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 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 County Air Pollution Control District (District or APCD) nominated the Community of Portside Environmental Justice Neighborhoods (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 very high CalEnviroScreen 3.0 (CES 3.0) ratings. CalEnviroScreen is a science-based tool developed by the California Environmental Protection Agency 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. The Portside Community has four census tracts that are in the 98th percentile for CES 3.0 and another eight that are in the 85th percentile. This environmentally burdened and vulnerable community has over 50,000 residents. As a result, this community was selected by CARB for the air pollution monitoring program in 2018 and for an emissions reduction program in 2019. The Portside Community Steering Committee (CSC) was formed in 2018.

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 Portside Community. These communities have historically had a mix of residential and industrial land uses and are bisected by major transportation corridors. The 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). Additionally the community also has more than 13 miles of freeways that support regional and local transportation needs, including Interstate Highways 5 and 15. Mobile sources are the driver for diesel particulate matter (DPM) emissions, a known carcinogen, in the community with the major contributors being commercial harbor craft, off-road diesel equipment, 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.

Community outreach and engagement is 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), 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 CSC, as well as extensive public outreach and public workshops conducted in September 2020. **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 CERP, as well as associated responses to those comments are contained in **Appendix TBD**.

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

Source Category	Pollutants			Total Emissions for Each Source Category (Tons/Year)	Emission Contribution for Each Source Category
	NOx	ROG	PM_{10}		
Off-Road Mobile Equipment	922.4	317.8	36.2	**1276.4**	**37%**
Area Sources	26.6	455.0	589.2	**1070.8**	**31%**
On-Road Mobile Equipment	462.8	259.9	69.5	**792.2**	**23%**
Stationary Sources	50.6	215.3	33.2	**299.1**	**9%**
TOTAL (Tons/Year)	**1457**	**1235**	**716**	**3438.5**	**100%**

NOx: *Nitrogen Oxides*
ROG: *Reactive Organic Gases*
PM_{10} *Particulate Matter 10 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 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 marketing).

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.

In addition to criteria pollutants, Toxic Air Contaminants (TACs) in the Portside Community are dominated by DPM and ROG such as formaldehyde, methylene chloride, and benzene. Pollutants like formaldehyde from engines and methylene chloride from consumer products are the highest emitters within the emission study boundary but these pollutants do not have the highest health risk. Arsenic from construction/demolition and road dust, benzene and 1,3-butadiene from mobile sources, and hexavalent chromium from construction and demolition operations and certain stationary source welding operations have the highest health risk and impact. **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 **Appendices 3a and 3b** for toxics and criteria pollutants, respectively.

In addition to estimates of air pollutants made from emissions inventory data, monitoring data 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 National Ambient Air Quality Standards (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 (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). 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 - Air Monitoring Data.** Most of the data provided in this chapter is 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 Steering Committee to obtain additional community-level air quality data and further quantify the emissions impacting the Portside community.

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 in close proximity 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**.

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 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 (Port, Navy, Shipyards)**

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 2 phases. Phase I will include actions that have been fully developed and supported by all jurisdictions or organizations, which have an implementation role, by November of 2020. Phase II will include strategies that need further development and will be presented to the

APCD Board in May of 2021. A full description of these actions can be found in **Chapter 7 - Actions and Strategies.**

Moving forward, the CSC, APCD, and CARB will track and monitor the progress of the Portside Community CERP implementation. Community engagement will continue on an ongoing basis, and implementation of the CERP will be evaluated and refined as needed to continue progress towards the goal of healthful air quality for all Portside Community residents.