamlined enforcement process to increase outreach to owners of heavy-duty diesel trucks and buses and provide an opportunity for vehicle owners to demonstrate compliance. Those with older vehicle models that could potentially be out of compliance were sent Notices of Non-Compliance (NC) and Notices of Violation (NOV) letters from 2018 through 2019. In the last quarter of 2019, CARB began sending warning letters to fleet owners who appeared to have vehicles that could potentially be out of compliance beginning January 1, 2020.

In 2018 and 2019, CARB identified 287 heavy-duty diesel vehicles in the Portside Environmental Justice Neighborhoods within the zip codes of the AB 617 community (91950, 92102, and 92113). CARB issued 215 warning letters and 72 NC and NOV letters to vehicles within the AB 617 community boundaries, see Table 8. Out of the 72 NCs or NOVs sent for vehicles, 17 units demonstrated compliance and 52 units were subject to registration holds by the DMV. The remaining three vehicles could be deactivated, no longer owned by the fleet, have been sold out of state, be are owned by a different fleet in state, or determined to not subject to the regulation.

Table 14 - Summary of letters sent under SB1 (2018-2019) in the Portside Environmental Justice Neighborhoods

Type of Letter	Number of Letters Sent
Warning letters	215
NC and NOV letters	72
Total	**287**

Beginning in 2020, HDDV owners are required to show proof of compliance with the Truck and Bus Regulation to the DMV with their vehicle registrations, or their registration will be denied. Starting January 1, 2020, and continuing through December 31, 2023, trucks and buses that are not in compliance with the Truck and Bus regulation will be removed from the road via registration holds through the DMV, so that by the end of 2023, 100 percent of Trucks and Buses subject to the rule will be in compliance. The 215 vehicle owners who received warning letters are required to show proof of compliance, otherwise they will not receive 2020 registrations.

Fuels Enforcement Program

In 2019, CARB conducted 167 fuel inspections in California, of which four gasoline samples were found to be

non-compliant. There were no violations for diesel, ethanol or racing fuels. Overall, for the State of California, CARB determined a compliance rate of 98 percent in 2019.

CARB conducted a total of 47 fuels inspections in the Portside Environmental Justice Neighborhoods during the 2017-2019 period with an outcome of 100percent compliance rate. Portside Environmental Justice Neighborhoods benefits from the fuel inspections and audits that take place in the surrounding area as fuel is distributed to service stations in San Diego. Table 9 provides detail on the inspections conducted per year and per fuel type in the Portside Environmental Justice Neighborhoods. See Figure 89 for inspections spatial distribution in within AB 617 boundaries.

Table 15 - Enforcement History of Fuels Program Inspections in Portside Environmental Justice Neighborhoods

Fuel	2017			2018			2019		
	Inspections	Violations	Compliance Rate	Inspections	Violations	Compliance Rate	Inspections	Violations	Compliance Rate
Ethanol	-	-	-	2	0	100%	4	0	100%
Gas	20	0	100%	6	0	100%	11	0	100%
Diesel	3	0	100%	1	0	100%	2	0	100%
Total	23	0	100%	7	0	100%	17	0	100%

Figure 89 - CARB Fuels Program Inspection Locations (2017-2019)

Vehicles and Engines

CARB is responsible for evaluating the emission control systems of new vehicles and engines, and evaporative emission control systems of engine-equipped devices. When CARB finds that the vehicle/engine/evaporative emission control system complies with all of California's emission standards and emissions-related requirements, the vehicle/engine/evaporative emission control system may operate in California.

CARB conducted 13 Vehicles and Engines inspections in the Portside Environmental Justice Neighborhoods during the 2017-2019 period. There is a high compliance rate above 95 percent average over the three-year

period. Table 10 provides detail on the inspections conducted per year and per program type in the Portside Environmental Justice Neighborhoods. See Figure 90 for inspections spatial distribution in within AB 617 boundaries.

Table 1 - Enforcement History of Vehicles & Engines

	2017			2018			2019		
Program	Inspections	Violations	Compliance Rate	Inspections	Violations	Compliance Rate	Inspections	Violations	Compliance Rate
49 State	1	0	100%	1	0	100%	3	1	67%
Dealer and Fleet Tampering				1	0	100%	6	0	100%
R134A							1	0	100%
Total	1	0	100%	2	0	100%	10	1	90%

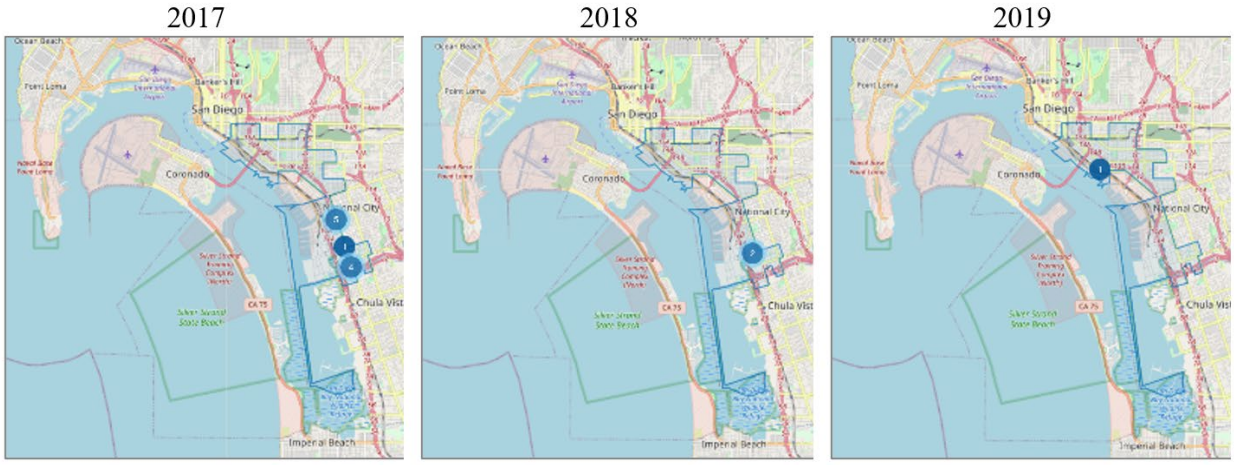

Figure 90 - CARB Vehicles and Engines Inspection Locations (2017-2019)

Marine Enforcement

From 2017-2019 CARB staff performed at least 241 inspections for marine regulation enforcement in the Portside Environmental Justice Neighborhoods. Analysis of the enforcement data for inspection activities in the Portside Environmental Justice Neighborhoods suggests that there is a high compliance rate and an increase in the number of inspections conducted, see Table 11. Figure 91 indicates the approximate location and number of inspections in the above-mentioned Marine program areas in the Portside Environmental Justice Neighborhoods Community from 2017-2019.

Table 17 - Marine Enforcement History (2017-2019)

	2017			2018			2019		
Program	Total Inspections/ Audits	Compliance Rate	Violations	Total Inspections	Compliance Rate	Violations	Total Inspections	Compliance Rate	Violations
Cargo Handling Equipment	21	100%	0	3	100%	0			
Commercial Harbor Craft	7	100%	0	4	100%	0	12	100%	0
Ocean Going Vessels	7	100%	0	86	100%	0	95	98%	2
Shore Power	3*	100%	0	3	100%	0			
Total	38	100%	0	96	100%	0	107	98%	2

*Shorepower are fleet audits. Each audit is a separate fleet making up multiple vessel visits throughout the year.

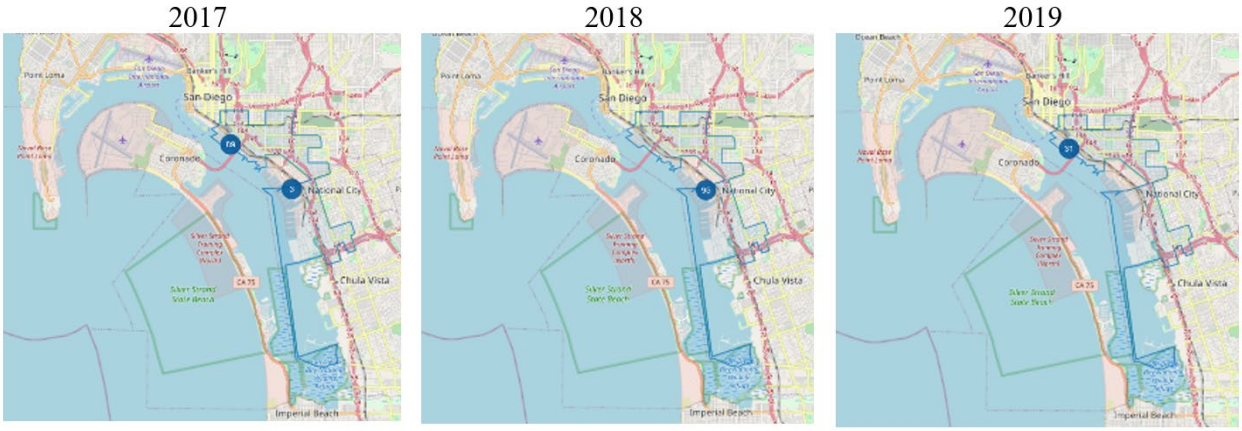

Figure 91 - Marine Inspection Locations

Consumer Products

Consumer product inspections are an important regulatory tool to improve public health in the community. Consumer products, such as hairsprays, deodorants and flooring, are widely used, but can be sources of toxic air containments (TACs) and volatile organic compounds (VOC) that community members willingly bring into their homes. As these products are often used throughout the state of California, compliance in one location affects communities across the state. Table 12 shows data for Consumer Products enforcement activities conducted statewide over the three-year enforcement history used as baseline for this enforcement plan. A total of 1,883 inspections were conducted statewide, a high percentage of cases were found to be in compliance. There is no record of Consumer Products enforcement activities conducted within the Portside Environmental Justice Neighborhoods Community boundaries for the 2017-2019 period.

Table 18 - Consumer Products (Statewide) Enforcement History (2017-2019)

Table 18 - Consumer Products (Statewide) Enforcement History (2017-2019)

Table 18 – Consumer Products (Statewide) Enforcement History (2017-2019)

	2017				2018				2019			
Program	Inspections	Compliant	Non-compliant	Investigations	Inspections	Compliant	Non-compliant	Investigations	Inspections	Compliant	Non-compliant	Investigations
Aerosol Coatings	7	1	5	1	72	21	19	32	39	0	0	39
Antiperspirant/ Deodorants	5	0	0	5	19	7	4	8	11	3	0	8
Composite Wood	80	59	10	11	11	0	1	10	29	0	0	29
Consumer Products	514	417	32	65	590	415	32	143	506	87	9	410
Total	**606**	**482**	**47**	**82**	**692**	**443**	**56**	**193**	**585**	**90**	**9**	**486**

Settlements

This section presents an overview of settlement agreements reached between companies and CARB for violations to listed regulations in the Portside Environmental Justice Neighborhoods. In 2015, one company was found to be out of compliance with the requirements of the Cargo Handling Equipment Regulation and a settlement was reached in 2017. As a result of this settlement a total of $118,125.00 was collected in fines due to the violation, from which $59, 063.00 went to the Air Pollution Control Fund, and $59,062.00 was allocated to fund the School Bus Diesel Emission Reduction SEP. For further details on these cases, please visit https://ww2.arb.ca.gov/cemex-construction-materials-pacific-llc-case-settlement

Complaints

In 2019, CARB received three diesel complaints through CARB's complaint reporting system for Truck & Bus regulations, and no actionable complaints through CalEPA reporting system within the Portside Environmental Justice Neighborhoods. CARB referred received complaints to the appropriate section in a timely manner.

To increase the effectiveness of the complaint program, CARB Enforcement has developed a training to offer to the communities further described in the Enforcement Goals and Strategies section. CARB has recently begun to track all complaints through the California Environmental Protection Agency Complaint Reporting system. This will allow CARB staff to better track complaints by community and to see the resolution of the complaint. Furthermore, this process will enhance CARB's complaint response by encouraging better complaint referrals (e.g. referring complaints to the proper agency and/or identifying complaints that may require multiple agencies to be involved in their resolution).

CARB Border Enforcement Activities

CARB conducts enforcement activities that include inspections for various programs and regulations in the border area. This is relevant to Portside Neighborhoods based on proximity to community boundaries, and truck routes that travel through freeways near the area. Table 13, Enforcement Activities in San Diego Border Area, shows a list of regulations enforced and high compliance rates for the three-year period 2017-2019 within

approximately 10 miles from the U.S. border with Mexico, Otay Mesa border cross. Details on inspections, enforcement activities and locations are available at https://webmaps.arb.ca.gov/edvs/

Table 2 - Enforcement Activities in San Diego Border Area

Program	Inspection locations	Inspections	In Compliance	Compliance
Heavy Duty Vehicles	114	3726	3227	87%
Fuels	3	59	59	100%
Consumer products	4	18	17	94%
Vehicles and engines	19	20	20	100%
Case settlements	8	10 cases	N/A	N/A

CARB Enforcement Potential Strategies

The Air District and CARB recognize that enhancing enforcement is a top priority for the Portside Environmental Justice Neighborhoods and intends to implement enforcement strategies, programs and policies in addition to the existing, ongoing enforcement activities to help improve air quality and penalize non-compliance in the Portside Community:

CARB acknowledges that the high compliance rates identified in the enforcement history may not necessarily reflect compliance across the community. In cases where enhanced enforcement activities uncover non-compliance issues, CARB's goal will be to achieve the same or higher compliance rates as observed in the three-year history.

CARB staff will also work closely with the community steering committee (CSC), the Air District, and other agencies (e.g. City of San Diego, Port of San Diego, etc.) to address gaps in the enforcement of mobile sources and seek opportunities to close these gaps.

To support achieving these goals, CARB is committed to enhancing enforcement activities within Portside Environmental Justice Neighborhoods by utilizing the following tools:

- An assessment of the enforcement history data
- Targeting areas that may require additional enforcement with guidance from the community steering committee

CARB will utilize current regulations and enforcement programs across all sources CARB regulates to target areas of non-compliance within the Portside Community. In addition, CARB and Air District staff will use the above-referenced tools to continue coordination on enforcement of mobile source rules and regulations in and around the community. This coordination is in part due to CARB and the APCD's MOU and the APCD's Mobile Source Compliance Plan, which lays out a comprehensive strategy for enforcement of specific regulations. CARB and APCD will explore opportunities to expand the use of MOUs to enforce additional regulations.

Listed below are CARB's enforcement strategies to help improve air quality and enhance enforcement in the Portside Community:

1. Coordinate and conduct inspections of stationary sources with APCD staff

   CARB will coordinate with APCD staff and will select, based on the community steering committee input, stationary sources for joint inspections. CARB is also committed to assisting APCD staff with compliance inspections of unpermitted sources identified by the community steering committee.

2. Achieve compliance with the Truck and Bus Regulation via Senate Bill 1

   In April 2017, the Governor signed Senate Bill 1 (SB 1) into law, which included a provision that, beginning in 2020, a vehicle must demonstrate compliance with the STB regulation before it can be registered with the Department of Motor Vehicles (DMV). In 2020, DMV started vehicle registration denial for non-compliant units based on information provided by CARB for the HDVs model year.

3. Provide Annual Report of Enforcement Activities

   CARB's Enforcement Division will provide an annual report to the CSC to summarize CARB's enforcement activities within the community and update strategies as required.

4. Coordinate with other agencies

   CARB will seek opportunities to coordinate with other agencies with enforcement authority in the Portside Community, including but not limited to the City and San Diego and Port of San Diego.

5. Enhance CARB's Data Management Practices

   CARB is committed to enhancing the quality of enforcement data for the Portside Community. Moving forward, CARB will maintain the location of enforcement activity and received complaints to provide the community steering committee with the most accurate data available. CARB has recently launched a visualization tool that makes CARB enforcement data more transparent and available. CARB's visualization tool provides access to community specific enforcement data and is publicly available online by visiting https://webmaps.arb.ca.gov/edvs/.

6. Provide in-person community specific training

   CARB will develop and offer training opportunities to the Portside Community. Information will cover topics like the fundamentals of enforcement, how the enforcement process works, instructions on filing a thorough complaint, and what to expect from the enforcement process after filing a complaint. Through this program, community members will be able to better support CARB or air district enforcement processes. CARB will also develop online trainings in the future.

7. Update enforcement strategies as applicable

   CARB staff are committed to updating enforcement strategies as requested by the CSC if those strategies are enforceable by CARB staff or if CARB can reasonably accommodate the request.

CHAPTER 7
ACTIONS AND STRATEGIES

Chapter 7 - Actions and Strategies

The Portside community has several census tracts with some of the highest CalEnviroScreen 3.0 (CES 3.0) ratings in the State. Specifically, it has four census tracts that are in the 98th percentile for CES 3.0 and another eight that are in the 85th percentile. Over 50,000 San Diegans reside in this area and are subject to significant pollution exposure.

Diesel particulate matter (PM) emissions, a known carcinogen and the greatest toxic air pollutant risk in the County, is one of the challenges the community faces[63]. Eleven of the twelve census tracts in the Portside community (over 45,000 people) have an exposure risk greater than the 95th percentile. Four of the census tracts (over 15,000 people) are in the 99th percentile for diesel PM.

According to CES 3.0 there are five census tracts (20,000 residents) in the 95th+ percentile for the asthma indicator[64]. With a high asthma indicator and significant pollution exposure, residents are very vulnerable to the effects of asthma.

The sources of air pollution are often located close to homes, schools, and other community areas where the public can be exposed to harmful pollutants. As a result, reducing exposure to air pollution at schools and residential areas is a priority for the community.

In addition to the ongoing efforts described in this plan, the Community Steering Committee (CSC) is proposing new actions to reduce air pollution in the community. The actions set forth in this chapter define a path to further reduce air pollution from sources in the community under the following seven categories:

1. Outreach and Community Engagement
2. Incentives
3. Rule Development
4. Enforcement
5. Heavy-Duty Trucks
6. Land Use
7. Working Waterfront Activities
8. Advocacy Measures

Each action in this chapter is to be carried out based on a set of strategies, goals, and timelines. Timelines outlined here are ambitious, and subject to change depending on priorities of the community and availability of funding. The entity (e.g., government agency or organization) responsible for the actions is also identified. The actions will be presented to the APCD Board in two phases. Phase I includes actions from categories one through four from the list above and were adopted by the APCD Board in November of 2020. Phase II includes actions from categories five through eight and will be presented to the APCD Board in July of 2021.

[63] CARB's estimated statewide cancer risk due to DPM is 460 in one million in 2014

[64] ces3results.xlxs

Overall Goals for the CERP

The following aspirational goals are intended to guide the community members, businesses, organizations, and government agencies partnering in the implementation of this CERP to support health and environmental justice in the Portside Community. While there might not be a clear path to reach some of these goals, they identify the direction in which the community wants to go to achieve emission reductions beyond regulatory requirements. As technology evolves and data continues to be collected, the goals below may be adjusted.

GOAL 1. By 2031, reduce Diesel PM from 2018 levels by 80% in ambient air at all Portside Community locations.

GOAL 2. Medium and Heavy Duty trucks servicing Portside Community to be 100% ZEV 5 years ahead of the California state requirements.

GOAL 3. Establish ZEV HD/MD truck charging infrastructure in Portside, by specified dates in Action E1, with 4 sites operational by 2026.

GOAL 4. Reduce emissions from HD/MD trucks servicing indirect sources by 100% 5 years in advance of regulatory requirements.

GOAL 5. By December 2021, APCD to present the cumulative cancer risk for Portside Communities from Health Risk Assessments and modeling of cumulative risk (including freeways, rail, vessels, stationary sources, etc.) to inform Goal #6. APCD can achieve this modeling goal with CARB assistance and input from the Portside Community Steering Committee including methodology and input data.

GOAL 6. By February 2022, establish an estimated cancer risk reduction goal based on the modeling that is done in Goal #2. Estimated cancer risk at all census tracts in Portside Community from locally generated emissions, including both stationary and mobile sources, to meet goals of ___/ million by 2026 and ___ /million by 2031.

GOAL 7. Conduct a Health Risk Assessment (HRA) at the Port's two marine cargo terminals to establish an updated baseline that relies on the most recent source characterization and activity from the Port's 2019 Emissions Inventory to inform aspirational goals in support of public health community priorities:

2) By October 2021, identify existing health risk levels generated from the Port's Tenth Avenue Marine Terminal (TAMT) and the National City Marine Terminal (NCMT) for Diesel Particulate Matter (DPM) and other Toxic Air Contaminant (TAC) emissions.
    a. Reduce Health Risk: The HRA may be used to inform an aspirational goal of reducing cancer risk
    b. Reduce DPM Emissions: The HRA may be used to inform an aspirational emission reduction goal
    c. Assist the San Diego Air Pollution Control District (SDAPCD) and the California Air Resources Board (CARB) with preparing a cumulative cancer risk analysis for the AB 617 Portside Community by providing them with the Port's HRA (October 2021) and the other operational related information.

GOAL 8. By 2026 reduce cancer risk below 10/million for each permitted stationary source, including portable equipment, in the Portside Environmental Justice Community.

GOAL 9. By 2031 complete Harbor Drive 2.0 truck freight improvements, including enforcement and signage of truck route for National City.

GOAL 10. By 2031 increase tree canopy in the Portside Community to 35%.

GOAL 11. Develop a new vision for park/green space for the Portside Community to increase park space by 30% by December 2022.

Outreach and Community Engagement Strategies

To further communicate and provide outreach to protect the health and welfare of San Diego County residents in the community, the San Diego County Air Pollution Control District (District or APCD) is proposing the following strategies:

- Incident Response Plan
  The District will prepare and implement an incident response plan that clearly defines the District's protocols and procedures prior to, during, and after an incident involving major, unplanned air contaminant releases and other emergencies with air quality impacts. The plan, which will be designed to provide for the protection of public health, safety and the environment, will include criteria for response times and public outreach and an evaluation procedure to identify areas of improvement after incidents. The plan will be developed in collaboration with other government agencies and the public to ensure understanding and readiness for any future incident with an air quality impact.
- Public Outreach and Community Engagement.
  The District will develop and implement a Public Participation Plan to enhance the effectiveness of the District's public outreach and engagement activities in disadvantaged communities and other communities throughout the region. The Public Participation Plan will include opportunities for community members to learn about and provide feedback on CERP-related strategies, as well as an educational component to the District Board members that focuses on historically disadvantaged areas that are disproportionately impacted by air pollution.
- Determination of Community Health Risks from Air Pollutants
  The Portside Community has expressed concerns regarding the potential health impacts from toxic air contaminants in the community. In order to address this concern, the health risks in the community need to be quantified to inform community members about the health risks they are exposed to and the sources contributing to health risks. This in turn would enable the CSC to develop specific and targeted emission reduction strategies to manage those risks.
- Office of Environmental Justice
  The District will provide a guideline to help design, establish, and administer a new Office of Environmental Justice within the APCD. This strategy will help to provide under-served communities with additional opportunities to fully participate in decision-making processes. This new office will provide additional institutional support for the Community Air Protection Program.

The strategies identified in the tables shown below align with the District's commitment to continuing to foster environmental justice and community engagement.

Action A1: Incident Response Plan	
Course of Action	
Establish and implement an APCD Incident Response Plan: • Develop protocols and procedures to address and manage the series of air quality-related events during and after a major, unplanned incident with air quality impacts. • Train staff to implement the incident response plan in order to protect public health, safety, and the environment. • Provide the plan in other languages	
Strategies:	
• Collaboration and Engagement	
Goal(s):	
• Contribute in an advisory or support capacity to emergency response agencies utilizing the APCD's resources and expertise for air sample collection, air monitoring, laboratory analysis, inspection, investigation, enforcement, identifying air emissions, health effects, media coordination and general public messaging during an incident impacting air quality.	
Estimated Timeline(s):	
In FY 2020-21: • Establish the APCD Incident Response Plan including overall scope, roles, and responsibilities. • Evaluate the costs and funding source for plan implementation. • Train staff to implement the APCD Incident Response Plan.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	• Establish APCD Incident Response Plan • Evaluate the costs and funding for plan implementation • Ensure staff is trained to implement • Coordinate with other jurisdictions
County of San Diego – Office of Emergency Services (OES)	• Provide notifications of incidents impacting air quality • Communicate continued updates of the incident and progress made
Community Steering Committee (CSC) Members	• Provide input to and receive updates from APCD on the plan.

Additional Information:
• South Coast Air Quality Management District's Incident Response Policy https://www.aqmd.gov/nav/about/policies/aqmd%27s-emergency-response-policy

Action A2: Develop and Implement a Public Participation Plan	
Course of Action	
• Develop and implement a Public Participation Plan to enhance the effectiveness of the APCD's public outreach and engagement activities in disadvantaged communities and other communities throughout the region.	
Strategies:	
• Collaboration and Engagement	
Goal(s):	
• Increase the awareness of air quality challenges and resources available to help the public. • Provide community members with assessment of toxic air contaminants affecting the community, including quantifying each emission, ranking the relative impact on public health impact, providing safety ranges for each air contaminant based upon OEHHA standards, and identifying emission sources ranked by overall impact. Provide opportunities for meaningful public participation in APCD's decision-making processes. • Provide useful information to support the public in making informed choices. • Help to ensure that the APCD is responsive to the diverse needs of residents and businesses. This includes having information and services available in other languages. • Provide routine updates to community residents on all CERP strategies and timelines.	
Estimated Timeline(s):	
• FY 2020-21	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
SDAPCD	• Prepare a draft Public Participation Plan • Conduct outreach and gather public feedback on the draft plan • Finalize and implement a Public Participation Plan

Community Steering Committee and the public	• Provide input on the APCD's approaches for public outreach and engagement.
Additional Information:	
• Bay Area Air Quality Management District's Public Participation Plan https://www.baaqmd.gov/plans-and-climate/public-participation-plan	

Action A3: Develop Plan to Quantify and Prioritize the Community Health Risks from Air Pollutants	
Course of Action	
• Determine, in consultation with the Community Steering Committee and CARB, the goals and objectives of the health risk analysis. • Based on the goals and objectives develop a work plan that articulates and evaluates the inputs, processes, deliverables, and timelines needed in quantifying and prioritizing the health risks and establish options considering various timeframes and resources needed, including the need and scope of any subsequent updates. • Determine how the planning emission inventories developed for this Community Emissions Reduction Program (in Chapter 3) can be utilized to quantify the health risks.	
Strategies:	
• Public information and outreach • Collaboration	
Goal(s):	

• Develop a plan to quantify and prioritize community health risk from air pollutants
  ○ The plan should establish goals and objectives to evaluate the resources needed in quantifying and prioritizing the health risks and establish the options including timeframes and resources needed.
  ○ The plan should establish the steps for determining the health risk, establishing its relative impact and priority, and the methodologies that will need to be developed.
  ○ The plan should also specify the timelines and milestones for quantifying the health risk.	

Estimated Timeline(s):	
• Finalize plan and timelines to be implemented in Phase II by April 1st of 2021	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:

Air Pollution Control District (APCD)	Coordinate with CARB, CSC, and others to develop the requirements and plan
California Air Resources Board (CARB)	Coordinate with APCD, CSC, and others to develop the requirements and plan
Community Steering Committee (CSC) Members	Coordinate with CARB, APCD, and others to develop the requirements and plan
Additional Information:	
West Oakland Community Action Plan (discusses health risk from diesel particulate matter in the West Oakland community) - https://www.baaqmd.gov/community-health/community-health-protection-program/west-oakland-community-action-plan	

Action A4: Establish an Office of Environmental Justice within the APCD
Course of Action
• Design and implement educational plan for Air Pollution Control Board members with a focus on areas of the region that are disproportionately impacted by air pollution. • Design, establish, and administer a new Office of Environmental Justice within the APCD. • Develop and implement strategies to integrate environmental justice and equity in agency operations, policies, and regulations. • Develop and implement strategies to improve APCD's outreach and education efforts in communities, especially low-income and minority communities. • The Office of Environmental Justice will strive to intentionally and specifically integrate environmental justice consideration in all agency actions. This requires support for meaningful community engagement, the promotion of environmental justice and equity considerations in decision-making, including: rule development, review of all permits, complaints and other documents and action.
Strategies:
• Collaboration and Engagement
Goal(s):

- Make environmental justice considerations a standard practice in the way APCD conducts business.
- Engage under-served communities so that everyone can fully participate in decision-making processes.
- Provide additional institutional support for the Community Air Protection Program.
- Work towards meeting health-based air quality standards and reduce health risks from toxic air pollutants in all communities.

Estimated Timeline(s):

In FY 2020-21:

- Establish the Office of Environmental Justice including overall scope, roles, responsibilities.

Implementing Agency, Organization, Business or Other Entity

Name:	Responsibilities:
Air Pollution Control District (APCD)	• Establish Office of Environmental Justice • Integrate equity in all agency decisions • Evaluate feasibility of satellite office • Provide Steering Committee with periodic updates on these efforts
Community Steering Committee (CSC) Members	• Provide input to and receive updates from APCD on the goals, policies, priorities, and practices of the Office of Environmental Justice.

Additional Information:

- California Air Resources Board's Office of Environmental Justice https://ww2.arb.ca.gov/news/carb-appoints-first-environmental-justice-liaison

Incentives Strategies

Addressing Incentive Program Challenges

While the Community Air Protection Program (CAPP) Incentives and other incentive programs are available for projects in the Portside communities, these programs have limitations that restrict the kinds of projects that can be done. The creation of this CERP allows the District to work with the community and CARB to determine what, if any, additional flexibilities can be introduced to the CAPP Incentives. In October 2020, CARB finalized new funding criteria for the CAP incentives, providing needed flexibility for funding projects and expanding the eligible project types to include those based on the priority of the community. The criteria are intended to assist in the development of Project Plans for community-identified projects specifically for communities selected to develop a CERP. Community-identified projects must be consistent with the strategies identified in the CERP. The action below outlines some of the potential flexibilities the community has considered to allow a greater variety of projects to be funded with Community Air Protection funds.

Action B1: Implement Additional Flexibility for Mobile Source Incentives
Course of Action
Work with the CSC and the public to identify and prioritize opportunities that could benefit from incentive funding. Work with CARB to implement flexibilities that can provide funding for other projects in the Portside community through the Community Air Protection Incentives Guideline process. Potential flexibilities include: • Modified cost-effectiveness limits for zero-emission Moyer-type projects • Eligibility for new purchase without scrappage requirements • Eligibility for supporting infrastructure • Provide mechanism for funding pilot projects to demonstrate new technologies • Eligibility for projects to reduce exposure as prioritized by the community including indoor air filtration and tree and vegetation plantings • Eligibility for projects that reduce emission from passenger car use, including incentives for zero and near-zero emission vehicles, transit passes, bicycle and pedestrian projects, and others. • Consideration of proximity of emissions to sensitive receptors, such as schools.
Strategies:
• Incentives • Public Information and Outreach • Collaboration
Goal(s):
• Create two opportunities for non-Moyer type incentive projects in calendar year 2023

Estimated Timeline(s):	
• Work with community, CSC, and CARB to evaluate and prioritize initial slate of projects and flexibilities by December 31, 2021. • Implement initial flexibilities by the 2022 solicitation for AB 617 funding.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	Work with CSC, local entities, and CARB to implement flexibilities to incentive programs
California Air Resources Board (CARB)	Work with APCD and CSC to implement flexibilities under AB 617 Guidelines
Community Steering Committee (CSC) Members	Work with APCD and other local entities to provide community priorities for incentive projects
Additional Information:	
Moyer Guidelines - https://ww3.arb.ca.gov/msprog/moyer/guidelines/current.htm Community Air Protection Program Incentives - https://ww2.arb.ca.gov/our-work/programs/community-air-protection-incentives/about CAP Incentive Guidelines - https://ww3.arb.ca.gov/msprog/cap/docs/cap_incentives_2019_guidelines.pdf	

Incentives for Passenger Vehicles and Transportation Demand Management Strategies

Because passenger vehicles also make up a large portion of our overall air pollution burden, strategies that can encourage cleaner vehicles (including zero-emission vehicles) and reducing the number of miles driven are an important consideration in this CERP. The action discussed below outlines a suite of potential passenger vehicle strategies that can help reduce pollution from this sector in the Portside communities.

Action B2: Reduce Emissions from Passenger Vehicles
Course of Action
• Implement incentive program for zero and near-zero vehicles for low income residents in disadvantaged communities (Clean Cars 4 All or similar) • Implement EV charging infrastructure incentive program (CALeVIP) • Coordinate with other jurisdictions and agencies to support improvements to pedestrian, bicycle, shared mobility services, and transit infrastructure

Strategies:	
• Incentives • Public information and outreach • Collaboration	
Goal(s):	
• CALeVIP incentives available in late 2020 • Clean Cars 4 All or similar available in 2021 • Provide letters of support from APCD and community to leverage external grant funding opportunities	
Estimated Timeline(s):	
• CALeVIP open October 27, 2020 • Clean Cars 4 All or similar open in 2021 • Provide letters of support for projects in Portside requesting funding in 2021 and beyond	
Implementing Agency, Organization, Business or Other Entity	
Name:	**Responsibilities:**
Air Pollution Control District (APCD)	Coordinate with CSC, CARB, Center for Sustainable Energy, SANDAG, and California Energy Commission to administer CALeVIP and CC4A incentive programs Review projects with goal of providing letters of support to those that reduce passenger vehicle trips.
California Air Resources Board (CARB)	Coordinate with CSC, APCD, and others to promote and support programs that reduce passenger vehicle trips
Community Steering Committee (CSC) Members	Provide collaboration opportunities with other local and regional groups for outreach and information regarding programs and grant opportunities

Additional Information:
Clean Cars 4 All - https://ww2.arb.ca.gov/our-work/programs/clean-cars-4-all CALeVIP - https://calevip.org/ Potential grant funding opportunities - California Climate Investments - https://ww2.arb.ca.gov/our-work/programs/california-climate-investments/cci-funded-programs Transit, Active Transportation Planning - San Diego Association of Governments (SANDAG) - https://www.sandag.org/

Residential air filtration and air monitoring program

To address exposure vulnerabilities in the community the Air Pollution Control Board established appropriations of $550,000 in APCD for residential air quality monitoring, air purifiers and data analysis in the Portside Community.

Action B3: Reduce Exposure to Air Pollution	
Course of Action	
• Develop and implement a residential air filtration and air monitoring program for up to 1,000 residents of the Portside Community	
Strategies:	
• Incentives • Public information and outreach • Collaboration	
Goal(s):	
• Establish a program for residential air quality monitoring, air filtration and data analysis • Provide resources as needed to residents to evaluate the data collected	
Estimated Timeline(s):	
• Establish program in 2021	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	Develop and implement the program
Community Steering Committee (CSC) Members	Provide support as needed

Additional Information:
Supervisor Fletcher's Board Letters: https://www.supervisornathanfletcher.com/content/dam/d4/board_letters/FINAL%20D4%20LUEG%20Budget%20Change%20Letter.pdf Budget Approval: https://bosagenda.sandiegocounty.gov/cob/cosd/cob/doc?id=0901127e80c06b8d

Incentives Outreach

To assist implementing agencies and entities to fully understand available incentives opportunities, the District will develop a plan to enhance its incentives outreach efforts.

Action B4: Incentives Outreach	
Course of Action	
• Develop a plan for augmenting APCD role in reaching out to implementing agencies or entities, such as the Port of San Diego, Cities, or candidates for incentive funding.	
Strategies:	
• Incentives • Public information and outreach • Collaboration	
Goal(s):	
• The plan should define how APCD will promote coordination to increase the number of applications, offer workshops and technical assistance that will present leverage opportunities, expedite incentives, and how APCD can play a more proactive role in assisting the San Diego region competing for and securing state and other incentive funding.	
Estimated Timeline(s):	
• 2021	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	Develop a plan to enhance incentive program outreach
Community Steering Committee (CSC) Members	Provide support as needed

California Air Resources Board (CARB)	Provide support and resources
Additional Information:	
N/A	

Rule Development Strategies

The District develops local rules and regulations to improve air quality and protect the health and welfare of San Diego County residents and the environment. The District is considering evaluating the following rules to identify potential measures to reduce emissions and further protect public health.

- Evaluate District Rule 1206 to potentially regulate residential structures between 1-4 dwelling units. Asbestos is a naturally occurring mineral fiber that is resistant to heat and fire and has been used extensively in building construction materials such as sprayed-on surface materials, pipe insulation, resilient floor tiles, and roofing materials. If not properly controlled, asbestos fibers can be released into the air when asbestos-containing materials are disturbed during building demolition or renovation activities. Inhalation of the airborne asbestos fibers can cause serious health problems including chronic lung disease and cancer. In fact, there is no known safe level of exposure to asbestos.

  Asbestos is federally regulated through the National Emissions Standards for Hazardous Air Pollutants (NESHAP) and locally regulated under Rule 1206 (Asbestos Removal, Renovation, and Demolition). Pursuant to the NESHAP and Rule 1206, building materials that are suspected to contain asbestos must be sampled and laboratory tested prior to renovation or demolition activities. Laboratory testing is required because the presence of asbestos cannot be detected visually by the unaided eye and it may be excluded from safety data sheets under certain conditions. If identified, regulated asbestos-containing materials must be removed under controlled conditions prior to renovation or demolition activities so that asbestos fibers are not released into the air.

  Federal and local rules only regulate residential structures with more than 4 dwelling units. However, since there is no known safe level of asbestos exposure, regulating all residential structures (including 1-4 dwelling units) under Rule 1206 would provide an increased level of protection to the public. Approximately 80 percent of residential structures in San Diego County have 1-4 dwelling units, which is currently exempted under Rule 1206. Additionally, approximately 50 percent of these structures were built before 1980, which increases the probability of the presence of asbestos.

  The District's asbestos program is essential to protect public health and enhance the quality of the environment by reducing exposure to hazardous air pollutant emissions. This program is even more critical in communities with older buildings and structures that have a higher probability of containing asbestos materials.

- Evaluate District Rule 1210 to potentially reduce toxic air contaminants
  The California *Air Toxics "Hot Spots" Information and Assessment Act* (AB 2588) was enacted by the Legislature in 1987 and requires facilities to quantify emissions of toxic air contaminants, conduct a public health risk assessment for emissions of concern, notify the affected public if there is an elevated risk, and reduce significant health risks to acceptable levels. The District is the implementing agency for San Diego County and is required to publish an annual report summarizing program efforts and results. Rule 1210 (Toxic Air Contaminant Public Health Risks - Public Notification and Risk Reduction) governs the public notification and risk reduction aspects of the program.

  Rule 1210 requires facilities whose public health risk assessment shows potential risks above specified levels to implement a risk reduction plan to reduce those risks below the significance level within five years. The current cancer risk reduction level is 100 in one million, meaning that if one million people were exposed to a facility's emissions, 100 of those persons might develop cancer due to the facility's emissions.

  Evaluating District Rule 1210 to potentially lower the threshold at which stationary sources must reduce the cancer risk may decrease the health risk from regulated sources impacting surrounding communities.

- Evaluate existing rules and the adoption of new rules that can benefit the communities.
  The District regulates emissions from various stationary sources within the county, including volatile organic compounds (VOC) emissions, which contribute to the formation of ozone in the air we breathe. When inhaled, ozone can damage the lungs and cause chest pain, coughing, shortness of breath and throat irritation. Ozone may also worsen chronic respiratory diseases such as asthma and compromise the ability of the body to fight respiratory infections. The District also regulates particulate matter emissions, which is an air pollutant that is a concern for people's health when levels in air are high. Particulate matter are small particles in the air that reduce visibility and cause the air to appear hazy when levels are elevated. Particulates can penetrate deep into the lungs and blood streams unfiltered, causing heart attacks, respiratory disease, and premature death.

  To further protect public health, the District is considering the following:

  - Evaluating District Rule 61.2 (Transfer of Organic Compounds into Mobile Transport Tanks) to potentially reduce VOC emissions from the transfer of organic compounds into mobile transport tanks.
  - Evaluating District Rule 67.0.1 (Architectural Coatings) to potentially reduce VOC emissions from the application of coatings to stationary structures.
  - Evaluating District Rule 67.18 (Marine Coating Operations) to potentially reduce VOC emissions from the application of coatings to marine vessels.
  - Evaluate the feasibility of adopting a rule for commercial charbroiling and deep-frying operations to identify potential measures to reduce PM and VOC emissions from these sources.
  - Evaluate the feasibility of adopting a new rule to control emissions from indirect sources (any facility, building, structure, or installation, or combination thereof) that generates or attracts mobile source activity which results in emissions of any pollutant (or precursor). An indirect

source rule links air quality to decisions about how to build and provides an incentive for developers to consider ways to make their projects more energy efficient, more walkable and bikeable, and in the end, more livable and healthy for the entire community.

- Revise District Rule 1401- Title V thresholds

  Under federal law, stationary sources that are considered *Major Sources* of emissions must apply for and obtain a federally enforceable permit known as a Title V Operating Permit. A Title V Permit will include conditions required to demonstrate compliance with all applicable rules and regulations, and may include enhanced monitoring, recordkeeping and reporting requirements compared to a non-Title V permit. District Rule 1401 (Title V Operating Permits - General Provisions) specifies the thresholds when a stationary source is considered a *Major Source* for Title V purposes. The US Environmental Protection Agency reclassified the District's ozone non-attainment status, and as a result, Rule 1401 will need to be amended to lower the threshold at which facilities must apply for and obtain a Title V Operating Permit.

These strategies are further discussed in the tables below.

Action C1: Evaluate Rule 1206 to potentially regulate residential structures between 1-4 dwelling units	
Course of Action	
• Evaluate the feasibility of amending Rule 1206 (Asbestos Removal, Renovation, and Demolition) to protect public health. • Engage in community outreach on asbestos awareness.	
Strategies:	
• Rules and Regulations • Public Information and Outreach	
Goal(s):	
• Protect public health. Since there is no known safe level of asbestos exposure, regulating all residential structures (including 1-4 dwelling units) under Rule 1206 would provide an increased level of protection to the public. Approximately 80 percent of residential structures in San Diego County have 1-4 dwelling units, which is currently exempted under Rule 1206. Additionally, approximately 50 percent of these structures were built before 1980, which increases the probability of the presence of asbestos. • Engage in outreach events to educate community on asbestos awareness.	
Estimated Timeline(s):	
• By July 2021 determine the feasibility of amending District Rule 1206.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:

Air Pollution Control District (APCD)	• Conduct outreach • Evaluate feasibility of strengthening asbestos regulation • If feasible develop proposed amended rule
Community Steering Committee (CSC) Members	• Participate in APCD rule development process (e.g., attending workshops, providing comments on draft rule materials)
Regulated Facilities	• Participate in APCD rule development process (e.g., attending workshops, providing comments on draft rule materials)

Additional Information:

- District Rule 1206 (existing rule):

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Toxic_Air_Cotaminants/APCD_R1206.pdf

- District Rule Development Workshops page (for workshop information):

https://www.sandiegocounty.gov/content/sdc/apcd/en/Rule_Development/Workshops.html

Action C2: Evaluate District Rule 1210 to Potentially Reduce Health Risks

Course of Action

- Implement a regulatory process to amend District Rule 1210 (Toxic Air Contaminant Public Health Risks - Public Notification and Risk Reduction), which includes industry and community partners, to obtain input on and analyze reducing the toxic air pollution significance threshold with the intent of improving public health.

Strategies:

- Rules and Regulations
- Public Information and Outreach

Goal(s):

- Evaluate the feasibility of reducing cancer risk impacting communities.
    - Some sources that would be subject to a cancer risk reduction are either within the Portside Community or in close proximity to it.
    - This strategy could reduce the cancer risk impacting surrounding communities.

Estimated Timeline(s):

- By October 2021 propose District Rule 1210 amendments to the Air Pollution Control Board.

Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	• Evaluate and develop options for reducing cancer risk • Develop proposed amended rule
Community Steering Committee (CSC) Members	• Participate in APCD rule development process (e.g., attending workshops, providing comments on draft rule materials)
Regulated Facilities	• Participate in APCD rule development process (e.g., attending workshops, providing comments on draft rule materials)

Additional Information:

- District Rule 1210 (existing rule):
  https://www.sandiegocounty.gov/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Toxic_Air_Cotaminants/APCD_R1210.pdf
- District Rule Development Workshops page (for information on prior Rule 1210 workshops):
  https://www.sandiegocounty.gov/content/sdc/apcd/en/Rule_Development/Workshops.html
- APCD Board letter 052219 D4 BL Reducing Cancer Risk for SD Residents_SIGNED.pdf

Action C3: Evaluating Existing Rules and Considering New Rules

Course of Action

- Evaluate and, if feasible, propose amending District Rule 61.2 (Transfer of Organic Compounds into Mobile Transport Tanks), Rule 67.0.1 (Architectural Coatings) and District Rule 67.18 (Marine Coating Operations) to identify potential measures to reduce emissions from sources regulated under these rules.
- Evaluate and, if feasible, propose a new rule to control emissions from commercial cooking operations for charbroiling and deep-frying operations.
- Evaluate and, if feasible, propose a new rule to control emissions from indirect sources (any facility, building, structure, or installation, or combination thereof) that generates or attracts mobile source activity which results in emissions of any pollutant (or precursor). Examples of indirect sources include: employment sites, shopping centers, sports facilities, housing developments, airports, commercial and industrial facilities, warehouses, distribution centers, goods movement terminals like port terminals, development and parking lots and garages.

Strategies:	
• Rules and Regulations • Public Information and Outreach	
Goal(s):	
• Evaluate the feasibility of amending Rules 61.2, 67.18, and 67.0.1 to identify potential measures to reduce emissions from sources regulated by these rules. • Evaluate the feasibility of adopting a new rule for commercial charbroiling and deep-frying operations to identify potential measures to reduce emissions from these sources. • Evaluate the feasibility of adopting a new rule to control emissions from indirect sources.	
Estimated Timeline(s):	
• By December 2021 complete the evaluation of these rules to identify any potential changes to reduce emissions from sources regulated by these rules.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	• Evaluate and develop options for reducing VOC emissions from Rules 61.2, 67.18, and 67.0.1. • Evaluate the feasibility of adopting a new rule to reduce VOC and PM2.5 emissions from commercial cooking operations. • Evaluate the feasibility of adopting a new rule to reduce emissions from indirect sources.
Community Steering Committee (CSC) Members	• Participate in APCD rule development process (e.g., attending workshops, providing comments on draft rule materials).
Regulated Facilities	• Participate in APCD rule development process (e.g., attending workshops, providing comments on draft rule materials).
Additional Information:	
• District Rule 61.2 (existing rule): https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Prohibitions/APCD_R61-2.pdf • District Rule 67.0.1 (existing rule): https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Prohibitions/APCD_R67-0-1.pdf	

- District Rule 67.18 (existing rule):
  https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Prohibitions/APCD_R67-18.pdf
- San Joaquin Valley APCD Rule 4692 (Commercial Charbroiling):
  https://www.valleyair.org/rules/currntrules/r4692.pdf
- South Coast AQMD Rule 1138 (Control of Emissions from Restaurant Operations):
  http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1138.pdf?sfvrsn=4
- San Joaquin Valley APCD Indirect Source Review Rule:
  http://www.valleyair.org/ISR/ISRHome.htm
- District Rule Development Workshops page (for information on public workshops):
  https://www.sandiegocounty.gov/content/sdc/apcd/en/Rule_Development/Workshops.html

Action C4: Propose the amendment of District Rule 1401	
Course of Action	
• Propose the amendment of District Rule 1401 (Title V Operating Permits - General Provisions) to lower the threshold at which facilities must apply for and obtain a Federal Title V Operating Permit. ○ Title V Permits are required of Major Sources of air pollution (some of which are located in the Portside community) and may include enhanced monitoring, record-keeping, and reporting requirements.	
Strategies:	
• Rules and Regulations • Public Information and Outreach	
Goal(s):	
• Propose the amendment of District Rule 1401	
Estimated Timeline(s):	
• By March of 2021 propose amendments to District Rule 1401 to the District's Board	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	• Develop and propose amended rule.

Community Steering Committee (CSC) Members	• Participate in APCD rule development process (e.g., attending workshops, providing comments on draft rule materials).
Facilities	• Participate in APCD rule development process (e.g., attending workshops, providing comments on draft rule materials).
Additional Information:	
• District Rule 1401 (existing rule): https://www.sandiegocounty.gov/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Title_V_Operating_Permits/APCD_R1401.pdf • District Rule Development Workshops page (for information on public workshops): https://www.sandiegocounty.gov/content/sdc/apcd/en/Rule_Development/Workshops.html	

Enforcement Actions/Strategies

In addition to the ongoing enforcement efforts described in the enforcement chapter of this plan, the District is proposing enforcement strategies to:

- **Foster environmental justice in disadvantaged communities and minimize the environmental harm and impact on areas where a violation occurred.**

  The District is proposing to formalize its Supplemental Environmental Project (SEP) program. Enforcement through penalties plays an important role in deterring environmental violations, but penalties alone do not address the environmental harm that communities suffer because of these violations. SEPs are community-based projects funded by a portion of penalties received during the District's settlement of violations. SEPs can provide an opportunity to improve public health, reduce pollution, increase environmental compliance, and raise public awareness to communities most burdened by environmental harm.

- **Increasing compliance rates.**

  The Mobile Source Program has been an integral part of emission reduction strategies for the Portside community given the large percentage of emissions coming from mobile sources. The community has expressed concerns over excess emissions from idling and the level of diesel particulate matter in the community. CARB and the District have worked together in the past to create a first of its kind enforcement program for mobile sources at the District level. The District has had great success in increasing compliance rates for the regulations it currently enforces through the Memorandum of Understanding (MOU) with CARB. To continue this effort, the District is proposing to expand its mobile source program to enforce additional regulations that reduce diesel particulate matter (PM) and oxides of nitrogen (NOx). Localized enforcement of these additional regulations will help reduce excess ozone forming pollution as well as diesel particulate matter.

The District is also proposing to incorporate a portable combustion emissions analyzer (Testo 350) into its inspection procedure to verify compliance with emission limits more frequently. Certain fuel-fired emission units, such as boilers and engines, are subject to emission limits and are typically required to conduct and pass a source test annually to quantify the actual emissions from these units. The proposed portable analyzers would allow inspectors to verify compliance with emission limits (equivalent to a smog check) during unannounced routine inspections, increasing the frequency of emission testing from annually to multiple times per year. This analyzer would help identify potential emission exceedances sooner and require facilities to make the necessary adjustments or repairs to return emissions to compliant levels.

- **Promote community engagement and enhance services provided by the District's Enforcement Division.**

  The District is evaluating having an office in the Portside area to further increase its presence in the community, decrease complaint response times, and have multiple inspectors traveling in and out of the community observing nearby activities and closely monitoring areas of concern.

  The District is also proposing to evaluate its complaint program (in accordance with the requirements in AB423) and provide a recommended plan for updating the process including:

  - 24-hour hotline
  - Response to complaints within 48 hours or less
  - Whistle-blower and public complainant protections

  Currently District inspectors are only available during regular working hours unless an investigation is needed afterhours. The District currently has a MOU with the County's Department of Environmental Health to have their inspectors respond to afterhours complaints. Under this proposal the District would evaluate the need of having its inspectors available 24/7.

The enforcement-based strategies identified in the tables shown below align with the District's commitment to continuing to expand and evolve its enforcement program to foster environmental justice and community engagement.

Action D1: Propose the Development of a Supplemental Environmental Project (SEP) Program within the Violation Settlement Program
Course of Action
Formalize a SEP program to fund community-based projects from a portion of penalties received under the District's Violation Settlement Program by: • Developing a SEP policy, which would include the appropriate criteria to qualify for these projects. • Publishing the SEP policy and projects proposed by community members and stakeholders on the District's website. • Discussing SEP options through the District's Violation Settlement Program.

Strategies:	
• Enforcement • Community Outreach	
Goals:	
• Explore projects to minimize the environmental harm and impact on communities. • Focus enforcement efforts to help foster environmental justice in disadvantaged communities. • Utilize a portion of penalties to fund community-based projects that provide a tangible environmental or public health benefit to the community.	
Estimated Timeline(s):	
• By July 1, 2021 the District will formalize its SEP program.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	Propose the development of a SEP program to fund community-based projects from a portion of penalties received under the District's Violation Settlement Program by: • Developing a SEP policy, which will include the appropriate criteria to qualify for these projects. • Publishing the SEP policy and projects proposed by community members and stakeholders on the District's website. • Discussing SEP options through the District's Violation Settlement Program.
Community Steering Committee (CSC) Members	• Participate in the development of the SEP program. • Assist with outreach opportunities. • Submit community- based projects that can be considered under this program.
Facilities	• Participate in the development of the SEP program. • Assist with outreach opportunities
Additional Information:	
US Environmental Protection Agency (EPA's) SEP Policy and Background Guidance: https://www.epa.gov/enforcement/supplemental-environmental-projects-seps#policy The California Air Resources Board (CARB) SEP Policy: https://ww2.arb.ca.gov/our-work/programs/supplemental-environmental-projects-seps	

Action D2: Evaluate the Feasibility of Expanding Mobile Source Enforcement Program
Course of Action
• Work with the California Air Resources Board (CARB) to explore feasibility of expanding the mobile source program to enforce additional mobile source regulations under the MOU with CARB. Marine: o Commercial Harbor Craft Regulation On-Road and Cargo Handling: o Mobile Cargo Handling Equipment Regulation o Solid Waste Collection Vehicle Regulation o Tractor-Trailer Greenhouse Gas (TTGHG) Regulation • Conduct a cost analysis to evaluate the feasibility of expanding the mobile source program by increasing the number of staff members to conduct additional inspections under the existing MOU.
Strategies:
• Enforcement • Outreach
Goal(s):
• Increase number of inspections in San Diego County and increase compliance rates as they relate to these regulations that are designed to: o Reduce diesel particulate matter (PM) and oxides of nitrogen (NOx) from ocean-going vessels auxiliary engines while they are docked at California ports. o Reduce diesel particulate matter (PM) and oxides of nitrogen (NOx) from commercial harbor craft vessels including ferries, excursion vessels, tugboats, towboats, push boats, crew and supply vessels, barge and dredge vessels, work boats, pilot vessels, and commercial and charter fishing boats. o Reduce diesel particulate matter (PM) and oxides of nitrogen (NO_X) from cargo handling equipment at ports and intermodal rail yards. o Reduce diesel particulate matter (PM) from solid waste collection vehicles and on-road diesel cranes with a single engine. o Reduce Greenhouse Gas (GHG) emissions from on-road heavy-duty tractor-trailers.
Estimated Timeline(s):
• By December 1, 2021, determine feasibility of expanding the mobile source program to enforce additional mobile source regulations under the Memorandum of Understanding (MOU) with CARB.

Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	• Explore feasibility of expanding the mobile source program to enforce additional mobile source regulations under the MOU with CARB. • If the MOU is revised, the District would conduct outreach, provide training and compliance assistance, conduct inspections, and take enforcement actions when a violation of the regulations listed above are documented.
California Air Resources Board (CARB)	• Evaluate feasibility of expanding the mobile source program to enforce additional mobile source regulations under the MOU with CARB. • If feasible, grant authority to the District to enforce additional mobile source regulations.
Community Steering Committee (CSC) Members	• Assist with outreach opportunities. • Provide input regarding this proposal.
Facilities	• Assist with outreach opportunities. • Provide input regarding this proposal.
Additional Information:	
CARB Regulations: Ocean-Going Vessels At Berth Regulation https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation Commercial Harbor Craft Regulation https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft Mobile Cargo Handling Equipment https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment Solid Waste Collection Vehicle Regulation https://ww2.arb.ca.gov/our-work/programs/solid-waste-collection-vehicle-regulation Tractor-Trailer Greenhouse Gas Regulation https://ww2.arb.ca.gov/our-work/programs/ttghg	

Action D3: Evaluate the Current Air Quality Complaint Process	
Course of Action	

• Evaluate the current air quality complaint process.
• Provide a recommended plan for updating the process including:
  ○ 24-hour hotline
  ○ Response to complaints within 48 hours or less
  ○ Whistle-blower and public complainant protections
  ○ A bilingual hotline and a user-friendly smart phone application in order to report truck idling.
  ○ Evaluate the APCD air quality complaint form in the "Tell Us Now" smart phone application to ensure it meets the needs of the community.
  ○ Evaluate the feasibility of allowing users to file their complaint related to truck idling or truck route utilizing the "Tell Us Now" application and have the truck route complaints forwarded to the City of San Diego.	

Strategies:	
• Enforcement • Community Outreach	
Goal(s):	
• Evaluate the air quality complaint process to identify areas that can be enhanced to better serve members of the public.	
Estimated Timeline(s):	
• Develop a recommendation by December 1, 2021.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	• Evaluate the air quality complaint process to identify areas that can be enhanced to better serve members of the public. • Coordinate with the City of San Diego to evaluate the feasibility of allowing the City to access complaints submitted via the "Tell Us Now" app that are under its jurisdiction
Community Steering Committee (CSC) Members	• Provide input regarding this proposal.
Facilities	• Provide input regarding this proposal.

Additional Information:
AB-423: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB423

Action D4: Increase APCD Presence in Portside Community	
Course of Action	
Evaluate options in increase APCD presence in the Portside	
Strategies:	
• Enforcement • Community Outreach	
Goal(s):	
• Reduce complaint response time. • Increase inspector availability for stakeholders and community members. • Increase frequency of focused stationary and mobile source inspections. • Closely monitor areas of concern and non-compliant sources. • Increase community outreach and awareness.	
Estimated Timeline(s):	
• TBD	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	• Evaluate options in increase presence in the Portside
Community Steering Committee (CSC) Members	• Provide input regarding this proposal.
Additional Information:	
N/A	

Action D5: Evaluate the Feasibility of Utilizing Portable Emission Analyzers to Verify Compliance	
Course of Action	
• Evaluate the feasibility of utilizing Testo 350 portable emissions analyzers to enforce District requirements as they relate to combustion sources.	
Strategies:	
• Enforcement	
Goals:	
• Use Testo 350 portable emissions analyzers to verify emission standards for combustion sources (boilers and prime engines). • Enforce emission standards. • Identify areas of concerns to prevent future non-compliance. • Provide information to facilities that combustion equipment requires adjustment, repair, or replacement. • Conduct more focused inspections.	
Estimated Timeline:	
• By December 1, 2021 reach out to impacted sources to obtain input. • By July 1, 2022 consider input from the regulated entities and determine if the analyzer can be used for enforcement purposes.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	• Notify facilities via advisory and District website of this proposal. • Consider input from regulated entities. • Determine if the analyzer can be used for enforcement purposes.
Community Steering Committee (CSC) Members	• Assist with outreach opportunities. • Provide input regarding this proposal.
Facilities	• Assist with outreach opportunities. • Provide input regarding this proposal.
Additional Information:	
Testo 350 Portable Emission Analyzer data: https://www.testo.com/en-US/testo-350/p/0632-3510 https://www.valleyair.org/policies_com/policies_com_idx.htm https://www.valleyair.org/policies_com/Policies/com1150_portable_emission_analyzer_042607.pdf	

Action D6: Promote enforcement of existing air quality rules and regulations pertaining to mobile sources.	
Strategies and Course of Action	
• Evaluating the feasibility of expanding enforcement of truck idling regulations within the Portside Community.	
Goals:	
• Enforcement • Community Outreach	
Targeted Timeline(s):	
N/A	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	Evaluate performance of idling inspections
California Air Resources Board (CARB)	Evaluate compliance of idling regulations to determine if additional enforcement is needed.
Community Steering Committee (CSC) Members	Help with development of performance metrics and provide input on critical areas for inspections.
Additional Information:	
N/A	

Heavy Duty Truck Strategies

The CSC created subcommittees to discuss and establish specific actions to reduce emissions from various sources within the Portside community. A subcommittee was formed to focus on the technological and institutional challenges to electrification of heavy-duty truck fleet, including trucks that serve the port's cargo terminals as well as businesses and industries that are interspersed throughout the community. Trucks serving the port and other businesses in the community traverse the Portside communities, exposing residents and other sensitive receptors to diesel emissions.

Below are some of the actions EPA and CARB have committed to take to reduce truck emissions statewide.

Agency	Upcoming Action	Expected Decision	Expected Phase-in Period
EPA	Cleaner Truck Initiative – In response to a petition from South Coast AQMD, EPA has committed to updating its truck engine standard to reduce NOx emissions.	2020-2021	2024
CARB	Transport Refrigeration Unit (TRU) Regulation[65] – Measure to reduce emissions and residual risk from TRUs by transitioning to zero-emission technologies.	2021	TBD
CARB	Zero-Emission Fleet Rule[66] – Would require fleets to transition to zero-emissions, including drayage trucks.	2021	2024
CARB	Heavy-Duty Inspection and Maintenance - Similar to smog check for cars and light duty trucks, this would allow an on-board diagnostics system checks to identify malfunctioning emissions-related components in applicable engines.	2021	2023

While CARB and APCD have taken many actions to reduce truck pollution through regulation, enforcement, and incentive programs, Portside residents are still disproportionately affected by trucks in their neighborhoods. As business and activities increase within and around the Portside community in coming years, these impacts could be greater without concerted action.

The CERP Trucks Subcommittee met weekly from May 22 through July 31, 2020 to develop a set of strategies to reduce truck emissions and exposure to those emissions in the Portside communities. The committee recognizes that trucks play a vital role in the movement of goods in Portside and other communities, and truck drivers and businesses should have opportunities to transition to clean technologies and minimize impacts on

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

[66] CARB, Zero-Emission Vehicle Fleet https://ww2.arb.ca.gov/our-work/programs/zero-emission-vehicle-fleet.

neighborhoods. The subcommittee identified actions to support electric trucks and charging infrastructure, support dedicated truck route(s) in the community to minimize exposure to at-risk populations, provide for the needs of truck drivers and businesses that rely on them, ensure fair outcomes for truck drivers with regard to incentives and promote enforcement of mobile source air quality rules.

Action E1: Advance the deployment of heavy-duty on-road electric trucks to demonstrate operational feasibility and reduce emissions within the Portside Community and other disadvantaged communities.
Strategies and Course of Action
• Develop and implement a ZE truck shuttle program to/from Port tidelands for one or more routes. • Develop Electric Vehicle (EV) Truck charging needs assessment and strategy to support EV Truck expansion beyond above pilot. Install charging facilities to support deployment of on-road electric trucks (include DC Fast charging and wireless). • Implement a Community (Off Port) Operators Mitigation Strategy to coordinate with other operators for their transition to Zero Emission Vehicles (ZEV), infrastructure, truck routes and truck operations. • Pursue all grant funding opportunities. • Identify new sources of funding, including new fees, to promote zero and near-zero emission trucks and other emissions reduction opportunities at the Port of San Diego. • As City of San Diego and National City acquire Zero Emission (ZE) trucks and ZE light duty vehicles, encourage the cities to prioritize utilizing them in the Portside Community.
Goals:
• Develop a short-haul ZE truck shuttle program that seeks to displace approximately 20,000 diesel vehicle miles traveled (VMT) (equal to about 12% of community miles traveled) annually or more by 2024, and yields the corresponding emission reduction benefits, to continue in perpetuity if operations and funding allows. • Install EV charging in conjunction with the above ZE truck shuttle program. • Seek to implement the ZE truck shuttle program for a period of at least one and two years and to continue in perpetuity if funding allows. • Include an evaluation component in the truck shuttle program that (1) identifies lessons learned and (2) recommends actions to accelerate the implementation of electric trucks to/from Port tidelands. • Identify a process to introduce this strategy to the Cities with staff from San Diego Gas and Electric (SDG&E), San Diego Association of Governments (SANDAG), to help accelerate the transition to ZEVs. • Develop EV Strategy for region including opportunities in Portside communities. • Incorporate SANDAG's EV Management Strategies (currently under development). • Develop process to obtain necessary permits to make sure all of the cities are EV ready (e.g., State of CA Go-BIZ may have resources).

- Work with the Barrio Logan Community Planning Group (CPG) and other stakeholders to establish a working group to identify businesses (including private waste hauling services) and companies within the Portside Community that can pilot EV truck routes.
- Target funding between 85% and 90% of all heavy-duty on-road electric truck projects and studies with outside grant support.

Targeted Timeline(s):

- Develop a short-haul electric truck shuttle program and seek to secure environmental approvals and entitlements within an 18 to 24-month period.
- Identify a minimum of three candidates within the Portside Community to deploy an EV delivery program in 2022.
- Prepare a market study/feasibility analysis for the Port of San Diego's Board of Port Commissioners consideration by the end of 2023, that explores potential fees that can support and promote zero and near-zero emission trucks and other emission reduction opportunities, as well as implications to the District's revenue and maritime business opportunities.
- Obtain commitment from City of San Diego in 2022 that prioritizes deploying ZE Light Duty, Medium Duty, and Heavy-Duty Trucks, if available, including ZE Garbage Trucks, within the Portside Community.
- Obtain commitment from National City in 2022 that prioritizes deploying ZE Light Duty, Medium Duty, and Heavy-Duty Trucks, if available, within the Portside Community.

Implementing Agency, Organization, Business or Other Entity

Name:	Responsibilities:
City of San Diego	Encourage prioritization of deployment of ZEVs.
City of National City	Encourage prioritization of deployment of ZEVs.
San Diego Association of Governments (SANDAG)	Develop EV strategy for region including opportunities in Portside communities.
Environmental Health Coalition (EHC)	Work with Barrio Logan CPG and other stakeholders to establish working group to identify businesses (including private waste hauling services), and companies within the Portside Community that can pilot EV truck routes.
Air Pollution Control District (APCD)	Target funding of 85-90% of all heavy-duty on-road electric truck projects with outside (federal, state, or local) grant support.

San Diego Gas and Electric (SDG&E)	Support make-ready EV charging infrastructure for Medium/Heavy Duty fleets.
Port District	Develop a short-haul ZE Truck Program with the accompanying charging infrastructure by 2024 to continue in perpetuity if operations and funding allows. Collaborate with Community Residents, Stakeholders, and Agencies to identify up to four locations for ZE Truck Charging by 2023. Work with SDG&E and Stakeholders to develop the four sites listed above by 2026. Prepare feasibility analysis for the Board of Port Commissioners by 2023 that explores potential fees to promote zero and near-zero emission trucks and other emissions reduction opportunities, as well as implications to the Port's revenue and maritime business opportunities.
Additional Information:	
N/A	

Action E2: Fair outcome for small fleet owners and truck drivers
Course of Action
• Evaluate potential regulatory impacts of truck replacements and maintenance on small fleets or sublessees. • Focus grant opportunities on truck companies, as opposed to individual drivers, to ensure an unfair burden is not placed on the driver.
Strategies and Goals
• Support CARB rule requiring larger fleets to transition over time to ZE technologies. Expected DPM and NOx benefits from draft rule and ISOR when available. • Consult with APCD legal counsel to identify potential grant contract amendments requiring compliance with all federal, state and local labor laws.
Targeted Timeline(s):
N/A

Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD)	Evaluate fairness of burden when distributing grant funding. Include language in incentive grants for on-road trucks emphasizing the need for grantees to follow all appropriate labor laws
California Air Resources Board (CARB)	Continue developing the Advanced Clean Fleets Rule to require larger fleets to transition to ZE technologies.
Additional Information:	
Additional information on the development of the Advanced Clean Fleets Rule: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets	

Action E3: Support dedicated truck route and avoid truck impacts to local community
Strategies and Course of Action
• Establish a formal procedure to implement robust stakeholder outreach and educational component on a biannual basis. • Improve street truck signage regarding designated truck route. Recommend asking the City of San Diego to post on its website a map showing the routes for prohibited/allowable truck route. Implement Harbor Drive 2.0 Improvements to facilitate the dedicated truck route and to reduce stop/go truck diesel emissions at key intersections (HDMCS project #64) (consider incorporating wireless charging technology in this concept). • Reinstitute aggressive enforcement of designated Truck Haul route and keep the Barrio Logan CPG updated on enforcement efforts. • Install signage, especially around sensitive receptors. • Enforcement of Truck Route (City of San Diego and National City). • Update the City of San Diego's "Get It Done" application to include truck route complaints. Evaluating the feasibility of allowing users to file their complaint related to truck idling or truck route utilizing this application and have the idling complaints forwarded to the APCD.

Goals:
• In 2021, 50% of operations within Portside Community (warehouses, storefronts, small restaurants, etc.) will be notified of designated truck route. • Ensure the Harbor Drive 2.0 Improvements concept gets included in the San Diego Association of Governments (SANDAG's) South Bay to Sorrento Comprehensive Multimodal Corridor Plan (CMCP) and consider for inclusion in the San Diego Forward: 2021 Regional Plan. • Target environmental approvals for the infrastructure improvements identified in the Harbor Drive 2.0 project and related infrastructure improvements identified in the South Bay to Sorrento CMCP by 2024/2025. • Continue the Barrio Logan Truck Route Enforcement Task Force, that was established and implemented by the San Diego Police Department in October 2019 and continued through March 2020. • Update the Barrio Logan CPG on the number of truck stops, number of tickets, and number of warnings on a monthly basis. • Ensure adequate funding for enforcement, such as Supplemental Environmental Projects (SEP) funding. • Develop a concept of operations for the intelligent transportation system (ITS) technologies in the Harbor Drive 2.0 project and related ITS systems identified in the South Bay to Sorrento CMCP, focusing on implementing freight signal priority, gate operating system, truck reservation system, and/or geofencing (or other ITS technologies).
Targeted Timeline(s):
• In 2021 – 85% of Port tenants and assoc. trucking companies will be provided training info. • By the end of 2021, present a plan to the City of San Diego and California Department of Transportation (CALTRANS) for consideration, that identifies upgrades to existing street signage and locations to install new street signage informing truck drivers of the designated truck haul route. • Target installation of new signs in calendar year 2022 by the City of San Diego and CALTRANS. •

Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
City of San Diego	Notify relevant parties of designated truck routes, improve trucking route street signage infrastructure throughout the city as needed. Coordinate with the APCD to evaluate the feasibility of allowing APCD to access complaints submitted via the "Get It Done" app that are under its jurisdiction.

	Continue robust enforcement of truck route, continue Barrio Logan Truck Route Enforcement Task Force, and update Barrio Logan Community Planning Group monthly on truck route enforcement activities.
City of National City	Notify relevant parties of designated truck routes, improve trucking route street signage infrastructure throughout the city as needed. Continue robust enforcement of truck route
San Diego Association of Governments (SANDAG)	Support inclusion of Harbor Drive improvements in Regional Plan. Provide technical assistance regarding geofencing program (or other ITS technologies).
California Department of Transportation (CALTRANS)	Participate in creation of signage plan and install signage according to adopted plan.
Air Pollution Control District (APCD)	Support improved truck route signage and education programs
Community Steering Committee (CSC) Members	Create/inform education and training programs, provide feedback on geofencing (or other ITS technologies), Harbor Drive improvements, and signage plan.
Port District	Based on established procedure, provide educational material to Port tenants and other companies doing business at the Port on a biannual basis. Ensure new drivers are provided the information on an ongoing basis.
Additional Information:	
N/A	

Action E4: Increase number of truck parking and staging facilities with electric charging capabilities to address regional parking needs and alleviate the truck parking burdens within the Portside Community.	
Strategies and Course of Action	
• Increase number of truck parking facilities and electric charging facilities.	
Goals:	
• Provide relief to local communities and support the needs of truckers. • Prepare a feasibility study by 2023 to determine needs and potential locations of truck parking facilities. This feasibility study might explore potential public-private partnership opportunities. • Identify and advance one location in Otay Mesa. • Identify and advance one location to alleviate truck parking burdens in National City.	
Targeted Timeline(s):	
• Complete feasibility study by 2023. Date assumes funding to be available in 2021-2022. This date is subject to change depending on funding being secured.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
County of San Diego	Assist in identifying allowable locations for truck parking in Otay Mesa (unincorporated area).
City of San Diego	Assist in identifying allowable locations for truck parking in Otay Mesa.
San Diego Association of Governments (SANDAG)	Work with National City, City of San Diego, and other jurisdictions as needed to identify allowable locations for truck parking facilities.
California Department of Transportation (CALTRANS)	Assist as needed.
Additional Information:	
N/A	

Land Use Strategies

The CSC created subcommittees to discuss and establish specific actions to reduce emissions from various sources within the Portside community. The Land Use Subcommittee was formed to focus on a series of strategies to reduce exposure to toxic air contaminants in the Portside Communities. The Subcommittee reviewed over 125 proposals and identified those strategies with the highest priority for the stakeholders, as well as additional strategies (Phase 2) which would continue to be developed to further these goals. The subcommittee identified strategies which would provide for reduced exposure through improved community planning, transportation planning, development of additional community green space, indoor air filtration, enforcement of truck regulations, as well as further study of health inequities in the communities.

Some of the strategies call for the development and adoption of community plan documents which provide for increased separation between sensitive receptors and sources of toxic air contaminants (TACs), as well as additional green space in the communities. Additional physical separation between sensitive receptors and sources of TACs can reduce the community exposure and associated health risks from those TACs. Additional green space in the community can provide physical separation, as well as provide important recreational opportunities for community residents. As part of SDG&E's goal to build better communities, SDG&E partners with jurisdictions and community-based organizations to expand the tree canopy throughout its service territory. Various SDG&E tree planting and tree stewardship programs can help to meet the Portside Community urban canopy goals.

The strategies also call for the development of grant programs to provide air filtration to residents within 500 feet of the Port, freeways, or industrial land uses, as well as the development of vegetative buffers along freeways. In order to reduce exposure in local public schools, the strategies call for the installation of air filtration systems, and increased use of electric school buses.

Further study and documentation of health inequities in the Portside communities is also an identified strategy from the Subcommittee. The strategies call for the completion of a health equity assessment for Portside communities in order to inform CERP health outcomes. This assessment will assist with information needed for several Phase 2 strategies to provide relief to local communities by supporting neighborhood resiliency and housing stability for AB617 neighborhoods as a health/racial/environmental justice cross agency goal.

Finally, transportation planning is also an important strategy in reducing the exposure to air pollution. Traffic congestion and idling, especially from diesel vehicles, can result in increased pollution in communities. As a result, the Subcommittee identified a priority project related to grade separation of the local trolley network in order to reduce freight, truck, and vehicle impacts and emissions on Portside communities, while reducing traffic congestion from the working waterfront by improving transportation efficiencies. Several Phase 2 strategies related to transportation planning have also been proposed.

Action F1: Support land uses that serve as a buffer between industrial and residential uses in the Portside Community	
Course of Action	
• Provide Steering Committee support for Barrio Logan Community Plan (BLCP) Update, which proposes commercial land uses and zoning that serve as a buffer between industrial uses within the Port and residential uses within the community. • Coordinate air quality strategies and goals in the CERP with the BLCP Update. • Support adoption of the Port of San Diego Maritime Clean Air Strategy (MCAS). • Support Balanced Plan adoption that will ensure implementation for Pepper Park in National City. • Support for Westside Specific Plan (WSP) amortization strategy (WSP strategies 3.4 and 3.5). • National City to pursue the implementation of the amortization plan.	
Strategies:	
• Public information and outreach • Collaboration • Planning	
Goals:	
BLCP Update • Adoption of the New Barrio Logan Community Plan with commercial land uses and zoning that serve as a buffer between industrial uses in the Port and residential uses in the community. • Ensure air quality policies and goals in New BLCP meet all regulatory requirements, including APCD requirements. • Obtain support from Barrio Logan Community Planning Group for MCAS adoption. Pepper Park Expansion • Adoption of the Balanced Plan with Pepper Park expansion. • Set goals for the completion of Pepper Park expansion. National City Amortization Plan • Set amortization implementation & timeline goals. • Support commitment from National City by Third Quarter 2021	
Estimated Timeline:	
N/A	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:

Portside Steering Committee	• Support development BLCP update • Support adoption of MCAS
City of San Diego	• Support/Adopt new BLCP • Confirm that air quality policies in BLCP are coordinated with APCD requirements
Barrio Logan Community Planning Group	• Support/Adopt new BLCP • Confirm that air quality policies in BLCP are coordinated with APCD requirements
City of National City	• Set amortization implementation and timeline goals • Adopt the Balanced Plan with Pepper Park expansion
Port of San Diego	• Set goals for the completion of Pepper Park expansion.
Additional Information:	
N/A	

Action F2: Reduce exposures for sensitive receptors within 500 feet of Port, freeways, and industries
Course of Action
• Support community request for Caltrans to develop buffers (vegetative/walls) along I-5 where possible.   ○ Coordinate this action with the South Bay to Sorrento Corridor Plan and the Barrio Logan Community Plan Update • Pursue all grant funding opportunities. • Support new policies for requiring all <u>new</u> housing & other sensitive receptors (like daycares, health & medical facilities) install landscape buffers (refer to CARB's Air Quality and Land Use Handbook & indoor air filtration systems.
Strategies:
• Public Outreach • Collaboration • Grant funding/Incentives
Goal(s)/Timeline:

Vegetative buffers

- Prepare a feasibility study in 2022 to identify locations where strategy can be implemented.
- Set goals for project construction.

New policies for new sensitive land uses:

- Continued support of the City of San Diego to integrate policy for determining compatible land uses in BLCP Update.
- Continued implementation by National City of policy in WSP.

Estimated Timeline:	
N/A	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
California Department of Transportation (CALTRANS)	• Based on the South Bay to Sorrento Corridor Study, identify locations where a vegetative barrier strategy can be implemented in the Portside Community • Pursue construction of vegetative barriers where feasible in the Portside Community.
Additional Information:	
N/A	

Action F3: Urban Greening
Course of Action

- Support National City Pepper Park Expansion (additional 2.54 acres of open space, Balanced Plan).
- Pursue all grant funding opportunities.
- Support the development of New Urban Green Spaces in National City such as Urban Mini-parks with community gardens.
- Support the creation of urban green spaces as proposed by the BLCPU.
- Support the proposal for urban greening along Cesar Chavez parkway between 25th St. and Cesar Chavez Park to encourage outdoor activity, walking, and increase pedestrian access to Cesar Chavez Park. (Harbor Drive Multimodal Corridor Study (HDMCS) project 67)

Strategies:
• Public Outreach • Collaboration • Grant funding/Incentives
Goal(s)/Timelines:

Pepper Park Expansion:
• Obtain commitment from National City and Port of San Diego to prioritize implementation by 2021.
• Project completion by 2025.
Urban Mini- Parks:
• Request National City to prepare a feasibility Study by 2022 to identify:
  ○ necessary policy/plan,
  ○ analysis of 3-4 potential locations that present best opportunities for implementation.
• Complete 1-2 urban mini-parks by 2025.
Linear Park:
• Support the creation of urban green spaces as proposed by the BLCPU.
• Seek project funding.
Cesar Chavez:
• Obtain commitment from the City of San Diego and the Port in 2021.
• Obtain project funding in 2022.
• Project construction start in 2023.

Estimated Timeline(s):
Obtain commitments from National City, San Diego, Caltrans for proposals above by First Quarter 2021.

Implementing Agency, Organization, Business or Other Entity	
Name:	**Responsibilities:**
City of National City	Support adoption of Balanced Plan (with EHC and Port of San Diego support). Pursue all grant funding opportunities.
City of San Diego, Port of SD, SANDAG, U.S. Navy (for exploring opportunities), BLCPG support	Support the proposal for Boston Avenue Linear Park creating a new urban green space along I-5 and Boston Ave. in San Diego. Support the proposal for urban greening along Cesar Chavez parkway between 25th St. and

	Cesar Chavez Park to encourage outdoor activity, walking, and increase pedestrian access to Cesar Chavez Park. (HDMCS project 67) Pursue all grant funding opportunities Port of San Diego to convene stakeholders to explore opportunities to increase tree canopy in the Portside Community Port of San Diego to work with Urban Core to increase tree canopy on tidelands and Portside Community, including irrigation plan
California Department of Transportation (CALTRANS)	Support the proposal for Boston Avenue Linear Park creating a new Urban Green space along I-5 and Boston Ave. in San Diego. (By subcommittee)
Additional Information:	
N/A	

Action F4: Public school exposure reduction
Course of Action
• Introduce indoor air filtration system technologies to school districts. • Prioritize incentive funding to support ZEV buses & charging infrastructure. • Establish collaboration with school districts to pursue funding opportunities. • Pursue grant funding opportunities.
Strategies:
• Public Outreach • Collaboration • Grant funding/Incentives
Goal(s):
• Identify all public schools and school districts within AB617 area. • Obtain commitment from school districts to support and implement air filtration technologies. • Assist school districts to develop indoor air filtration transition plan for all AB617 schools. • Obtain commitment from School Districts to prioritize bus fleet transition in 2021. • Assist school districts to develop grant fund applications.

Estimated Timeline(s):	
N/A	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Air Pollution Control District (APCD) (with San Diego Gas and Electric (SDGE), City of San Diego and City of National City support)	Identify all public schools and school districts within AB617 area. Work with school districts to identify opportunities to implement air filtration technologies. Assist school districts to develop incentive funding applications for indoor air filtration systems. Work with School Districts to prioritize bus fleet transition in 2021. Assist school districts to develop grant fund. applications
Additional Information:	
N/A	

Action F5: Support Harbor Drive Multimodal Corridor Study (HDMCS) Land Use Proposals
Course of Action:
• Beardsley St & Harbor Dr: Modification of raised median to restrict EB and SB left turns. (project 9) • Cesar Chavez Pkwy & Logan Ave: Reconfiguration of intersection to improve operations and bike/ped access. (project 10) • Schley St & 26th St: Diverter island on 26th St to restrict NB traffic from Schley St. (project 4) • Schley St & Harbor Dr: Reconfiguration of intersection to improve operations and bike/ped access to shipyards. (project 16) • Cesar Chavez Pkwy: Evaluate ingress/egress from driveways near Tenth Avenue Marine Terminal to improve safety and operations. (project 14) • Harbor Drive 2.0: Construction of infrastructure and transportation engineering improvements, in conjunction with ITS technologies, between TAMT and NCMT to provide a more efficient movement of freight while maintaining the quality of life for neighborhood residents and improving public safety (project 64).

Strategies:	
• Transportation Planning • Collaboration • Public Outreach	
Goal(s):	
• Continued collaboration between the City of San Diego and Port of San Diego in 2021/2022 to support the goals of the HDMCS • Set goals for project construction.	
Estimated Timeline(s):	
N/A	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
City of San Diego	Support implementation of the HDMCS.
Port of San Diego	Support implementation of the HDMCS.
City of National City	Support implementation of portion of Harbor Drive 2.0 (HDMCS 64) that is within National City's jurisdiction.
Additional Information:	
N/A	

Action F6: Neighborhood Resiliency & Housing Stability
Course of Action
• Work with the County of San Diego Health and Human Services Agency (HHSA) to evaluate the feasibility of conducting a health equity assessments for Portside communities in order to inform CERP health outcomes. • Work with SANDAG to evaluate the feasibility of developing a framework to identify and assess significant health impacts within the Portside communities, analyze the relationship between these health issues and the built environment, and evaluate impacts of major transportation strategies in the CERP. • Leverage SANDAG's 2012 Healthy Communities Atlas to inform future health equity studies.

Pursue all grant funding opportunities (such as: Caltrans Planning Grant, other planning grants, or grants for public health). • Support the development of polices to require a minimum of 25% of new affordable housing units be designated affordable in AB617 area.
Strategies:
• Collaboration • Research • Public Outreach • Grants
Goal(s)/Timelines:
• Perform health assessment in 2021 to establish existing conditions and health equity metrics and coordinate public workshops. • Perform health assessment update in 2025. • Work with SANDAG to develop transportation & health equity study in 2022—based on funding—in collaboration with the County of San Diego HHSA and the Environmental Health Coalition. • Establish working group with the City of San Diego and National City to align CERP goals with Climate Action Plans, TOD's and affordable housing to identify goals and opportunities for leveraging funding for residential charging infrastructure and ZEV support, solar panel installations, restorative landscape, and indoor air filtration or other similar goals for healthy environment.
Estimated Timeline(s):
N/A
Implementing Agency, Organization, Business or Other Entity

Name:	Responsibilities:
County of San Diego Health and Human Services Agency (HHSA)	• Evaluate the feasibility of conducting health equity assessments.
San Diego Association of Governments (SANDAG)	• Develop transportation & health equity study in 2022, based on funding opportunities.
Air Pollution Control District (APCD)	• Support regional and local land use efforts that improve air quality and public health, subject to

	available resources and board direction

Additional Information:

https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/CHS/healthequity/_HE_RaceEthnicity_FINAL.pdf
https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/CHS/healthequity/_HE_SES_FINAL.pdf

Action F7: Improve Transportation Efficiencies

Course of Action

1. Prioritize implementation of Blue line trolley grade separation at 28th St and 32nd St (SANDAG MMAS project L-83, & HDMCS project 62 & project 22).
2. SD/BL – Support adding traffic calming measures along Main Street between Cesar Chavez Parkway and 32nd St. to discourage truck use. (By subcommittee)
3. Work through the South Bay to Sorrento Corridor Plan and the BLCPU to pursue freeway ramp removal and relocation of I-5 Southbound onramp from Boston Ave. to 28th St. (HDMCS project 69)
4. Boston Ave: Traffic calming improvements including potential bike boulevard between 26th St and 28th St. (HDMCS project 48 – Coordinate w/above HDMCS project 69)
5. Boston Ave: Class I bikeway/multi-use path between 29th St and 32nd St. (HDMCS project 49 – Coordinate w/above HDMCS project 69)
6. 28th St & National Ave: Reconfiguration of intersection to alleviate queueing issues for WB vehicles. (HDMCS project 26 – Coordinate w/above HDMCS project 69
7. 28th St & Harbor Dr: Enhanced pedestrian facilities to accommodate shipyard demand including widened crosswalks, curb extensions, curb ramps, curb ramps, and potential pedestrian scramble. (HDMCS project 38)
8. 28th St: Reconfiguration to increase capacity and improve access between Main St and National Ave. Initial study assumed 2 NB and 3 SB lanes with raised median. (HDMCS project 46)
9. 8th St & Harbor Dr: Additional and/or extended left-turn pocket to improve access from WB Harbor Drive to Naval Base Gate 9 (8th St). (HCMCS project 31)
10. 8th St & Harbor Dr: Reconfiguration of WB 8th St to allow 3 through lanes Naval Base Gate 9 (8th St). (HCMCS project 32)
11. Civic Center Dr & Harbor Dr: Dual EB left turn lanes to increase capacity for traffic from nearby I-5 SB offramp. (HCMCS project 33)
12. 8th St: Class II bike lanes connecting Harbor Dr, 8th St Trolley/Bus Station and National City communities. Pedestrian upgrades including rail crossing gates and curb ramps. Wayfinding

facilities. (HCMCS project 53)

13. 24th St/Bay Marina Dr: Class II bike lanes connecting NCMT, 24th St Transit Center and National City communities. Pedestrian upgrades including rail crossing gates and curb ramps. Wayfinding facilities. (HCMCS project 55)
14. Pepper Park: Bike/pedestrian connections to Pepper Park extension proposed in National City Marina District Balanced Land Use Study (2016). (HDMCS project 19)
15. Bayshore Bikeway, National City: Relocation from Tidelands Ave to Marina Way and McKinley Ave. (HDMCS project 50)
16. NC – Support Bay Marina Drive Active Transportation Connection from east of I-5 to gates on Terminal Ave (SANDAG MMAS project L-198, December 2018 Workshop NBSD Table)
17. NC – National City wayfinding signage project throughout National City (SANDAG MMAS project # P-32, Port Capital Improvement Program (CIP) (2014))
18. SD/BL - Support Chollas Creek Multi-Use Path from Dorothy Petway Park to Harbor Drive (SANDAG MMAS project # L-142, City of San Diego Capital Improvement Program (CIP GIS Shapefile) (2017))
19. NC – Support 8th Street urban Trail from Harbor Drive to D Ave. (SANDAG MMAS project L-146, National City Downtown Specific Plan (2017))

Strategies:

- Collaboration
- Planning

Goal(s)/Timeline:

High Priority:

- Identify and evaluate if both or one location can move forward in the South Bay to Sorrento Comprehensive Multimodal Corridor Study and SANDAG's 2021 Regional Plan as priorities.
- Based on evaluation above, prioritize implementation by conducting advanced planning of grade separation project by 2024. Implementation refers to advancing the project to the next step in the project development process.

For actions #'s 2 and 4-8, above:

- Support actions from City of San Diego in 2021/2022.
- Set goal for project construction.

For action #3, above:

- Confirm feasibility by Second Quarter of 2022.
- If advanced, obtain commitment from Caltrans for project construction.

For actions #'s 9-17 and 19, above:

- Support commitment from National City in 2021/2022.
- Set goal for project construction.

<table>
<tr><td colspan="2">For action #18, above:
• Support commitment from the City of San Diego, Port & Caltrans to prioritize project in 2021/2022.
• Set goal for project construction.</td></tr>
<tr><td colspan="2">Estimated Timeline(s):</td></tr>
<tr><td colspan="2">TBD</td></tr>
<tr><td colspan="2">Implementing Agency, Organization, Business or Other Entity</td></tr>
<tr><td>Name:</td><td>Responsibilities:</td></tr>
<tr><td>San Diego Association of Governments (SANDAG), Port of San Diego, Naval Base San Diego</td><td>• Identify and advance if both or one location can move forward in the South Bay to Sorrento Comprehensive Multimodal Corridor Study and SANDAG’s 2021 RTP as priorities.
• Prioritize implementation to expedite grade separation project start in 2024. Implementation can mean the project will advance to the next step in the project development process assuming funds can be secured.</td></tr>
<tr><td>City of San Diego, Port of San Diego, Naval Base San Diego</td><td>• Support SANDAG prioritization of project.</td></tr>
<tr><td>City of San Diego</td><td>• Review proposed actions 2, 4-8.</td></tr>
<tr><td>City of National City</td><td>• Review proposed actions 9-17, 19.</td></tr>
<tr><td>California Department of Transportation (CALTRANS)</td><td>• Review proposed action 3.</td></tr>
<tr><td>Naval Base San Diego</td><td>• Review proposed action 16, provide support for actions 17-19.</td></tr>
<tr><td>Port of San Diego</td><td>• Review proposed action 16, provide support for actions 5-19.</td></tr>
<tr><td colspan="2">Additional Information:</td></tr>
<tr><td colspan="2">Please see this Caltrans document for a list of phases: https://dot.ca.gov/-/media/dot-media/programs/sustainability/documents/2011-how-caltrans-builds-projects-a11y.pdf</td></tr>
</table>

Action F8: Truck Diversion	
Course of Action	
• Truck diversion to prevent trucks from driving onto Beardsley St. as they exit I-5 South on Cesar Chavez exit. Divert trucks to Cesar Chavez Parkway to access Tenth Avenue Marine Terminal.	
Strategies:	
• Transportation Planning, Collaboration, Public Outreach	
Goal(s)/Timeline:	
• Prepare a feasibility study in 2022 to identify best truck route to Tenth Avenue Marine Terminal and diversion, traffic calming and appropriate signage. • Develop goals for removing or reducing truck traffic along Beardsley Street with Barrio Logan Community Planning Group.	
Estimated Timeline:	
N/A	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
City of San Diego	• Seek resources to prepare study If resources are secured: • Complete feasibility study • Implement measures as a result of feasibility/planning study
California Department of Transportation (CALTRANS)	• Support as needed
Barrio Logan CPG	• Support as needed
Additional Information:	
N/A	

Working Waterfront Activities (Port, Navy, and Shipyards)

The CSC created subcommittees to discuss and establish specific actions to reduce emissions from various sources within the Portside community. A subcommittee was formed to focus on key port-related emission

sources and strategies to control them beyond current regulatory programs to further reduce health risks. In addition to emission reduction strategies associated with the Port of San Diego, the subcommittee identified strategies to reduce emissions at U.S. Naval Base San Diego (NBSD) and the neighboring Port of San Diego Tenants including private shipyards. These facilities are located along the westernmost boundary of the Portside Community, which is an area commonly referred to as the working waterfront.

As the fourth largest port in California, with over 500 ship calls per year, the Port of San Diego includes two cargo terminals within the Portside Community and a cruise ship terminal that is located west of downtown San Diego. The National City Marine Terminal (NCMT) focuses primarily on automobiles (or roll-on roll-off cargo), whereas the Tenth Avenue Marine Terminal (TAMT) includes, refrigerated containers, as well as dry bulk and breakbulk commodities. These ship calls are assisted in their trade by pilot boats for navigation, tugboats for maneuvering, and other harbor craft that provide vessel services. In order to move cargo, marine terminals throughout the Port District service the calling ships with cranes, container-handling equipment, and trucks. Cargo is moved from marine terminals to its final destination with on-road trucks and trains.

NBSD is the Navy's most populous base on the west coast and occupies approximately 2,000 acres south of downtown San Diego. It is homeport to 60 surface ships and more than 200 tenant commands in the San Diego metropolitan area.

Several private shipyard facilities are also located along the westernmost boundary of the Portside Community. These facilities are engaged in building and repairing of commercial and military ships.

The tables below propose strategies that were designed to reduce emissions associated with activities occurring along the working waterfront.

Action G1: Reduce Diesel Emissions from cargo handling equipment (CHE).
Course of Action
<u>High Priority</u> • Facilitate upgrading and/or replacing diesel emitting CHE with ZE CHE at the Port's marine terminals. Port staff will encourage the use of ZE technology and will help assess the feasibility of ZE equipment when it is scheduled to be upgraded. If electric cargo handling equipment is not feasible, Port staff shall demonstrate the legal, technological, operational, and/or financial constraints to zero emission equipment implementation. • Ensure new CHE is compatible with operational needs of end users. • Ensure CHE has been vetted by end user. • Port staff will establish Zero Emission / Near Zero Emission goals for 2030 in the Maritime Clean Air Strategy (MCAS). • Port staff will develop recommendations to require the best available CHE technology in the Maritime Clean Air Strategy (MCAS)

Strategies and Goals	
• Reduce cargo handling equipment DPM emissions by 80% and NOx 89% • For demonstration equipment and pilots, incorporate feedback from end users, such as ILWU, Teamsters and stevedores. • Identifying which ZE CHE works better than the rest.	
Timeline(s):	
• Meet Reduction Goals by 2025.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
San Diego Gas and Electric (SDG&E)	• Implementing agency for infrastructure and load requirements.
Air Pollution Control District (APCD)	• Assist with funding opportunities
Port District	• Exhibit ZE CHE equipment and engage with CHE owners.
Additional Information:	
N/A	

Action G2: Reduce Emissions from Ships at Berth
Course of Action
• Grant funding support for shore power or equivalent reductions in ship hoteling emissions. • Emission reductions from ship hoteling or innovative concepts, starting with pilot testing in 2024. • Utilize existing ship-to-shore power infrastructure to shut down main and auxiliary engines
Strategies and Goals
• Pilot testing of ship emission reduction technology by 2024 or implementation of innovative concepts in consultation with CARB. • The US Navy at Naval Base San Diego commits to operating all in-ported ships on ship-to-shore power and shutting down their main and auxiliary diesel-fired engines.
Timeline(s):
• Full implementation of Roll-on/Roll-off vessels by 2025
Implementing Agency, Organization, Business or Other Entity

Name:	Responsibilities:
California Air Resources Board (CARB)	Evaluate how CARB can assist the Port in piloting of ship emission reduction technology.
Port District	Provide materials to Port tenants and other companies doing business at the Port regarding shore power requirements. Develop 30% design plans to implement shore power at the Port District marine terminals.
San Diego Gas and Electric (SDG&E)	Determine infrastructure improvements that are necessary to support load requirements.
US Navy at Naval Base San Diego	Operate in-port ships on shore power to the maximum extent possible considering national defense requirements
Additional Information:	
N/A	

Action G3: Reduce emissions from harbor craft
Course of Action
• Facilitate implementation of the first all-electric tugboat on the west coast by 2026 • Seek opportunities for grant funding to fund projects in advance of regulatory requirements.
Strategies and Goals
Identify suitable projects to assist with advancing the State's goals for Commercial Harbor Craft* by supporting: • Existing fuel docks with the transition to renewable diesel by January 1, 2023; • All new excursion vessels' transition to zero emission capable hybrid technologies by January 1, 2025; and • Short-run ferry-operators' transition to ZE technologies for all their new and in-use short run (<3 nm) ferries by January 1, 2026

Timeline(s):	
• Install dock power by 2024 at high traffic marinas (50 visits per year or more) • By 2026 all new and in-use short-run ferries to be zero emissions • By 2025 all new excursion vessels and tugs to transition to hybrid/electric technologies	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Port District	Assist Port tenants to facilitate transition to ZE tugboats and ferries. Provide necessary landside infrastructure to support transition to ZE harbor craft Facilitate implementation of the first all-electric tugboat on the west coast by 2026
SDGE	Supply power for chargers as needed
APCD	Explore expanding agreement with CARB to enforce harbor craft regulations locally
CARB	Enforce regulations to support goals described above
Additional Information:	
N/A	

Action G4: Reduce DPM and NOx emissions from portable air compressors and other diesel sources at shipyards.
Course of Action
• Shipyards to require portable air compressors on site to be powered by ZE technology or Tier 4 engines. • Shipyards will continue ongoing actions to reduce emissions from on and off-road diesel equipment. Actions to reduce emissions may include retirements, replacements (to cleaner fuel or higher engine tier), exhaust retrofits, or electrification.

Strategies and Goals	
• NASSCO, BAE Systems and Continental Maritime of San Diego LLC (CMSD) will implement portable air compressor policies by May 1, 2021. • The number and types of action will vary depending on a variety of factors including shipyards specific equipment needs, business cycle, availability of incentives, technical feasibility and availability of zero/low emissions equipment. • Shipyards will report progress on achieving this goal to the Steering Committee annually**.**	
Timeline(s):	
• 2021 for portable air compressors.	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Shipyards	Implementation of policy for portable air compressors.
Additional Information:	
N/A	

Action G5: Promote best practices for reducing diesel, VOC and other emissions from ship repair activities.
Course of Action
• Provide training on best practices for ship repair contractors. • Navy will assess emission changes from ship repair operations at NBSD.
Strategies and Goals
• Shipyards conduct a minimum of three training or outreach events per year from 2021 through 2025. • US Navy will monitor changes in emissions over the next 5 years as a result of ship activities in the area as well as overall emissions at the base and make it available to the public.
Timeline(s):
N/A

Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Shipyards	Training and outreach events.
US Navy	Conduct emissions evaluations on operations, monitor emissions and make information available to the public
Additional Information:	
N/A	

Action G6: Reduce emissions from shipyard employee transportation
Course of Action
• Continue ongoing programs and partnership with SANDAG iCommute to promote and increase participation in alternative transportation.
Strategies and Goals
• Annual report to steering committee. • Facilitate outreach and education to encourage vanpool, carpool, transit, bike options. • Inform employees about available iCommute transportation subsidies for eligible vanpool and transit users. • Designate an existing staff member(s) to coordinate and promote commuter programs to employees. • Inform employees who carpool, vanpool, take transit, bike, or walk to work about iCommute's Guaranteed Ride Home Program which provides a reimbursement for those who take alternative transportation to work and need a ride home in the event of an emergency, illness, or unscheduled overtime. • Conduct an iCommute survey as feasible to determine employee commute preferences and measure drive alone rate changes.
Timeline(s):
• TBD

Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Shipyards	Educate workforce and coordinate with SANDAG iCommute staff.
San Diego Association of Governments (SANDAG)	Support initiative
Additional Information:	
N/A	

Action G7: Promote adoption of ZE technologies by Port tenants, truckers, and other users of equipment	
Course of Action	
• Demonstration event where ZE equipment can be viewed and tested.	
Strategies and Goals	
• Conduct one event in 2021.	
Timeline(s):	
• Conduct one event in 2021	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:
Port	Organize event and reach out to Shipyards, IL WU, Teamsters, Port tenants and other interested parties.
Additional Information:	
N/A	

Action G8: Reducing emissions associated with traffic at Naval Base San Diego	
Course of Action	
• Reduce total emissions from employee transportation associated with travel to and from the base.	
Strategies and Goals	
• Support Telework Schedules • Support of the Federal Transportation Improvement Plan (TIP) & San Diego Association of Governments (SANDAG) iCommute Programs to reduce emissions via public transportation and vanpools • Utilizing TIP Coordinators to market the program to all Sailors on station, newly arriving Sailors to the city, and Sailors within San Diego to maximize TIP and Vanpools • Monitor reductions in VMT in partnership with SANDAG's iCommute survey • Reduce queueing delays at security checkpoints by increasing NBSD personnel at checkpoints during peak traffic hours • Restrict sailors residing at NBSD from driving onto the wet-side of the base during peak morning commute hours • Exploring innovative ideas within existing housing areas to maximize the FEDGOV TIP program creating "transit oriented-like" housing • Continue use of 33 electric passenger vehicles and supporting on-base charging stations in support of reduced emissions • Continue its partnerships with SANDAG and CALTRANS on assessing and identifying potential strategies to reduce VMT and the resulting emissions impacting the portside communities • Facilitate outreach and education to encourage vanpool, carpool, transit, bike options. • Inform employees about available iCommute transportation subsidies for eligible vanpool and transit users. • Designate an existing staff member(s) to coordinate and promote commuter programs to employees. • Inform employees who carpool, vanpool, take transit, bike, or walk to work about iCommute's Guaranteed Ride Home Program which provides a reimbursement for those who take alternative transportation to work and need a ride home in the event of an emergency, illness, or unscheduled overtime. • Conduct an iCommute survey every two years to determine employee commute preferences and measure drive alone rate changes.	
Timeline(s):	
• Commute related VMT will be tracked and reported on over the next 5 years • Transit oriented housing will be explored over the next 5 years • All other strategies are implemented and currently ongoing	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:

US Navy	Implement strategies and report on actions
Additional Information:	
N/A	

Advocacy Measures

Some measures require a commitment by an agency that cannot be made until after a public process and/or after May 2021 when the CERP will be finalized. The only action the APCD and/or Steering Committee can take is to support an outcome that will improve air quality in Portside, all disadvantaged communities, or the region.

Action H1: Support Emission Reduction Opportunities	
Course of Action	
• Support emission reductions opportunities to improve air quality	
Strategies and Goals	
• Support new State Implementation Plan (SIP) measures • Support a Regional Transportation Plan with significant reduction in VMT throughout the region • Support for transit as a funding priority for SANDAG and cities • Support for early transition to ZE transit buses • Support SANDAG in the development of EV strategies for region including opportunities in Portside communities • Support new policies for requiring all new housing & other sensitive receptors (like daycares, health & medical facilities) install landscape buffers & indoor air filtration systems. • Support polices to develop new affordable housing units in AB617 communities. • Support CARB fleet rules • Support for a Barrio Logan community plan update that eliminates zoning that allows incompatible land uses.	
Timeline(s):	
• TBD	
Implementing Agency, Organization, Business or Other Entity	
Name:	Responsibilities:

Air Pollution Control District (APCD)	Support regional and local land use and transportation planning efforts that improve air quality and public health, subject to available resources and board direction
Community Steering Committee (CSC)	Support actions as needed
Additional Information:	
N/A	

Additional Emission Reduction Actions

In addition to the proposed strategies outlined in this document to reduce air pollution in the Portside community, the District will continue to reduce emissions in the San Diego region through its incentive and rule development programs.

The District develops and adopts detailed air quality plans that evaluate new and existing emissions reduction strategies to meet federal and state air quality targets. The most recent proposed plans include: the 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County[67], the 2020 Reasonable Available Control Technology Demonstration for the National Ambient Air Quality Standards for Ozone in San Diego County[68], the 2008 Eight-Hour Ozone Attainment Plan for San Diego County[69], and the 2008 Eight-Hour Ozone Reasonable Available Control Technology Demonstration for San Diego County.[70] These proposed plans highlight emissions reductions through incentives and rule development and provide implementation strategies and actions.

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[67] San Diego Air Pollution Control District, *2020 Plan for Attaining the National Air Quality Standards for Ozone in San Diego County*, October 2020, available at:

https://www.sandiegocounty.gov/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/Att%20A%20(Attainment%20Plan)_ws.pdf.

[68] San Diego Air Pollution Control District, *2020 Reasonable Available Control Technology Demonstration for the National Ambient Air Quality Standards for Ozone in San Diego County*, October 2020, available at:

https://www.sandiegocounty.gov/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/Att%20B%20(RACT).pdf .

[69] San Diego Air Pollution Control District, *2008 Eight-Hour Ozone Attainment Plan for San Diego County*, December 2016, available at:

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/8-Hr-O3%20Attain%20Plan-08%20Std.pdf

[70] San Diego Air Pollution Control District, *2008 Eight-Hour Ozone Reasonable Available Control Technology Demonstration for San Diego County*, December 2016, available at:

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/8-Hr-O3%20RACT%20Demo-08%20Std.pdf

The sections below demonstrate regionwide actions as a result of the 2020 proposed plans for attaining National Ambient Air Quality Standards in San Diego County and highlight how these specific actions can address some of the air pollution concerns in the Portside community. Please refer to Chapter 5 of this CERP to review the District's Enforcement Program.

District's Incentive Programs

The District's incentive programs are designed to provide funding to encourage owners of older, dirtier mobile equipment to replace it with newer cleaner machines before regulations require them to do so. Since 1999, the District incentives programs have provided over $131 million in funding to residents and businesses who work throughout the County and achieved over 1,800 tons per year of emission reductions.

Funding for the District's incentive programs typically comes from state or federal sources, include the California Air Resources Board (CARB) and the US Environmental Protection Agency (EPA). Each program the District administers follows guidelines to ensure projects using this funding provide expected emission reductions for each program. In the last five years, the District has administered the following incentive programs:

- Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program and Moyer State Reserve Program)
- Community Air Protection Program (AB 617 CAPP)
- Funding Agricultural Replacement Measures for Emission Reductions (FARMER)
- Voluntary NOx Remediation Measure Program
- AB 2766 DMV Funding
- Goods Movement Emission Reduction Program (GMERP)

Along with these District-run programs, residents of San Diego can also participate directly in state incentive programs such as Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), the Clean Off-Road Equipment Voucher Incentive Project (CORE), and programs for passenger vehicles like the Clean Vehicle Rebate Program and the Clean Vehicle Assistance Program. San Diego Gas and Electric also provides incentive funding for electric vehicle charging through their Power Your Drive program for passenger cars and medium and heavy-duty vehicles.

Community Air Protection Program

The District and state programs mentioned above provide opportunities for newer cleaner vehicles and equipment throughout San Diego County. While businesses and agencies in the Portside Environmental Justice Communities can and have participated in these programs, the Community Air Protection Program (CAPP) is focused on ensuring that incentive funding is available and spent on projects that directly benefit residents of state-designated disadvantaged communities. In the first year of the CAPP program (2019), San Diego awarded $2.1 million to four contractors for 14 projects in or adjacent to Portside. In 2020, the District has approximately $18 million available for projects in Portside. To date the District is contracting up to $11.2 million of that funding for projects in or adjacent to the Portside community and anticipates a second solicitation for projects to occur before the end of 2020.

Mobile source CAP projects that can be funded through the Carl Moyer program must meet a cost-effectiveness limit of $30,000 per weighted ton of emission reductions for diesel or natural gas projects, and $100,000 per weighted ton of emission reductions for zero emission projects. In order to address local sources of air pollution, projects identified, prioritized and included in a CERP have the ability to set its own cost-effectiveness limits. Because the state of California has identified diesel particulate matter as a carcinogen, any emission reductions achieved by the projects are weighed by a factor of 20.With the anticipated $33 million in overall CAPP funding, the District expects to reduce approximately 330 tons of nitrogen oxides or reactive organic gases, or 16.5 tons of particulate matter from CAPP-funded projects such as off-road equipment, on-road trucks, and marine vessels in the region.

Rule Development Actions

This section discusses recently adopted and upcoming rule development actions that will apply districtwide but can also benefit the Portside community. The District's Rule Development program proposes revisions to existing rules and develops new rules. During this process, the District evaluates whether existing rules meet Federal Reasonable Available Control Measures (RACM) or California's Best Available Retrofit Control Technology (BARCT). Existing rules are also compared to other air district's rules to further evaluate potential emission reductions from rule development actions. A more thorough analysis of potential emission reductions from rule development actions can be found in Attachment G and Attachment J of the proposed 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County. Some of the measures are highlighted below.

Recently Adopted SDAPCD Regulations

Stationary Reciprocating Internal Combustion Engines

Stationary reciprocating internal combustion engines are non-mobile piston engines that run on gaseous or liquid fuels. Though their use varies widely, examples of such engines can be found on compressors or cranes, or more typically used for emergency power systems critical to human life (i.e. emergency standby engines). Despite their widespread use, the category will comprise only 1% of the total emissions inventory for NOx in 2032.

An amendment to Rule 69.4.1 was approved in July 2020 to require all non-emergency engines to meet a Tier 4 engine standard, currently the cleanest available technology for compression-ignition equipment. The District has already been implementing the lower emission standard through enforcement of California's Diesel Engine ATCM and federal NSPS IIII. The amendment also consolidates all the source category's requirements into one over-arching rule to simplify compliance and permitting. Because amended Rule 69.4.1 is as stringent as applicable state/federal requirements, and because the category represents RACT, there are no RACM available that would enable further emissions reductions in this source category.

Small Boilers, Process Heaters, and Steam Generators

The District regulates residential water heaters through multiple rules which include Rule 69.5.1 (for residential water heaters less than 75,000 BTU/hour), and Rule 69.2.1 (for small boilers 600,000 to 2 million BTU/hour).

However, large water heaters from 75,000 to less than 600,000 BTU/hour had not been regulated. South Coast Air Quality Management District (SCAQMD) Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters) regulates units from 75,000 to 2 million BTU/hour, limiting NOx emissions to 14 ng/J.

The District preliminarily evaluated the local feasibility, cost-effectiveness, and emission reduction potential of amending Rule 69.2.1 to reflect the more stringent emission limit of 20 ppmv NOx included in SCAQMD Rule 1146.2 for all new boilers and large water heaters rated from 75,000 to 2 million BTU/hour. Amended Rule 69.2.1 was adopted on July 8, 2020. The potential emission reductions (averaged over 365 days of operation per year) are estimated to be approximately 0.80 tons of oxides of nitrogen (NOx) per day.

Medium Boilers, Process Heaters, and Steam Generators

New Rule 69.2.2 (Medium Boilers, Process Heaters, and Steam Generators) applies to medium-sized new and replacement units rated between 2-5 million BTU/hour. There are estimated to be 900 boilers of that size range in San Diego County, cumulatively emitting an estimated 315 tons per year of NOx.

The District reviewed similar rules of other California air districts that regulate units in this size range. SCAQMD requires a permit to operate such equipment through Rule 1146.1 (Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, December 7, 2018). The SCAQMD rule was recently strengthened in specific categories, such as units firing on landfill gas (25 ppm), digester gas (15 ppm), and natural gas (9 ppm or 0.011 pounds/106 BTU). On the other hand, San Joaquin Valley Air Pollution Control District (SJVAPCD) chooses to regulate the source category via registration through Rule 4307 (Boilers, Steam Generators, and Process Heaters – 2.0 MMBTU/hour to 5.0 MMBTU/hour, April 21, 2016). Registration is required to operate similar equipment at the same control levels for certain equipment categories. Both the SCAQMD and SJVAPCD rules were adopted with cost-effectiveness values well above the District's threshold for further reductions.

The District created a requirement that all medium-sized natural-gas-fired units (between 2 and 5 million BTU/hour) to be either certified as meeting a NOx emission limit of 30 ppm or installed in accordance with a District registration. Rule 69.2.2 is anticipated to reduce NOx emissions from medium-sized boilers by 194 tons per year (0.53 tons per day).

Potential Upcoming SDAPCD Regulations

Architectural Coatings

Architectural coatings include a variety of residential, commercial and industrial paints, primers, sealers, and other coatings which, when applied, emit VOCs. The category will comprise 10% of the total emissions inventory for VOC in 2032. The District regulates architectural coatings through District Rule 67.0.1 (Architectural Coatings). Rule 67.0.1 currently incorporates VOC limits from CARB's 2007 Suggested Control Measure (SCM). However, an amendment to Rule 67.0.1 is planned for consideration to incorporate more stringent limits found in CARB's 2019 Suggested Control Measure, as well as to incorporate other attainment plan provisions.

Petroleum Storage Tanks

Existing District Rule 61.1 (Receiving and Storing Volatile Organic Compounds at Bulk Plants and Bulk Terminals) regulates large storage tanks for gasoline and other high volatility motor vehicle fuels. Based on emission inventory information and updated equipment descriptions, estimated emissions from this source category are about 0.12 tons per day of VOC. Based on emission factors in the SCAQMD Rule 1178 staff report, if the standards of SCAQMD Rule 1178 were incorporated in Rule 61.1 the estimated emission reduction potential would be about 0.05 tons per day. About 40% of the emission reduction potential (0.02 tons per day) would result from upgrading rim seals. However, since ongoing BACT adherence is required by Rule 61.1 for rim seal replacement, these emission reductions will be achieved over time by existing Rule 61.1. District permit data suggests rim seals are usually replaced between 12-16 years, and some facilities have already installed upgraded rim seals. The remaining potential emission reduction benefit of the Rule 1178 standards would be approximately 0.03 tons per day, from the more stringent requirements for fittings and the requirement for external floating roof tanks to be domed.

Mobile Transport Tanks Loading

Existing District Rule 61.2 (Transfer of Organic Compounds into Mobile Transport Tanks) controls vapors displaced by loading of mobile transport tanks with gasoline and other high volatility fuels from bulk terminals and vapor and liquid leaks during the loading process. The primary standard of Rule 61.2 requires a 90% emission reduction for all Volatile Organic Compounds (VOC) vapors displaced during the transport tank loading process. Based on emission inventory information, total estimated VOC emissions in San Diego County due to vapor displacement are about 0.03 tons per day from three bulk terminal loading rack facilities. San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4621 (Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants) requires a 95% emission reduction for displaced VOC vapors. Source testing data for the largest San Diego County facility shows that it consistently achieves greater than 97% control of VOC vapors released in the loading process. The emission reduction potential for the two remaining facilities is about 0.01 tons per day if they were required to meet a 95% control level instead of the 90% control level in existing Rule 61.2.

Metal Parts and Product Coating Operations

District Rule 67.3 (Metal Parts and Products Coating Operations) controls VOC emissions for the source category by limiting the VOC content of paints and cleaning solvents and specifies methods to minimize VOC emissions during equipment cleaning operations. Rule 67.3 also requires the use of high-transfer efficiency application equipment. One specialty coating limit found in Rule 67.3 (chemical agent resistant coatings, or CARC) has a VOC limit that exceeds the CTG requirements. Rule 67.3 requires CARC to not exceed 420 grams of VOC per liter when air-dried, or 420 grams of VOC per liter when baked. Limits for CARC are not specified directly in applicable federal guidelines; thus, it can be construed that CARC limits could adhere to "general" coating limits of 340 grams of VOC per liter (air-dried) or 280 grams of VOC per liter when baked.

The limited use of CARC produces a negligible impact to miscellaneous metal and plastic part coating emissions, and even less of an impact to total countywide VOC emissions. The emission reduction potential for the lowering of the VOC limit for CARC is about 0.003 tons of VOC per day.

Marine Coating Operations

Existing District Rule 67.18 (Marine Coating Operations) regulates VOC emissions from coating of marine vessels, including ships and pleasure boats. Based on emission inventory information, total VOC emissions from this source category are approximately 0.65 tons of VOC per day. VOC limits in Rule 67.18 are generally consistent with SCAQMD Rule 1106 (Marine Coating Operations). Specifically, for pleasure craft, some coating limits in San Diego County are more stringent than Rule 1106, which include antenna coatings, antifoulants for aluminum substrates, high gloss coatings, pretreatment wash primers, and special markings. In other pleasure craft coating categories, such as extreme high gloss topcoats, SCAQMD has a lower VOC content limit.

Additional emission reductions from updates to Rule 67.18 would more likely occur by lowering the VOC limit of materials used in the cleaning process. Less than 0.01 tons per day of additional VOC emission reductions would occur should the VOC limit of cleaning materials be lowered to 25 g/l. These would be primarily from smaller facilities, as the largest source already uses cleaning material that complies with what would be the lower standard in an amended rule.

Adhesive Materials Application Operations

District Rule 67.21 (Adhesive Materials Application Operations) regulates VOC emissions from the use of adhesives and sealants. Rule 67.21 was found by the EPA to represent RACT in March 2020. In 2017, South Coast AQMD amended their adhesive Rule 1168 (Adhesive and Sealant Applications) and reduced VOC contents for a variety of products, including certain flooring adhesives, plastic welding products, and various types of sealants. Many of these lowered limits do not take effect until January 1, 2023. As such, the possible incorporation of more stringent VOC limits found within Rule 1168 into Rule 67.21 could potentially reduce VOC by 0.09 tons per day in the same timeframe.

Natural Gas-Fired Fan-Type Central Furnaces

Existing District Rule 69.6 (Natural Gas-Fired Fan-Type Central Furnaces) is a point-of-sale rule that limits NOx emissions of new natural gas-fired residential-type central furnaces. The District adopted Rule 69.6 on June 17, 1998, establishing NOx emission limits of 40 ng/J for new residential furnaces. In 2014, SCAQMD amended their equivalent rule (Rule 1111 – Reductions of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces) mandating a NOx limit of 14 ng/J on complying units and establishing an optional per unit mitigation fee for noncompliant units. Preliminary estimates for annual emission reductions in San Diego County, if similar controls are found to be feasible and cost-effective, are 0.14 tons of NOx per day, about a 65% reduction in NOx emissions. Full implementation would be expected 10 years after rule adoption, considering an existing unit's useful life of 10 years.

Estimated Emission Reductions from Rule Development

In addition to the above approved and possible rule development actions, there are other possible control measures in Attachment J of the 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone

in San Diego County. A summary of the possible emission reductions is presented in Table 20 which is an excerpt from Attachment J.[71]

Table 3 - Cumulative Potential Emission Reductions for Possible Reasonably Available Control Measure

Calculation of Cumulative Potential Emission Reductions for Possible Reasonably Available Control Measures (RACM)

Control Measure *(Further Control of Possible Control of)*	VOC Emission Reduction Potential (Tons/Day)	NOx Emission Reduction Potential (Tons/Day)
G.1 - Receiving and Storing VOC at Bulk Plants and Bulk Terminals	0.03	
G.2 - Transfer of Organic Compounds into Mobile Transport Tanks	0.01	
G.3 - Metal Parts and Product Coating Operations	0.003	
G.4 - Paper, Film, and Fabric Coatings	0.01	
G.5 - Aerospace Coating Operations	0.005	
G.6 - Graphic Arts Operations	0.05	
G.7 - Marine Coating Operations	0.01	
G.8 - Adhesive Materials Application Operations	0.09	
G.9 - Ind. & Comm. Boilers, Process Heaters & Steam Generators		0.1
G.10 - Natural Gas-Fired Fan-Type Central Furnaces		0.14
G.11 - Stationary Gas Turbine Engines		0.14
G.12 - Vacuum Truck Operations	0.04	
G.13 - Miscellaneous NOx Sources		0.015
G.14 - Equipment Leaks	0.01	
G.15 - Restaurant Cooking Operations	0.02	
G.16 - Food Products Manufacturing/Processing	0.03	
G.17 - Metalworking Fluids & Direct-Contact Lubricants	0.1	
Stationary Sources Subtotal (2008 & 2015 NAAQS)	*0.408*	*0.395*

Overview of California Air Resources Board's Statewide Actions

Community-scale air pollution exposure is caused by many factors, including the cumulative impacts from multiple pollution sources. Effective solutions require multiple strategies at both the statewide and local level to deliver new emissions reductions directly within these communities.

The California Air Resources Board (CARB) has adopted a number of comprehensive air quality and climate plans over the last several years that lay out new emissions reduction strategies. These plans include the State

[71] San Diego Air Pollution Control District, *2020 Plan for Attaining the National Air Quality Standards for Ozone in San Diego County*, October 2020, available at: https://www.sandiegocounty.gov/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/Att%20A%20(Attainment%20Plan)_ws.pdf

Strategy for the State Implementation Plan,[72] the California Sustainable Freight Action Plan,[73] California's 2017 Climate Change Scoping Plan,[74] and the Short-Lived Climate Pollutants Reduction Strategy,[75] along with a suite of incentive programs. The Community Air Protection Blueprint[76] further identified additional actions to reduce the air pollution burden in heavily impacted communities throughout the State. Together, these plans provide a foundation for the new actions identified as part of this community emissions reduction program.

This section illustrates CARB's statewide role in the community emissions reduction program, by broadly describing the regulatory and incentive-based foundational actions CARB has taken to reduce emissions statewide. It also highlights specific actions that address areas of concern identified by the San Diego Portside Environmental Justice community. CARB's potential enforcement strategies are described in Chapter 6 of this CERP.

CARB's Incentive Programs

CARB operates incentive programs that reduce the costs of developing, purchasing, or operating cleaner technologies. The programs help ensure cleaner cars, trucks, equipment, and facilities are operating in our neighborhoods by driving the development of new, cleaner technologies, and by accelerating their sale and adoption. Specifically, they accelerate the introduction of advanced technology vehicles and equipment, accelerate the turnover of older and higher emitting vehicles and equipment, and increase access to clean vehicles and transportation in disadvantaged communities and lower-income households.

Examples of CARB incentive programs include the Carl Moyer Memorial Air Quality Standards Attainment Program[77] (the Community Air Protection Incentives[78] are implemented by the air district through this program), Proposition 1B: Goods Movement Emission Reduction Program,[79] Funding Agricultural

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[72] California Air Resources Board, *Revised Proposed 2016 State Strategy for the State Implementation Plan*, March 7, 2017, available at: https://ww3.arb.ca.gov/planning/sip/2016sip/rev2016statesip.pdf.

[73] California Department of Transportation, *California Sustainable Freight Action Plan*, July 2016, available at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/main-document-final-07272016v2.pdf

[74] California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017, available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan.

[75] California Air Resources Board, *Short-Lived Climate Pollutant Reduction Strategy*, March 2017, available at: https://ww2.arb.ca.gov/resources/documents/slcp-strategy-final.

[76] California Air Resources Board, *Final Community Air Protection Blueprint for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring*, October, 2018, available at: https://ww2.arb.ca.gov/capp-blueprint.

[77] For more information on the Carl Moyer Memorial Air Quality Standards Attainment Program, visit: https://ww2.arb.ca.gov/our-work/programs/carl-moyer-memorial-air-quality-standards-attainment-program

[78] For more information on the Community Air Protection Incentives, visit: https://ww3.arb.ca.gov/msprog/cap/capfunds.htm

[79] For more information on the Proposition 1B: Goods Movement Emission Reduction Program, visit: https://ww2.arb.ca.gov/our-

Replacement Measures for Emission Reductions Program,[80] and Low Carbon Transportation Investments and Air Quality Improvement Program (which includes the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project).[81] While CARB is responsible for program oversight, some of these programs are implemented as a partnership with local air districts.

Community Air Protection Incentives

Since 2017 the California Legislature has budgeted $704 million to support Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) with incentives directed by local air districts to put advanced technologies to work for cleaner air in the California communities that are most heavily impacted by disproportionate levels of air pollution.

The Legislature designated the initial appropriation of $250 million in 2017 for immediate benefits in heavily impacted communities while the other aspects of AB 617 were created and implemented. To ensure swift action, the Legislature directed that air districts must spend funds according to two existing mobile source incentive programs: the Carl Moyer Memorial Air Quality Standards Attainment Program, and the Proposition 1B Goods Movement Emission Reduction Program. Air districts have been using the resulting Community Air Protection Funds Supplement to the Carl Moyer Program 2017 Guidelines since it was approved by the Board on April 27, 2018.

The Legislature appropriated an additional $245 million in 2018 and provided additional direction for new opportunities for stationary source incentives as well as Community-Identified Projects consistent with Community Emissions Reduction Programs. The approved 2019 California State Budget contains another appropriation of $209 million for continued incentives to support the Community Air Protection Program, with Legislative direction matching the previous year's appropriation.

Subsequently, staff developed the Community Air Protection (CAP) Incentives 2019 Guidelines to provide eligibility and funding criteria for two new project categories, this represents CARB's first steps in providing incentives to clean up stationary sources of air pollution. The new project categories aim to reduce hexavalent chromium emissions from chrome plating activities, as well as include a suite of project types to reduce exposure at public schools. These guidelines will continue to be expanded with new categories of projects, to be responsive to the needs of the most heavily impacted communities across the State.

At the May 2019 Board hearing, CARB staff was directed to provide more flexibility within the Community Air Protection Incentives Guidelines to allow communities and air districts the ability to develop specific Project Plans to quickly address unique local air quality concerns.

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work/programs/proposition-1b-goods-movement-emission-reduction-program.

[80] For more information on the Funding Agricultural Replacement Measures for Emission Reductions Program, visit: https://ww2.arb.ca.gov/our-work/programs/farmer-program.

[81] For more information on the Low Carbon Transportation Investments and Air Quality Improvement Program, visit: https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program

Unlike traditional Moyer projects, Stationary and Community-Identified projects do not lend themselves to the same type of cost effectiveness evaluation. Therefore, the proposed criteria for stationary and Community-Identified projects will focus on community involvement, transparency, and consistency. Air Districts will work with communities to identify project categories needed to address community problems and general concepts. Air districts will then develop Project Plans that:

- Document community support – Community members will evaluate whether there has been sufficient community involvement
- Detail the project selection process
- Set participant requirements
- Establish funding amounts and project costs
- Quantify expected emissions/exposure reductions

To ensure reporting requirements are met CARB will be responsible for:

- Assisting districts with development of technical details
- Helping districts be consistent in quantifying benefits
- Confirming that project plans are consistent with statutory requirements
- Ensuring transparency for communities regarding projects funded, dollars spent, and benefits expected

For more information on air pollution incentives, grants, and credit programs, visit: https://ww2.arb.ca.gov/our-work/topics/incentives.

CARB Regulatory Programs

Federal, State, and local air quality agencies all work together to reduce emissions. At the federal level, the U.S. Environmental Protection Agency (U.S. EPA) has primary authority to control emissions from certain mobile sources, including sources that are all or partly under federal jurisdiction (e.g., some farm and construction equipment, aircraft, marine vessels, locomotives), which it shares in some cases with air districts and CARB. The U.S. EPA also establishes ambient air quality standards for some air pollutants.

At the State level, CARB is responsible for controlling emissions from mobile sources and consumer products (except where federal law preempts CARB's authority), controlling toxic emissions from mobile and stationary sources, controlling greenhouse gases from mobile and stationary sources, developing fuel specifications, and coordinating State-level air quality planning strategies with other agencies.

Regionally, air districts are primarily responsible for controlling emissions from stationary and indirect sources (with the exception of consumer products in most cases) through rules and permitting programs within their regions.

CARB regulatory programs are designed to reduce emissions to protect public health, achieve air quality standards, reduce greenhouse gas emissions, and reduce exposure to toxic air contaminants. CARB establishes regulatory requirements for cleaner technologies (both zero and near-zero emissions) and their deployment into the fleet, for cleaner fuels, and to ensure in-use performance. CARB's regulatory programs are broad – impacting stationary sources, mobile sources, and multiple points within product supply chains from manufacturers to distributors, retailers, and end-users. CARB's regulations affect cars, trucks, ships, off-road

equipment, consumer products, fuels, and stationary sources.

One important and relevant regulatory authority of CARB's is to adopt measures to reduce emissions of toxic air contaminants from mobile and non-mobile sources, known as Airborne Toxic Control Measures (ATCM).[82] These regulatory measures include process requirements, emissions limits, or technology requirements. Additionally, the Statewide Air Toxics "Hot Spots" Program[83] addresses the health risk from toxic air contaminants at individual facilities across the State. The Air Toxics "Hot Spots" Program includes several components to collect emissions data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels.

Under the Air Toxics "Hot Spots" Program, air districts are required to set a threshold for facilities that pose a significant health risk and prioritize facilities for health risk assessments. Air districts also establish a risk value above which facilities must conduct a risk reduction audit and emissions reduction plan. Facilities must develop these health risk assessments, risk reduction audits, and emission reduction plans. CARB provides technical guidance to support smaller businesses conducting health risk assessments and developing emissions reduction plans.

Additionally, in some instances CARB has pursued enforceable agreements with industry that result in voluntary but enforceable adoption of the cleanest technologies or practices and provide assurance that emissions reductions will be realized. CARB's agreement with the Union Pacific Railroad Company and BNSF Railway Company to accelerate introduction of cleaner locomotives in the South Coast Air Basin is an example of an enforceable agreement.

CARB Actions Related to The San Diego Portside Environmental Justice Neighborhoods Community

This section highlights CARB actions that specifically relate to the Portside Environmental Justice Neighborhoods community. This list should not be interpreted as comprehensive or exhaustive, but rather illustrative of some of the major statewide strategies driving emissions reductions in conjunction with those local level strategies identified in this community emissions reduction program. Additional CARB foundational strategies can be found in Appendix D and Appendix F of the Community Air Protection Blueprint.[84]

Recently Adopted CARB Regulations

CARB adopted the Advanced Clean Trucks Rule[85] in June 2020 requiring truck manufacturers to transition from producing diesel trucks and vans to electric zero-emission trucks including heavy-duty vehicles beginning

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[82] California Health and Safety Code § 39650 et seq.

[83] Assembly Bill 2588, Air Toxics "Hot Spots" Information and Assessment Act, Connelly, Statutes of 1987, California Health and Safety Code § 44300 et seq.

[84] California Air Resources Board, Final Community Air Protection Blueprint for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring, October, 2018, available at: https://ww2.arb.ca.gov/capp-blueprint.

[85] For more information on the Advanced Clean Trucks Rule, visit: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks.

in 2024. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales will need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. This rule also requires that fleets report information on a one-time basis about their vehicles to support future zero-emission fleet rules.

In August 2020 CARB adopted the Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments[86] which require manufacturers to comply with tougher emissions standards, overhaul engine testing procedures, and further extend engine warranties to ensure that emissions of NOx (oxides of nitrogen, a key component of smog) are reduced to help California meet federal air quality standards and critical public health goals. The regulation is expected to have a significant impact on communities adjacent to railyards, ports and warehouses that typically experience heavy truck traffic. These trucks often idle, move slowly and make frequent stops – all actions that increase NOx emissions. Today's heavy-duty trucks do not control NOx effectively during such "low load" conditions. The new standards will reduce NOx emissions by 90 percent or more when trucks are operating under these low load real-world operations. All components of the new rule will be phased-in, allowing engine manufacturers time to prepare for compliance. The NOx standards that engines must meet will be cut to approximately 75 percent below current standards beginning in 2024, and 90 percent below current standards in 2027.

The Control Measure for Ocean-Going Vessels At Berth[87] was also adopted in August 2020 and is an updated version of the CARB's At-Berth Regulation that supersedes the existing At-Berth Regulation, as specified, and is designed to achieve further emissions reductions from vessels at berth to improve air quality in communities surrounding ports and terminals throughout California. Emission reductions will be achieved through the inclusion of new vessel categories (such as vehicle carriers and tanker vessels), new ports, and independent marine terminals, and through updated control requirements, among other provisions.

Upcoming CARB Regulations

Commercial Harbor Craft Regulation Amendments

CARB's existing commercial harbor craft regulation was adopted in 2007 and will be fully implemented by the end of 2022. CARB is working through a public process to consider additional amendments that may further reduce emissions and pursue more stringent in-use standards, with consideration for Tier 4 engine technology

[86] For more information on the Heavy-Duty Engine and Vehicle Omnibus Regulation and Associated Amendments, visit:

https://ww2.arb.ca.gov/our-work/programs/heavy-duty-low-nox

[87] For more information on the Control Measure for Ocean-Going Vessels At Berth, see:

https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation, and the At Berth Factsheet: https://ww2.arb.ca.gov/sites/default/files/2020-08/External%20At-Berth%20Fact%20Sheet%20August%202020%20ADA_0.pdf

and near-zero and zero emission technologies. For more information on the regulation and potential new regulatory concepts, visit: https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft.

Heavy-Duty Vehicle Inspection and Maintenance

When emissions control systems are not operating correctly, in-use emissions can increase. CARB's current inspection programs include the roadside Heavy-Duty Vehicle Inspection Program and the fleet Periodic Smoke Inspection Program. These regulations require heavy-duty vehicles operating in California be inspected for excessive smoke and tampering. In July 2018, CARB approved amendments to the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program to reduce the smoke opacity limits to levels more appropriate for today's modern engine technology.

CARB is now exploring the development of a more comprehensive heavy-duty inspection and maintenance program that would help ensure all vehicle emissions control systems are maintained adequately throughout the vehicles' operating lives. For more information on existing heavy-duty maintenance programs, visit: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-diesel-inspection-periodic-smoke-inspection-program. For more information on the development of a comprehensive heavy-duty inspection and maintenance program, visit: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program.

Cargo Handling Equipment Regulation Amendments

Mobile cargo handling equipment is any motorized vehicle used to handle cargo or perform routine maintenance activities at California's ports and intermodal rail yards. The type of equipment includes yard trucks (hostlers), rubber-tired gantry cranes, container handlers, forklifts, etc. The Mobile Cargo Handling Equipment (CHE) Regulation was adopted in 2005 to reduce toxic and criteria emissions to protect public health and was fully implemented by the end of 2017. CARB staff is currently assessing the availability and performance of zero-emission technology to further reduce emissions. For more information on the regulation, visit: https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment.

Advanced Clean Fleet Rules

CARB is developing a medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible and significantly earlier for certain market segments such as last mile delivery and drayage applications. For more information, visit: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets.

Transport Refrigeration Unit Regulations

Transport refrigeration units congregate at distribution centers, railyards, and other facilities, resulting in the potential for health risks to those that live and work nearby. CARB is working through a public process to consider new requirements to transition the transport refrigeration units fleet to zero emission operations by requiring both zero emission technology and supporting infrastructure. For more information on this new regulation, visit: https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation.

Advanced Clean Cars II

CARB staff is developing the Advanced Clean Cars II regulations, which will seek to reduce criteria and

greenhouse gas emissions from new light- and medium-duty vehicles beyond the 2025 model year, and increase the number of zero emission vehicles for sale. For more information on these new regulations, visit: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program.

Estimated Emission Reductions from CARB Measures

CARB has estimated the emission reductions benefits for some of the proposed statewide measures as shown in Table 21 for the 2025 and 2030 milestone years for the Portside Community. The statewide strategy emission benefits provided in the CERP are calculated independently for every proposed regulation using the same baseline emission inventory for a given future year. It means that potential emission reductions from proposed regulations are applied separately to the same starting baseline emissions for a given future year, and the combined effects from other proposed regulations for that year are not included in the estimated benefits[88].

It is important to note that most of these regulations are in early phases of development and their adoption and implementation timelines are not well established. Additionally, the emission inventory used to estimate the potential emission reduction factors for these strategies are derived from draft 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. As such, the draft statewide emissions reduction estimates presented in the CERP should only be used as a rough estimate that are subject to change in future. Note the emission reductions from the recently adopted Ocean-Going Vessels At Berth Amendment and Low NOx Omnibus Regulation are not reflected in the emissions inventories presented in Chapter 3, Appendix A, or Appendix B.

[88] For example, let's assume there are two proposed statewide regulations, Reg-1 and Reg-2, proposed for adoption before 2025 and both have potential reductions for the same source of emissions (e.g., trucks) in 2025. The 2025 future year baseline inventory for this emission source is estimated at 100 tons of a pollutant. In the benefits approach presented here, if Reg-1 has a 20% emission reduction potential and Reg-2 has a 10% emission reduction potential in 2025, we estimate 20 tons of emissions benefits from the implementation of Reg-1 and 10 tons of benefits from the implementation of Reg-2 in 2025. For the draft estimates here, the reductions from the two proposed regulations are not applied stepwise in 2025 and are not additive. These estimates are draft and subject to change.

Table 4 - Estimated Emission Reductions from CARB Measures in the San Diego Portside Environmental Justice Community

Proposed Statewide Measures	Emission Reductions (tons per year)							
	PM2.5		DPM		NOx		ROG	
	2025	2030	2025	2030	2025	2030	2025	2030
Ocean-Going Vessels At Berth Amendment	1.48	1.70	1.61	1.84	98.04	109.97	4.59	5.26
Advanced Clean Car 2		0.03		0.001		1.50		0.55
Heavy-Duty Inspection and Maintenance	0.20	0.22	0.21	0.23	16.39	18.6		
Low NOx Engine Standard					1.62	11.43		
Small Off-Road Engine Amendment	0.38	2.73	0.30	0.72	40.81	68.11	23.14	82.16

District Annual Reporting

In order to monitor the progress of the strategies outlined in this chapter, the District will work with the Community Steering Committee (CSC) and other agencies involved to prepare an annual progress report and make it available to the public by October 1st every year after approval of the CERP. The report will provide a status update on all strategies included in the CERP to evaluate the corresponding metrics.

The District will also report on the dollar amounts invested on incentive-based emissions reduction projects and the corresponding emission reductions from those projects. The District will also report on emissions reductions achieved resulting from any rule development implemented. Table 22 shows estimated expected ozone forming emissions reductions countywide and specifically in the Portside Community from full implementation of the items in the table. Ozone is formed through the combination of NOx and ROGs and can be transported around the San Diego region by wind patterns. Reduction in these emissions both locally and Countywide can have an impact on reducing ozone exposure in the Portside Community.

Table 22 - Estimated Expected Districtwide Emission Reductions (tons per year) for the year 2030 per CARB regulations

Estimated Expected Emission Reductions Districtwide (tons per year)		
	NOx	ROG
Small Boilers, Process Heaters, and Steam Generators	292	
Medium Boilers, Process Heaters, and Steam Generators	194	
Petroleum Storage Tanks		11
Mobile Transport Tanks Loading		3.7
Metal Parts and Product Coating Operations		1.1
Marine Coating Operations		3.7
Adhesive Materials Application Operations		33
Natural Gas-Fired Fan-Type Central Furnaces	51	
Districtwide Potential Reductions:	**537**	**86**
Estimated Expected Emission Reductions in Portside (tons per year)		
$33 Million in CAPP Incentive Funding	330	
Ocean-Going Vessels At Berth Amendment (CARB)	110	5.3
Advanced Clean Car 2 (CARB)	1.5	0.55
Heavy-Duty Inspection and Maintenance (CARB)	18.6	
Low NOx Engine Standard (CARB)	11	
Small Off-Road Engine Amendment (CARB)	68	82
Additional Potential Reductions in Portside:	**539**	**88**

California Environmental Quality Act (CEQA) Analysis

The California Environmental Quality Act (CEQA) requires agencies to consider the environmental impacts of a proposed project. CEQA describes and imposes specific legal requirements that agencies must follow when evaluating and making decisions about whether a project will cause a significant environmental impact. The information below describes what District staff has done and determined with respect to this project – the Community Emissions Reduction Plan (CERP) - Portside Environmental Justice Neighborhoods (Portside Community). The information below does contain some legal terms because that is the language contained in the law and use of that language is part of how an agency demonstrates compliance with that law. As noted below, District staff has looked at all aspects of the CERP and has determined that the CERP is exempt from the requirements of CEQA. The paragraphs below identify the exemptions that apply to the CERP.

If the District Board agrees with staff and determines that the CERP is exempt from CEQA, and adopts the CERP, a Notice of Exemption will be filed with the San Diego County Recorder/Clerk. Pursuant to CEQA, the District as lead agency for the proposed project, has reviewed the proposed project pursuant to:

1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document

to prepare for a project subject to CEQA; and

2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA.

District staff has determined that it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. Further, the overall purpose of this project is to improve the environment and health of residents of this selected community and all of the action items within the CERP to support this goal. Thus, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment.

The CERP also contains elements that qualify as feasibility and planning studies, because information needs to be collected to make an informed decision about further action (e.g., rule development). However, the portions of the CERP that qualify as feasibility and planning studies do not prescribe or commit to specific projects or rule requirements, nor have future actions been approved or adopted in advance, because they require an open public process. The regulated community, stakeholders, interested parties, and the public are invited to participate in the rule development process in a public forum. Thus, the portion of the CERP that contains action items which qualify as feasibility or planning studies is statutorily exempt from CEQA pursuant to CEQA Guidelines Section 15262 – Feasibility and Planning Studies.

Additionally, some of the action items in the CERP would require minor physical modifications to existing structures or buildings, such as installing air filters or monitoring equipment, and these action items are categorically exempt from CEQA pursuant to CEQA Guidelines Section 15303 – New Construction of Conversion of Small Structures. A portion of the action items within the CERP involves the collection or exchange of information or data obtained from inspections and air monitoring, which are categorically exempt from CEQA pursuant to CEQA Guidelines Section 15306 – Information Collection. Another component of the action items in the CERP also involves inspections that require performance or compliance checks which are categorically exempt from CEQA pursuant to CEQA Guidelines Section 15309 – Inspections. Finally, a portion of the action items within the CERP relies on enforcement activities which are categorically exempt from CEQA pursuant to CEQA Guidelines Section 15321 – Enforcement Actions by Regulatory Agencies.

CEQA Guidelines Section 15300.2 -Exemptions provides for some exceptions to the exemption language in CEQA to cover circumstances that may affect exempt projects. District staff has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project. Therefore, as mentioned above, the proposed CERP is exempt from CEQA.

RESOURCES

Resources

Stationary source emission inventories for permitted facilities within San Diego County are available at:

https://www.sandiegocounty.gov/content/sdc/apcd/en/engineering/Permits/Engineering_Emissions_Inventory/Engineering_Phase_2_Toxics_Facility_Emissions.html

CARB's Facility Search Engine provides information on District reported facility emissions:

https://www.arb.ca.gov/app/emsinv/facinfo/facinfo.php

CARB's Pollution Mapping Tool presents facility-specific emissions of criteria, toxics and greenhouse gas emissions for large facilities subject to CARB's Cap and Trade Greenhouse Gas Emissions Mandatory Reporting Regulation. The tool allows users to visually locate, view and analyze emissions in any region across the state:

https://ww3.arb.ca.gov/ei/tools/pollution_map/

CARB's Emission Inventory Website provides information and data on regional inventories used in State Implementation Plans (SIP), including historical as well as projections of anticipated future year emissions (CEPAM 2016 SIP), and descriptions of stationary, area and mobile source categories and the types of sources that are included in them:

https://ww2.arb.ca.gov/emission-inventory-data

CEPAM: 2016 SIP – Standard Emissions Tool (CEPAM v1.05): official 2016 SIP emission inventory

https://www.arb.ca.gov/app/emsinv/fcemssumcat/fcemssumcat2016.php

CARB's Area Source Methodologies webpage provides the most recent versions of District and/or CARB methodologies for estimating area source emissions:

https://ww2.arb.ca.gov/index-methodologies-major-category

CARB's Speciation profiles website provides current particulate matter (PM) and total organic gas (TOG) speciation profiles. Speciation profiles provide estimates of the chemical composition of emissions and are used in the emissions inventory and air quality models. CARB maintains and updates estimates of the chemical composition and size fractions of PM, and the chemical composition and reactive fractions of TOG for a variety of emission source categories:

https://ww2.arb.ca.gov/speciation-profiles-used-carb-modeling

CARB's On-road mobile source webpage provides documentation and links to CARB's EMFAC model. EMFAC is the regulatory model for estimating emissions from on-road sources:

https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-road-documentation

CARB's Off-road mobile source webpage provides information on methodologies and models used to estimate off-road emissions:

https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-road-documentation-0

OEHHA's cancer risk values and reference exposure levels for TACs:

https://oehha.ca.gov/media/CPFs042909.pdf and

https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary.

APPENDICES

Appendix A – Toxic Pollutants

Table 23 - 2019 Stationary Sources Toxic Emissions in the Portside Community (lbs./year)

Stationary Sources	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
Cleaning and Surface Coating	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**442.15**	**10.49**	**538.75**	**0.01**	**204.21**	**0.00**	**0.00**	**0.00**	**0.00**
Autobody Refinishing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Marine Coatings	0.00	0.00	0.00	0.00	0.00	442.15	10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Product Coatings	0.00	0.00	0.00	0.00	0.00	0.00	0.00	538.75	0.00	204.21	0.00	0.00	0.00	0.00
Fuel Combustion	**83.88**	**0.65**	**84.43**	**0.58**	**0.05**	**1.58**	**0.00**	**760.63**	**3.27**	**0.14**	**1.54**	**0.06**	**0.04**	**0.05**
Boiler	0.00	0.00	3.38	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00	0.00
Engines	83.37	0.61	72.45	0.58	0.04	1.58	0.00	666.82	3.19	0.01	1.50	0.00	0.00	0.00
Turbines	0.51	0.00	3.62	0.00	0.00	0.00	0.00	25.71	0.00	0.00	0.00	0.00	0.00	0.00
Flares	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.27	0.00	0.13	0.00	0.06	0.04	0.05
Misc. Combustion	0.00	0.04	4.96	0.00	0.00	0.00	0.00	9.83	0.08	0.00	0.04	0.00	0.00	0.00
Industrial Processes	**0.00**	**0.25**	**0.03**	**17.86**	**1.36**	**3473.42**	**0.00**	**1.34**	**4.30**	**0.00**	**128.22**	**4.14**	**0.21**	**0.00**
Abrasive Blasting	0.00	0.00	0.00	4.62	0.00	3441.72	0.00	0.00	4.10	0.00	46.02	0.00	0.00	0.00
Mineral Industry	0.00	0.19	0.00	0.01	0.04	0.38	0.00	0.00	0.20	0.00	0.21	0.00	0.00	0.00
Miscellaneous Industrial Processes	0.00	0.06	0.03	0.00	0.01	0.00	0.00	1.34	0.00	0.00	0.29	4.14	0.21	0.00
Welding	0.00	0.00	0.00	13.23	1.31	31.32	0.00	0.00	0.00	0.00	81.70	0.00	0.00	0.00
Petroleum Production and Marketing	**0.00**	**0.00**	**324.47**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Bulk Gasoline	0.00	0.00	48.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Stationary Sources	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
Loading Rack Oxygenated Gasoline														
Bulk Gasoline Vapor Processor	0.00	0.00	133.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gasoline Storage Tanks	0.00	0.00	69.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Marketing	0.00	0.00	73.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste Disposal	**0.00**	**0.00**	**0.72**	**0.00**	**0.00**	**0.00**	**0.20**	**0.00**	**0.00**	**5.86**	**0.00**	**2.99**	**1.79**	**2.21**
Landfill Operations	0.00	0.00	0.72	0.00	0.00	0.00	0.20	0.00	0.00	5.86	0.00	2.99	1.79	2.21
Wastewater	**0.00**	**0.00**	**0.14**	**0.00**	**0.00**	**0.00**	**4.65**	**12.03**	**0.00**	**4.47**	**0.00**	**617.96**	**550.51**	**3.09**
Pump Station	0.00	0.00	0.14	0.00	0.00	0.00	4.65	12.03	0.00	4.47	0.00	617.96	550.51	3.09
Total	**83.88**	**0.91**	**409.78**	**18.45**	**1.41**	**3917.17**	**15.34**	**1312.76**	**7.58**	**214.68**	**129.77**	**625.15**	**552.55**	**5.35**

Table 24 - 2018 Area-wide and Off-Road Toxic Emissions in the Portside Community (lbs./year)

Source Category	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
Area-wide Source	**164.44**	**36.68**	**372.24**	**40.34**	**0.04**	**247.96**	**0.00**	**10232.01**	**1083.55**	**17916.96**	**119.41**	**2216.53**	**1327.17**	**0.00**
Architectural Coatings And Related Process Solvents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	526.05	0.00	177.64	0.00	0.00
Asphalt Paving / Roofing	0.00	0.00	0.06	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Construction And Demolition	0.00	31.25	0.00	38.61	0.00	187.51	0.00	0.00	1023.95	0.00	108.46	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.05	0.00	0.00	0.00	0.00	13.04	0.00	17390.91	0.00	2038.89	1327.17	0.00
Cooking	164.44	0.16	129.98	0.26	0.00	10.91	0.00	8693.52	16.08	0.00	3.59	0.00	0.00	0.00
Fires	0.00	0.00	0.00	0.02	0.00	0.01	0.00	39.04	0.07	0.00	0.00	0.00	0.00	0.00
Fugitive Windblown Dust	0.00	0.02	0.00	0.03	0.00	0.10	0.00	0.00	1.08	0.00	0.08	0.00	0.00	0.00
Managed Burning And Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Road Dust	0.00	4.20	0.00	0.97	0.00	47.86	0.00	0.00	40.10	0.00	3.88	0.00	0.00	0.00
Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Residential Fuel Combustion	0.00	0.89	242.15	0.11	0.04	0.02	0.00	1486.41	0.99	0.00	3.04	0.00	0.00	0.00
Unpaved Road Dust	0.00	0.15	0.00	0.13	0.00	1.54	0.00	0.00	1.27	0.00	0.36	0.00	0.00	0.00
Off-Road Mobile Source	**3462.50**	**0.08**	**17195.94**	**1.12**	**0.56**	**12.68**	**0.00**	**39389.27**	**27.17**	**0.00**	**27.23**	**0.00**	**0.00**	**0.00**
Commercial Harbor Craft	231.11	0.05	2432.70	0.68	0.04	1.70	0.00	17892.49	0.24	0.00	0.21	0.00	0.00	0.00
Fuel Storage And Handling	0.00	0.00	160.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ocean Going Vessels	52.65	0.00	554.24	0.00	0.00	0.00	0.00	4076.42	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Equipment	1612.30	0.03	7434.37	0.38	0.26	6.16	0.00	11531.23	12.97	0.00	13.10	0.00	0.00	0.00

Source Category	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
Off-Road Recreational Vehicles	0.80	0.00	35.35	0.00	0.00	0.00	0.00	3.25	0.01	0.00	0.01	0.00	0.00	0.00
Recreational Boats	1562.61	0.00	6546.78	0.00	0.26	4.80	0.00	5651.42	13.93	0.00	13.89	0.00	0.00	0.00
Trains	3.03	0.00	31.88	0.06	0.00	0.03	0.00	234.46	0.03	0.00	0.01	0.00	0.00	0.00

Table 25 - 2018 On-Road Toxic Emissions in the Portside Community (lbs./year)

On-Road Mobile Source	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
LDV	1591.78	0.96	12670.75	0.27	0.12	1028.70	0.00	5909.99	10.09	0.00	60.09	0.00	0.00	0.00
LHDV	51.22	0.07	722.30	0.09	0.00	68.61	0.00	1342.27	0.51	0.00	3.99	0.00	0.00	0.00
MHDV	29.40	0.06	318.66	0.05	0.04	45.80	0.00	1716.23	0.27	0.00	2.72	0.00	0.00	0.00
HHDV	31.74	0.04	335.20	0.06	0.04	29.19	0.00	2437.39	0.41	0.00	1.79	0.00	0.00	0.00
BUS	51.62	0.02	554.32	0.01	0.01	27.87	0.00	3696.71	0.18	0.00	1.61	0.00	0.00	0.00
Total	**1755.76**	**1.14**	**14601.24**	**0.48**	**0.21**	**1200.17**	**0.00**	**15102.59**	**11.47**	**0.00**	**70.21**	**0.00**	**0.00**	**0.00**

LDV: Light Duty Vehicle, LHDV: Light Heavy Duty Vehicle, MHDV: Medium Heavy Duty Vehicle, HHDV: Heavy Heavy Duty Vehicle, BUS: Bus

Table 26 - 2025 Stationary Sources Toxic Emissions in the Portside Community (lbs./year)*

Stationary Sources	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* District in process of estimating stationary source emission growth and will provide the final and latest stationary source emissions data when available

Table 27 - 2025 Area-wide and Off-Road Toxic Emissions in the Portside Community (lbs./year.)

Category Source	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
Area-wide Source	**169.66**	**35.81**	**378.98**	**39.04**	**0.04**	**244.32**	**0.00**	**10515.73**	**1050.19**	**18483.51**	**115.95**	**2288.91**	**1409.36**	**0.00**
Miscellaneous Processes	**169.66**	**35.81**	**378.88**	**38.83**	**0.04**	**244.32**	**0.00**	**10501.54**	**1050.19**	**0.00**	**115.95**	**0.00**	**0.00**	**0.00**
Construction And Demolition	0.00	30.15	0.00	37.25	0.00	180.91	0.00	0.00	987.88	0.00	104.64	0.00	0.00	0.00
Cooking	169.66	0.17	134.11	0.27	0.00	11.26	0.00	8969.50	16.59	0.00	3.70	0.00	0.00	0.00
Fires	0.00	0.00	0.00	0.02	0.00	0.01	0.00	40.41	0.07	0.00	0.00	0.00	0.00	0.00
Fugitive Windblown Dust	0.00	0.02	0.00	0.03	0.00	0.10	0.00	0.00	1.08	0.00	0.08	0.00	0.00	0.00
Managed Burning And Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Road Dust	0.00	4.43	0.00	1.02	0.00	50.48	0.00	0.00	42.29	0.00	4.09	0.00	0.00	0.00
Residential Fuel Combustion	0.00	0.89	244.77	0.11	0.04	0.02	0.00	1491.63	0.99	0.00	3.07	0.00	0.00	0.00
Unpaved Road Dust	0.00	0.15	0.00	0.13	0.00	1.54	0.00	0.00	1.27	0.00	0.36	0.00	0.00	0.00
Solvent Evaporation	**0.00**	**0.00**	**0.10**	**0.21**	**0.00**	**0.00**	**0.00**	**14.19**	**0.00**	**18483.51**	**0.00**	**2288.91**	**1409.36**	**0.00**
Architectural Coatings And Related Process Solvents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	544.89	0.00	184.01	0.00	0.00
Asphalt Paving / Roofing	0.00	0.00	0.05	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Consumer Products	0.00	0.00	0.05	0.00	0.00	0.00	0.00	14.19	0.00	17938.61	0.00	2104.90	1409.36	0.00
Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Mobile Source	**3161.79**	**0.06**	**15937.92**	**0.74**	**0.60**	**12.24**	**0.00**	**39265.23**	**24.48**	**0.00**	**24.56**	**0.00**	**0.00**	**0.00**
Other Mobile Sources	**3161.79**	**0.06**	**15937.92**	**0.74**	**0.60**	**12.24**	**0.00**	**39265.23**	**24.48**	**0.00**	**24.56**	**0.00**	**0.00**	**0.00**
Commercial Harbor Craft	240.92	0.04	2536.05	0.53	0.12	2.32	0.00	18652.64	0.21	0.00	0.19	0.00	0.00	0.00
Fuel Storage And Handling	0.00	0.00	131.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ocean Going Vessels	64.33	0.00	677.15	0.00	0.00	0.00	0.00	4980.43	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Equipment	1734.36	0.01	7833.96	0.17	0.29	6.33	0.00	11445.89	13.88	0.00	14.03	0.00	0.00	0.00
Off-Road Recreational Vehicles	0.73	0.00	28.89	0.00	0.00	0.00	0.00	3.26	0.01	0.00	0.01	0.00	0.00	0.00
Recreational Boats	1119.72	0.00	4712.67	0.00	0.19	3.57	0.00	4049.69	10.36	0.00	10.33	0.00	0.00	0.00
Trains	1.72	0.00	18.13	0.04	0.00	0.02	0.00	133.32	0.02	0.00	0.01	0.00	0.00	0.00

Table 28 - 2025 On-Road Toxic Emissions in the Portside Community (lbs./year)

On-Road Mobile Source	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
LDV	950.26	0.98	7900.33	0.22	0.10	1069.65	0.00	3438.14	9.91	0.00	62.31	0.00	0.00	0.00
LHDV	30.29	0.06	459.28	0.06	0.00	67.59	0.00	1105.89	0.48	0.00	3.92	0.00	0.00	0.00
MHDV	4.59	0.05	49.26	0.00	0.00	54.19	0.00	80.38	0.31	0.00	3.15	0.00	0.00	0.00
HHDV	12.91	0.03	136.39	0.00	0.01	32.11	0.00	993.15	0.40	0.00	1.99	0.00	0.00	0.00
BUS	53.06	0.02	565.03	0.01	0.00	28.19	0.00	3955.59	0.17	0.00	1.63	0.00	0.00	0.00
Total	**1051.11**	**1.14**	**9110.29**	**0.29**	**0.11**	**1251.73**	**0.00**	**9573.16**	**11.27**	**0.00**	**72.99**	**0.00**	**0.00**	**0.00**

LDV: Light Duty Vehicle, LHDV: Light Heavy Duty Vehicle, MHDV: Medium Heavy Duty Vehicle, HHDV: Heavy Heavy Duty Vehicle, BUS: Bus

Table 29 - 2030 Stationary Sources Toxic Emissions in the Portside Community (lbs./year)*

Stationary Sources	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* District in process of estimating stationary source emission growth and will provide the final and latest stationary source emissions data when available

Table 30 - 2030 Area-wide & Off-Road Toxic Emissions in the Portside Community (lbs./year)

Category Source	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
Area-wide Source	**173.57**	**34.83**	**378.27**	**37.67**	**0.04**	**239.45**	**0.00**	**10716.77**	**1014.90**	**18904.19**	**112.20**	**2342.42**	**1463.30**	**0.00**
Miscellaneous Processes	**173.57**	**34.83**	**378.17**	**37.47**	**0.04**	**239.45**	**0.00**	**10701.87**	**1014.90**	**0.00**	**112.20**	**0.00**	**0.00**	**0.00**
Construction And Demolition	0.00	29.02	0.00	35.85	0.00	174.12	0.00	0.00	950.81	0.00	100.71	0.00	0.00	0.00
Cooking	173.57	0.17	137.21	0.27	0.00	11.52	0.00	9176.49	16.97	0.00	3.79	0.00	0.00	0.00
Fires	0.00	0.00	0.00	0.02	0.00	0.01	0.00	41.34	0.08	0.00	0.00	0.00	0.00	0.00
Fugitive Windblown Dust	0.00	0.02	0.00	0.03	0.00	0.10	0.00	0.00	1.08	0.00	0.08	0.00	0.00	0.00
Managed Burning And Disposal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paved Road Dust	0.00	4.58	0.00	1.06	0.00	52.14	0.00	0.00	43.69	0.00	4.23	0.00	0.00	0.00
Residential Fuel Combustion	0.00	0.89	240.97	0.11	0.04	0.02	0.00	1484.04	0.99	0.00	3.03	0.00	0.00	0.00
Unpaved Road Dust	0.00	0.15	0.00	0.13	0.00	1.54	0.00	0.00	1.27	0.00	0.36	0.00	0.00	0.00
Solvent Evaporation	**0.00**	**0.00**	**0.10**	**0.20**	**0.00**	**0.00**	**0.00**	**14.91**	**0.00**	**18904.19**	**0.00**	**2342.42**	**1463.30**	**0.00**
Architectural Coatings And Related Process Solvents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	557.45	0.00	188.25	0.00	0.00
Asphalt Paving / Roofing	0.00	0.00	0.05	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.05	0.00	0.00	0.00	0.00	14.91	0.00	18346.74	0.00	2154.17	1463.30	0.00
Pesticides/Fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Mobile Source	**3028.72**	**0.05**	**15356.30**	**0.59**	**0.64**	**12.23**	**0.00**	**38688.62**	**23.01**	**0.00**	**23.10**	**0.00**	**0.00**	**0.00**
Other Mobile Sources	**3028.72**	**0.05**	**15356.30**	**0.59**	**0.64**	**12.23**	**0.00**	**38688.62**	**23.01**	**0.00**	**23.10**	**0.00**	**0.00**	**0.00**
Commercial Harbor Craft	229.49	0.04	2415.66	0.44	0.17	2.79	0.00	17767.16	0.18	0.00	0.16	0.00	0.00	0.00
Fuel Storage And Handling	0.00	0.00	120.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ocean Going Vessels	74.19	0.00	780.91	0.00	0.00	0.00	0.00	5743.56	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Equipment	1828.60	0.01	8223.78	0.12	0.31	6.50	0.00	11850.77	14.34	0.00	14.48	0.00	0.00	0.00
Off-Road Recreational Vehicles	0.73	0.00	24.99	0.00	0.00	0.00	0.00	3.37	0.01	0.00	0.01	0.00	0.00	0.00

Recreational Boats	894.58	0.00	3778.47	0.00	0.16	2.92	0.00	3235.41	8.47	0.00	8.45	0.00	0.00	0.00
Trains	1.14	0.00	12.01	0.03	0.00	0.01	0.00	88.36	0.01	0.00	0.01	0.00	0.00	0.00

Table 31 - 2030 On-Road Toxic Emissions in the Portside Community (lbs./year)

On-Road Mobile Source	1,3-Butadiene	Arsenic	Benzene	Cadmium	Chromium, Hexavalent	Copper	Ethylene dichloride	Formaldehyde	Lead	Methylene Chloride	Nickel	Perchloroethylene	Trichloroethylene	Vinyl chloride
LDV	753.15	0.99	6410.20	0.17	0.08	1101.63	0.00	2742.10	9.66	0.00	64.07	0.00	0.00	0.00
LHDV	23.91	0.06	382.92	0.05	0.00	66.30	0.00	1023.94	0.46	0.00	3.84	0.00	0.00	0.00
MHDV	4.19	0.05	42.01	0.00	0.00	57.39	0.00	79.23	0.33	0.00	3.33	0.00	0.00	0.00
HHDV	14.60	0.03	154.08	0.00	0.01	33.98	0.00	1124.87	0.43	0.00	2.10	0.00	0.00	0.00
BUS	60.31	0.02	638.82	0.01	0.00	27.85	0.00	4549.16	0.17	0.00	1.61	0.00	0.00	0.00
Total	**856.16**	**1.16**	**7628.02**	**0.23**	**0.09**	**1287.15**	**0.00**	**9519.30**	**11.06**	**0.00**	**74.96**	**0.00**	**0.00**	**0.00**

LDV: Light Duty Vehicle, LHDV: Light Heavy-Duty Vehicle, MHDV: Medium Heavy Duty Vehicle, HHDV: Heavy Duty Vehicle, BUS: Bus

Appendix B – Criteria Pollutants and Diesel Particulate Matter

Table 32 - 2019 Stationary Criteria Emissions in Portside Community (tons/year)

Stationary Source Category	NOx	TOG	ROG	SOx	PM_{10}	$PM_{2.5}$	DPM
Cleaning and Surface Coatings	**0.00**	**187.05**	**170.97**	**0.00**	**5.28**	**0.00**	**0.00**
Autobody Refinishing	0.00	3.52	2.73	0.00	0.09	0.00	0.00
Cold Solvent Degreasing	0.00	13.84	1.91	0.00	0.00	0.00	0.00
Marine Coatings	0.00	155.04	154.24	0.00	4.73	0.00	0.00
Metal Parts and Products Coatings	0.00	2.48	2.40	0.00	0.18	0.00	0.00
Paper, Film and Fabric Coatings	0.00	2.14	2.14	0.00	0.00	0.00	0.00
Wood Product Coatings	0.00	2.70	1.21	0.00	0.01	0.00	0.00
Miscellaneous Cleaning & Coating Process	0.00	7.33	6.34	0.00	0.27	0.00	0.00
Fuel Combustion	**48.35**	**30.24**	**4.60**	**0.66**	**8.53**	**8.53**	**0.75**
Boilers	7.44	3.94	1.97	0.22	2.73	2.73	0.00
Engines	13.71	2.81	2.45	0.04	0.75	0.75	0.75
Flares	0.04	0.02	0.00	0.01	0.01	0.01	0.00
Motor Vehicle and Mobile Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Turbine	26.64	23.39	0.14	0.39	4.92	4.92	0.00
Misc. Combustion Equipment	0.68	0.08	0.04	0.00	0.12	0.12	0.00
Industrial Processes	**2.06**	**11.55**	**11.49**	**0.00**	**19.40**	**0.00**	**0.00**
Abrasive Blasting	0.00	0.00	0.00	0.00	6.51	0.00	0.00
Plasma Spray	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding	0.00	0.00	0.00	0.00	4.69	0.00	0.00
Mineral Industry	0.00	0.00	0.00	0.00	6.43	0.00	0.00
Miscellaneous Industrial Processes	2.06	11.55	11.49	0.00	1.77	0.00	0.00
Petroleum Production and Marketing	**0.00**	**30.81**	**27.93**	**0.00**	**0.00**	**0.00**	**0.00**
Bulk Gasoline Loading Rack Oxygenated Gasoline	0.00	6.33	6.33	0.00	0.00	0.00	0.00
Bulk Gasoline Vapor Processor	0.00	4.93	2.05	0.00	0.00	0.00	0.00
Gasoline Storage Tanks	0.00	18.78	18.78	0.00	0.00	0.00	0.00
Petroleum Marketing	0.00	0.77	0.77	0.00	0.00	0.00	0.00

Stationary Source Category	NOx	TOG	ROG	SOx	PM_{10}	$PM_{2.5}$	DPM

Source Category	NOx	TOG	ROG	SOx	PM_{10}	$PM_{2.5}$	DPM
Waste Disposal	**0.00**	**15.45**	**0.12**	**0.00**	**0.00**	**0.00**	**0.00**
Landfill Operations	0.00	15.45	0.12	0.00	0.00	0.00	0.00
Wastewater	**0.00**	**2.52**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
Pump Station	0.00	2.52	0.01	0.00	0.00	0.00	0.00
Total	**50.57**	**277.62**	**215.12**	**0.66**	**33.21**	**8.53**	**0.75**

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$:Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Table 33 – 2018 Area-wide and Off-Road Criteria Emissions in the Portside Community (tons/year)

Area-wide	**26.55**	**542.34**	**455.00**	**1.45**	**589.18**	**118.88**	**0.00**
Solvent Evaporation	**0.00**	**473.67**	**409.22**	**0.00**	**0.07**	**0.07**	**0.00**
Consumer Products	0.00	310.57	255.10	0.00	0.00	0.00	0.00
Architectural Coatings and Related Process Solvents	0.00	142.26	133.28	0.00	0.00	0.00	0.00
Pesticides/Fertilizers	0.00	2.75	2.75	0.00	0.00	0.00	0.00
Asphalt Paving / Roofing	0.00	18.08	18.08	0.00	0.07	0.07	0.00
Miscellaneous Processes	**26.55**	**68.67**	**45.79**	**1.45**	**589.10**	**118.81**	**0.00**
Residential Fuel Combustion	26.34	14.94	6.79	1.45	5.87	5.73	0.00
Construction and Demolition	0.00	0.00	0.00	0.00	449.47	45.04	0.00
Paved Road Dust	0.00	0.00	0.00	0.00	73.90	11.16	0.00
Unpaved Road Dust	0.00	0.00	0.00	0.00	2.90	0.29	0.00
Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.36	0.05	0.00
Fires	0.21	0.83	0.71	0.00	0.87	0.82	0.00
Managed Burning and Disposal	0.00	0.02	0.01	0.00	0.01	0.01	0.00
Cooking	0.00	52.89	38.27	0.00	55.72	55.72	0.00
Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Mobile Sources	**922.45**	**346.54**	**317.75**	**14.02**	**36.19**	**34.41**	**22.08**
Trains	24.03	0.80	0.70	0.02	0.42	0.39	0.42
Ocean Going Vessels	238.23	13.86	11.72	13.60	4.96	4.56	3.26
Commercial Harbor Craft	433.96	60.82	53.46	0.07	11.73	11.22	11.80
Recreational Boats	30.98	106.69	98.60	0.05	6.32	6.03	0.01
Off-Road Recreational Vehicles	0.02	2.08	2.07	0.00	0.00	0.00	0.00
Off-Road Equipment	195.22	147.68	136.58	0.28	12.76	12.22	6.59
Fuel Storage and Handling	0.00	14.62	14.62	0.00	0.00	0.00	0.00

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Table 34 - 2018 On-Road Criteria Emissions in Portside Community (tons/year)

On-Road Mobile Source Category	NOx	TOG	ROG	SOx	PM_{10}	$PM_{2.5}$	DPM
Mobile	**462.78**	**301.58**	**259.87**	**5.09**	**69.48**	**32.06**	**5.45**
Light Duty Vehicle	177.98	255.05	229.35	4.22	55.57	23.52	0.15
Light Heavy-Duty Vehicle	69.10	17.45	16.01	0.30	3.96	1.99	0.64
Medium Heavy-Duty Vehicle	67.96	7.38	6.44	0.18	4.16	2.84	2.07
Heavy Heavy-Duty Vehicle	126.38	8.34	6.28	0.31	4.22	2.91	2.34
Bus	21.36	13.36	1.80	0.08	1.56	0.79	0.26
Total	**462.78**	**301.58**	**259.87**	**5.09**	**69.48**	**32.06**	**5.45**

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Table 35 - 2025 Stationary Sources Criteria Emissions in the Portside Community (tons/year)*

Stationary Sources	NOx	TOG	ROG	SOx	PM	PM_{10}	$PM_{2.5}$	DPM
N/A	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

* District in process of estimating stationary source emission growth and will provide the final and latest stationary source emissions data when available

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Table 36 - 2025 Area-wide Off-Road Criteria Emissions in the Portside Community (tons/year)

Source Category	NOx	TOG	ROG	SOx	PM	PM_{10}	$PM_{2.5}$	DPM
Area-wide Source	**21.48**	**570.09**	**478.62**	**1.45**	**1127.46**	**579.20**	**119.72**	**0.00**
Solvent Evaporation	**0.00**	**499.67**	**431.58**	**0.00**	**0.08**	**0.07**	**0.07**	**0.00**
Consumer Products	0.00	332.02	273.23	0.00	0.00	0.00	0.00	0.00
Architectural Coatings and Related Process Solvents	0.00	147.36	138.06	0.00	0.00	0.00	0.00	0.00
Pesticides/Fertilizers	0.00	2.85	2.85	0.00	0.00	0.00	0.00	0.00
Asphalt Paving / Roofing	0.00	17.44	17.44	0.00	0.08	0.07	0.07	0.00
Miscellaneous Processes	**21.48**	**70.42**	**47.04**	**1.45**	**1127.39**	**579.13**	**119.65**	**0.00**
Residential Fuel Combustion	21.26	14.97	6.81	1.45	6.15	5.89	5.75	0.00
Construction and Demolition	0.00	0.00	0.00	0.00	886.79	433.64	43.45	0.00
Paved Road Dust	0.00	0.00	0.00	0.00	170.54	77.94	11.77	0.00
Unpaved Road Dust	0.00	0.00	0.00	0.00	4.89	2.90	0.29	0.00
Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.60	0.36	0.05	0.00
Fires	0.21	0.86	0.74	0.00	0.92	0.90	0.84	0.00
Managed Burning and Disposal	0.00	0.02	0.01	0.00	0.01	0.01	0.01	0.00
Cooking	0.00	54.57	39.49	0.00	57.49	57.49	57.49	0.00
Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Mobile Source	**889.00**	**320.89**	**293.34**	**17.72**	**32.41**	**31.88**	**30.25**	**18.35**
Trains	17.99	0.45	0.40	0.02	0.31	0.31	0.28	0.31
Ocean Going Vessels	276.48	16.93	14.32	17.25	6.24	6.24	5.74	4.00
Commercial Harbor Craft	410.43	63.40	55.73	0.07	10.64	10.57	10.12	10.64
Recreational Boats	27.05	77.77	71.88	0.05	4.89	4.70	4.48	0.01

Off-Road Recreational Vehicles	0.02	1.67	1.66	0.00	0.00	0.00	0.00	0.00
Off-Road Equipment	157.03	148.73	137.42	0.32	10.33	10.06	9.63	3.40
Fuel Storage and Handling	0.00	11.93	11.93	0.00	0.00	0.00	0.00	0.00

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Table 37 - 2025 On-Road Criteria Emissions in the Portside Community (tons/year)

Source Category	NOx	TOG	ROG	SOx	PM	PM_{10}	$PM_{2.5}$	DPM
On-Road Mobile Source	**236.97**	**201.00**	**170.83**	**4.29**	**68.83**	**67.48**	**28.60**	**1.11**
Light Duty Vehicle	86.43	170.81	156.70	3.48	58.37	57.19	23.88	0.07
Light Heavy-Duty Vehicle	34.57	11.84	10.98	0.27	3.78	3.71	1.78	0.44
Medium Heavy-Duty Vehicle	31.32	1.05	0.93	0.19	2.65	2.61	1.13	0.09
Heavy Heavy-Duty Vehicle	72.65	3.39	1.46	0.29	2.57	2.54	1.17	0.41
Bus	12.01	13.91	0.77	0.06	1.45	1.42	0.64	0.09
Grand Total	**236.97**	**201.00**	**170.83**	**4.29**	**68.83**	**67.48**	**28.60**	**1.11**

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Table 38 - 2030 Stationary Sources Criteria Emissions in the Portside Community (tons/year)*

Stationary Sources	NOx	TOG	ROG	SOx	PM	PM_{10}	$PM_{2.5}$	DPM
N/A	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

* District in process of estimating stationary source emission growth and will provide the final and latest stationary source emissions data when available

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Table 39 - 2030 Area-wide and Off-Road Criteria Emissions in the Portside Community (tons/year)

Source Category	NOx	TOG	ROG	Sox	PM	PM_{10}	$PM_{2.5}$	DPM
Area-wide Source	**18.91**	**587.79**	**493.66**	**1.45**	**1101.12**	**566.81**	**119.79**	**0.00**
Solvent Evaporation	**0.00**	**516.15**	**445.71**	**0.00**	**0.07**	**0.07**	**0.07**	**0.00**
Consumer Products	0.00	345.69	284.76	0.00	0.00	0.00	0.00	0.00
Architectural Coatings and Related Process Solvents	0.00	150.76	141.24	0.00	0.00	0.00	0.00	0.00
Pesticides/Fertilizers	0.00	2.91	2.91	0.00	0.00	0.00	0.00	0.00
Asphalt Paving / Roofing	0.00	16.79	16.79	0.00	0.07	0.07	0.07	0.00
Miscellaneous Processes	**18.91**	**71.65**	**47.95**	**1.45**	**1101.04**	**566.74**	**119.72**	**0.00**
Residential Fuel Combustion	18.69	14.93	6.79	1.45	6.12	5.86	5.72	0.00
Construction and Demolition	0.00	0.00	0.00	0.00	853.51	417.37	41.82	0.00
Paved Road Dust	0.00	0.00	0.00	0.00	176.16	80.50	12.15	0.00
Unpaved Road Dust	0.00	0.00	0.00	0.00	4.89	2.90	0.29	0.00
Fugitive Windblown Dust	0.00	0.00	0.00	0.00	0.60	0.36	0.05	0.00
Fires	0.22	0.88	0.75	0.00	0.94	0.92	0.86	0.00
Managed Burning and Disposal	0.00	0.02	0.01	0.00	0.01	0.01	0.01	0.00
Cooking	0.00	55.83	40.40	0.00	58.82	58.82	58.82	0.00
Other (Miscellaneous Processes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Mobile Source	**867.68**	**310.15**	**283.21**	**20.71**	**31.39**	**30.89**	**29.28**	**17.57**
Other Mobile Sources	**867.68**	**310.15**	**283.21**	**20.71**	**31.39**	**30.89**	**29.28**	**17.57**
Trains	13.67	0.30	0.26	0.03	0.24	0.24	0.22	0.24

Ocean Going Vessels	286.35	19.52	16.51	20.22	7.30	7.30	6.71	4.63
Commercial Harbor Craft	390.78	60.39	53.08	0.07	10.03	9.97	9.54	10.03
Recreational Boats	25.11	62.91	58.15	0.05	3.99	3.84	3.66	0.01
Off-Road Recreational Vehicles	0.02	1.42	1.42	0.00	0.00	0.00	0.00	0.00
Off-Road Equipment	151.75	154.64	142.83	0.35	9.83	9.55	9.14	2.66
Fuel Storage and Handling	0.00	10.96	10.96	0.00	0.00	0.00	0.00	0.00
Total	**886.59**	**897.95**	**776.87**	**22.16**	**1132.50**	**597.70**	**149.07**	**17.57**

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Table 40 - 2030 On-Road Criteria Emissions in the Portside Community (tons/year)

Source Category	NOx	TOG	ROG	SOx	PM	PM_{10}	$PM_{2.5}$	DPM
On-Road Mobile Source	**197.58**	**172.52**	**143.32**	**3.88**	**70.07**	**68.75**	**28.74**	**0.95**
Light Duty Vehicle	65.08	141.62	130.67	3.11	59.50	58.35	24.06	0.04
Light Heavy-Duty Vehicle	20.23	10.31	9.65	0.25	3.63	3.57	1.66	0.34
Medium Heavy-Duty Vehicle	32.37	0.92	0.83	0.19	2.81	2.76	1.19	0.09
Heavy Heavy-Duty Vehicle	71.08	3.84	1.50	0.28	2.71	2.68	1.22	0.41
Bus	8.82	15.83	0.68	0.06	1.42	1.39	0.61	0.07
Total	**197.58**	**172.52**	**143.32**	**3.88**	**70.07**	**68.75**	**28.74**	**0.95**

NOx: Nitrogen Oxides, TOG: Total Organic Gases, ROG: Reactive Organic Gases, SOx: Sulfur Oxides, PM_{10}: Particulate Matter 10 Microns or Smaller, $PM_{2.5}$: Particulate Matter 2.5 Microns or Smaller, DPM: Diesel Particulate Matter

Appendix C – Metrics Table

Strategies	Action	Description	Metric
Outreach and Community Engagement	A1	Develop and Implement and Incident Response Plan	Incident Response Plan Developed Metrics related to response time Outreach to stakeholder agencies and organizations
	A2	Develop and Implement a Public Participation Plan	Public Participation Plan Developed Number of individuals reached by APCD's activities Participation by residents of Environmental Justice (EJ) community Inclusion of Tribal Consultation Policy Addresses trauma informed outreach
	A3	Develop a plan to quantify and prioritize the community health risks from air pollutants	Health risks identified and communicated to the public Prioritization of health risks Involvement of Rady's Asthma Center to identify causes of asthma and outreach to the community
	A4	Establish an Office of Environmental Justice within the APCD	Staffing Office of Environmental Justice Staff available with ASL or other language experience Development of a framework for the Office of EJ Alignment of framework with County's Office of Environmental and Climate Justice
Incentives	B1	Implement Additional Flexibility for Mobile Source Incentives	Number of additional programs to affected communities available through AB617 Number of additional projects funded that became eligible thanks to CERP flexibility Emission reductions from projects Number of additional businesses participating (small and large)
	B2	Reduce emissions from passenger vehicles	Number of tons of emissions reduced through AB617 Incentives program(s) Decrease in emissions at Portside monitoring sites
	B3	Develop and implement a residential air filtration and air monitoring program	Number of filters/monitors installed through the PAIR program Emission reductions at participating homes measured at specified intervals

	B4	Incentives Outreach	Number of individuals/organizations reached Number of applications for incentive programs received
Rule Development	C1	Evaluate Rule 1206 (Asbestos Removal, Renovation, and Demolition) to potentially regulate residential structures between 1-4 dwelling units	No. of estimated residential structures that may undergo renovation each year. Estimated costs for notified projects Completion of evaluation Adoption of rule
	C2	Evaluate Rule 1210 to potentially reduce health risks	Health risk reduction Completion of evaluation
	C3	Evaluating existing rules and considering new rules	Emission reductions
	C4	Propose amendment of District Rule 1401	Number of facilities not triggering the Federal permit Number of self-reported violations Frequency of Notification to the Community
Enforcement Actions/ Strategies	D1	Propose de development of a Supplemental Environmental Project (SEP) Program within the Violation Settlement program	Adoption of a SEP program No. of available/applicable environmental community projects No. of facilities interested in participating in a SEP Number of projects in Portside and other EJ communities
	D2	Evaluate the feasibility of expanding mobile source enforcement program	No. of vessels subject to the Commercial Harbor Craft Regulation If MOU is expanded: no. of violations issues, compliance rates
	D3	Evaluate the current air quality complaint process	Compliant response time Consistency with criteria included in AB 423
	D4	Increase APCD presence in Portside Community	No. of inspections conducted annually No. of violations/citations issued
	D5	Evaluate the feasibility of utilizing portable emission analyzers (Testo 350) to verify compliance	If feasible and once in use: No. of inspections conducted utilizing Testo 350 No. of compliance determinations made
	D6	Evaluate the feasibility of expanding enforcement of truck idling regulations within the Portside Community	No. of inspections conducted annually No. of violations/citations issued

Heavy Duty Truck Strategies	E1	Advance the deployment of heavy-duty on-road electric trucks	Progress on completion of Port truck actions Development of EV Strategy for the region Development of EV infrastructure plan for the region Progress on use of ZEV by businesses within Portside Grant funding of ZE Vehicles and infrastructure Periodic reports from experts National Center for Sustainable Transportation regarding feasibility & availability of electric heavy-duty trucks
	E2	Fair outcome for small fleet owners and truck drivers	Evaluation of costs and benefits of ZEV requirements and grant funding for small fleets
	E3	Support dedicated truck route and avoid truck impacts to local community	Statistics on compliance Informal assessment of truck route compliance from community residents Outreach to businesses and drivers in Portside
	E4	Increase number of truck parking and staging facilities with electric charging capabilities	Completion of feasibility study Identification of potential parking/charging facilities
Land Use Strategies	F1	Support land uses that serve as a buffer between industrial and residential uses in the Portside Community	Adoption of land use plans with buffer provisions
	F2	Reduce exposure for sensitive receptors within 500 ft. of Port, freeways, and industries	Adoption of restrictions for residential construction within 500 ft of freeways and industries
	F3	Urban greening	Number of trees planted in Portside Amount of grant funding used for urban greening in Portside Number of projects supported/promoted/implemented
	F4	Public school exposure reduction	Indoor air filtration and monitoring at schools
	F5	Support Harbor Drive Multimodal Corridor Study (HDMCS) land use proposals	Implementation of land use proposals from the HDMCS
	F6	Neighborhood resiliency & housing stability	Completion of transportation and health equity assessment

	F7	Improve transportation efficiencies	Implementation or advancement of projects identified in Action F7
	F8	Truck diversion	Publication of dedicated truck routes and outreach to trucking companies, truck drivers and businesses in the Portside Community
Working Waterfront Activities (Port, Navy, and Shipyards)	G1	Reduce diesel emissions from cargo handling equipment	Replacement of 20 pieces of cargo handling equipment by 2026 results in a reduction of emissions by approximately 90% for NOx, 80% for DPM, and 50% for CO2e below 2019 levels
	G2	Reduce emissions from ships at berth	At Cruise Ship Terminal, additional plug to existing shore power system by 2023 At NCMT, add new shore power system with at least two plugs by 2025 At TAMT, add additional plug to existing shore power system by 2031
	G3	Reduce emissions from harbor craft	Dock power installed by 2024 at high traffic marinas Percentage of zero emission short-run ferries (100% by 2026) Percentage of hybrid/electric excursion vessels and tugs (100% by 2025)
	G4	Reduce DPM and NOx emissions from portable air compressors and other diesel sources at shipyards	Implementation of portable air compressor policies to be powered by zero emission technology or Tier 4 engines Number of retirements, replacements, retrofits or electrification of on- and off-road diesel equipment
	G5	Promote best practices for reducing diesel, VOC and other emissions from ship repair activities	Number of trainings and outreach events to promote best practices and number of attendees or participants reached
	G6	Reduce emissions from shipyard employee transportation	Number of employees participating in SANDAG's iCommute
	G7	Promote adoption of ZE technologies by Port tenants, truckers, and other users of equipment	Promotion/demonstration event held and number of attendees or participants reached
	G8	Reduce emissions associated with traffic at Naval Base San Diego	Implementation or progress of strategies identified in Action G8

Advocacy Measures	H1	Support Emission Reduction Opportunities	Advocacy actions taken to support emission reduction opportunities

Appendix D – Public Comments

#	Comment	Commentor	Response
1	This is not the first time something like this happens, nothing is going to change. I see the heavy trucks driving by my street all the time even though this is not a dedicated road for them. They want to save time and they will continue to take shortcuts and drive through our streets with their diesel trucks. Who is going to enforce that they are taking their assigned routes? I've called the police many times before, but they are not able to help either.	Resident of Barrio Logan	The CERP includes Action A3, which supports dedicated truck routes and avoiding truck impacts to local community. Through this action, the cities of San Diego and National City have committed to notify relevant parties of dedicated truck routes, improve trucking route street signage infrastructure as needed and continue robust enforcement of truck routes.
2	I want to participate in the CERP and learn more about this, I want to get involved in my community and learn more about what is going on. Send me links and information about this.	Jackie Lopez (resident)	Staff shared information with resident on the CERP and guidance on how to submit comments and get engaged.
3	I am a homeowner, resident of Southcrest. I am deeply concerned about the amount of toxins in the air due to the freeway traffic, the overwhelming air traffic, & NASSCO. Recently, I have noticed more frequent daily & nightly hovering helicopters over Southcrest & adjacent communities. This causes tremendous harm including air and sound pollution, toxic fumes that I can taste in my mouth, interferences with wifi bandwidth, unfriendly skies, anxiety, fear, etc. I have recorded several instances of this on my cell phone, my journal notes, & on twitter. Who is the most appropriate person to communicate with regarding this environmental injustice? I am eager to collaborate in order to see things change!	Keashonna Christopher (resident)	Staff shared information with resident on specific actions in the CERP and guidance on how to submit comments and get engaged. Staff also forwarded complaint to APCD's Compliance Division.
4	Support for Overall Goals: EHC supports the inclusion in Chapter 7, the Actions and Strategies chapter, of a set of Overall Goals for the CERP. These aspirational goals set forth quantified measures and timelines that address the community's highest priorities for the CERP: reduction of diesel and other toxic air contaminants; reduction of health risk due to air pollution; increasing trees and green spaces in the communities; and addressing issues with	Environmental Health Coalition (EHC)	Noted

	heavy duty trucks –a long time source of air pollution and safety concerns in residential areas of Portside. We thank staff for their willingness to include these aspirational metrics to express the community's vision for clean air and to provide a yardstick to measure progress, even if it is not completely clear yet how to reach the goals. We thank staff also for their extensive engagement with affected stakeholders to refine the goals and achieve a degree of consensus on including them.		
5	Support for Land Use Actions and Strategies: EHC supports all land use strategies. The Land Use Committee included most of the community resident members of the Steering Committee, along with SANDAG representatives, and met over 12 times. This committee reflected deeply on the links between air quality and the land uses in Portside, and developed recommendations that link the CERP to other plans being done in our region, including community land use plans, regional transportation plans, San Diego's Climate Action Plan (tree canopy), and the Port's Harbor Drive Multiuse Corridor Study projects. The community identified high priority projects for limiting truck traffic on surface streets, grade separations to improve pedestrian safety and reduce traffic bottlenecks and increase green spaces near homes. Additional strategies promote improvements in air quality at schools, and a health equity study of the community. APCD staff met with all the agencies whose collaboration is needed on these actions, to make sure they are feasible. This extensive set of land use strategies is unique among the CERPs done to date and distinguishes the Portside CERP.	EHC	Noted
6	Support for Working Waterfront Strategies: EHC supports all Working Waterfront strategies, with the edits to Action E-1 noted below. Subcommittee meetings had broad representation from the Steering Committee and affected agencies and industries. It included representation from ILWU, for whom it is important to have the opportunity to try out new zero emission equipment before it is purchased.	EHC	Noted

	A Teamsters representative also participated throughout the process.		
7	Support for Truck Strategies: EHC supports the Heavy-Duty Truck Strategies. These strategies provide for near term and longer-term measures to shift heavy duty and medium duty trucks to zero emission vehicles over time.	EHC	Noted
8	Support for Advocacy Measures: EHC supports the inclusion of Advocacy Measures. Advocacy Measures are included in recognition that it is important for the Steering Committee and APCD to advocate in support of strong air quality protections in planning and rulemaking processes that have not yet begun or that will require a public process. This set of actions can allow the CERP to address issues at regional and state levels where decisions will be made that will affect air quality in Portside. Regulatory measures such as the proposed Advanced Clean Fleets rule, to be heard by the California Air Resources Board later this year, are appropriate for advocacy action under this provision of the CERP.	EHC	Noted
9	Recommended additions: <u>Action E-1</u>, Truck short-haul EV pilot program: language should match current MCAS wording for a truck shuttle program, as spelled out in the March 24, 2021 draft of the MCAS Truck Objective 1A: TRK Objective 1A: Develop a short-haul on-road ZE Truck Shuttle Program comprised of a trucking company and/or independent drivers to displace approximately 20,000 diesel vehicle miles traveled (equal to about 12% of community miles) by 2024 and continuing through 2026.	EHC	Language will be revised to be consistent with the Port's Maritime Clean Air Strategy (MCAS). Please see below.
	Recommended additions: <u>Action E-1,</u> Add EV charging goal detail, removed from Overall Goals section at the recommendation of the CERP Subcommittee: ·By July 2021, establish ZEV HD truck	EHC	Language will be added to Action E-1 reflecting public input and approval by the Board of Commissioners of the Port of San Diego and as agreed in discussions with staff from Port of San Diego, SANDAG, SDGE, APCD, and EHC as follows:

	charging infrastructure plan and install 4 fast charge stations by January 2022.		• Develop a short-haul ZE Truck Program with the accompanying charging infrastructure by 2024 to continue in perpetuity if operations and funding allows. • Collaborate with Community Residents, Stakeholders, and Agencies to identify up to Four locations for ZE Truck Charging by 2023. *Note – this date lines up with SANDAG's CEC MD/HD Blueprint Planning Grant.* • Work with SDG&E and Stakeholders to develop the four sites listed above by 2026. *Note – sites have not been identified. A three-year process is assumed, which may involve multi-agency agreements for acquiring funds to purchase the property, develop the property (including CEQA, permitting, etc.), and to find an entity that would manage/operate the facility.*
10	Recommended additions: Add Overall Goal 9 actions, removed from the Overall Goals at the recommendation of the CERP Subcommittee, to Working Waterfront Actions: •Port of San Diego to support funding for tree canopy. •Navy to increase tree canopy and barriers along Harbor Drive.	EHC	Action F3 under Land Use Actions will be revised to include Port of San Diego and Navy on actions in support of increasing tree canopy in the Portside Community. Additionally, current efforts by the Port in collaboration with Urban Core will be added to action F3.
11	Recommended additions: Add consideration of the following District actions to raise the visibility and priority of welding emissions: •Adopt a welding rule modeled on South Coast AQMD Rule 1407.1 for chromium alloy metal melting, and incorporate Rule 1407 for non-chromium alloys to cover a broad range of welding operations. •Capture welding emissions discreetly, rather than as area sources, for Emissions Inventory Program and Health Risk Assessments.	EHC	Welding emissions are already captured individually for the Emissions Inventory Program and Health Risks Assessments (HRA). Welding emissions are already part of HRA requirements for New Source Review for Toxic Air Contaminants. APCD staff is currently collecting and evaluating data on welding activities. The following language will be added to the

	•Add emissions from welding to the Health Risk Assessment requirement for New Source Review for Toxic Air Contaminants.		CERP: APCD will collaborate with the California Air Resources Board (CARB) by providing emission data from welding operations and assisting CARB in evaluating the feasibility of adopting an Airborne Toxic Control Measures (ATCM) for welding operations.
12	Let me begin with comments about the goals and strategies outlined in Section 7. No doubt this section is of utmost interest to the Community and will be referred to more often than any other during the 5-year lifespan of this CERP. In light of its importance, we recommend that CERP goals and strategies in Section 7 belong closer to the front of the report, and certainly no later than following Section 4.	Industrial Environmental Association (IEA)	Staff will add a table to the Executive Summary section listing all actions and Goals in the CERP. Additional detail will remain in Chapter 7. The content of Chapter 7 is at the end of the document because the preceding chapters in the CERP lay the foundation for the goals and actions and walk the reader through the reason why those goals and actions are being adopted.
13	We also recommend that the explanation of CERP goals should be more transparent in this section when it comes to creating expectations within the community. We recommend that language be added to differentiate between plan Actions which are "achievable and actionable" versus the Overall Goals that are "aspirational and unenforceable." The community should be advised of this difference and where they can "expect" to be in five years versus where they can only "hope" to be in that time frame.	IEA	Language in the CERP already addresses the nature of the goals and it specifies that the goals are aspirational. Additional language will be added to clarify that the goals are not enforceable.
14	With regard to the overall goals in Section 7, we recommend that the goals be arranged in order of potential benefit to the community, with the goal offering the most benefit listed first. For example, goal number 1 calls for the reduction of cancer risk below 10/million for stationary sources in the Portside Community. Based upon the Districts own data included in the CERP, stationary sources in the community account for such a small portion of overall emissions that the end result would contribute very little toward reducing the overall health risk. We would further note that AB 617 specifies that the statewide strategies to reduce criteria	IEA	The goals will be arranged to start listing those with higher benefits or higher priority for the community.

	pollutant and toxic air contaminant emissions must include assessment of sources or source categories contributing to high cumulative exposure burdens, including the relative contribution of each source. The legislation further specifies that air district CERPs must be consistent with statewide strategy.		
15	In addition to the fact that Goal #1 should be a low priority goal based upon its relative benefit to the community, we suggest that any proposed modification to the risk threshold occur after Rule 1210 has been reviewed by the District and after Goal 2 has been completed. An arbitrary selection of a 10/million threshold-for which no data or analysis was provided–is bad process and pre-empts the District's own cancer risk analysis which is currently ongoing. For that reason, we recommend that for Goal1, the risk threshold number be left blank, like Goals 3 and 4, until after the District has evaluated the cumulative risk.	IEA	The cancer risk threshold of 10/million for permitted stationary sources is based on regulations from other Air Districts in California and potential options identified by APCD staff and presented to the Board in July of 2020. As noted in the CERP the goals are aspirational and additional language will clarify that the goals are also not enforceable. Enforcement related to risk reduction thresholds will be based on adopted APCD rules.
16	Goal 6 calls for heavy duty trucks servicing Portside Community to be 100% ZEV 5 years ahead of California State requirements. This goal is problematic because for industry to anticipate what State standards might be in 2035 and then meet those standards in 2030, the actual content of the 2035 regulation must be fully known no less than seven to eight years ahead of the deadline. What if changes in incentive programs and technologies occur between 2030 and 2035? And will heavy duty truck owners who have made the investment by 2030 receive credit from CARB for early attainment of Statewide standards?	IEA	As noted in the CERP the goals are aspirational and additional language will clarify that the goals are also not enforceable.
17	Moving to Chapter 3, page 50: there is a discussion of Toxicity Weighted Emissions (TWE), and the term "normalization factors" is used. We would like to suggest that a brief background and a definition for this term be introduced in the document.	IEA	Information will be included to help clarify the term "normalization factors".
18	Also, in Chapter 3, is Table 1 -Sources of Criteria Pollutants in the Portside Community. While we understand the District's intent to present the overall contribution of various source types to emissions, adding NOx, ROG	IEA	The Table 1 on Sources of Criteria Pollutants in the Portside Community (which is included in the Chapter 3 section of the Executive Summary) will present data in the same manner as Table 5 (2018 Community

	and PM10emissions together and presenting the total is a misleading and unusual way of communicating emissions information and impact. There is no local, state, or federal regulatory program that evaluates the impact of the sum of different criteria pollutants, likely because these pollutants are not equal in terms of impacts. This information should be presented separately for each source type exactly as it is presented in Table 5 –2018 Community Baseline Criteria Emissions Summary.		baseline Criteria Emissions Summary) in Chapter 3.