

Portside Environmental Justice Neighborhoods: Nomination for AB 617 Monitoring and Emissions Reductions in Year One

Submitted by:

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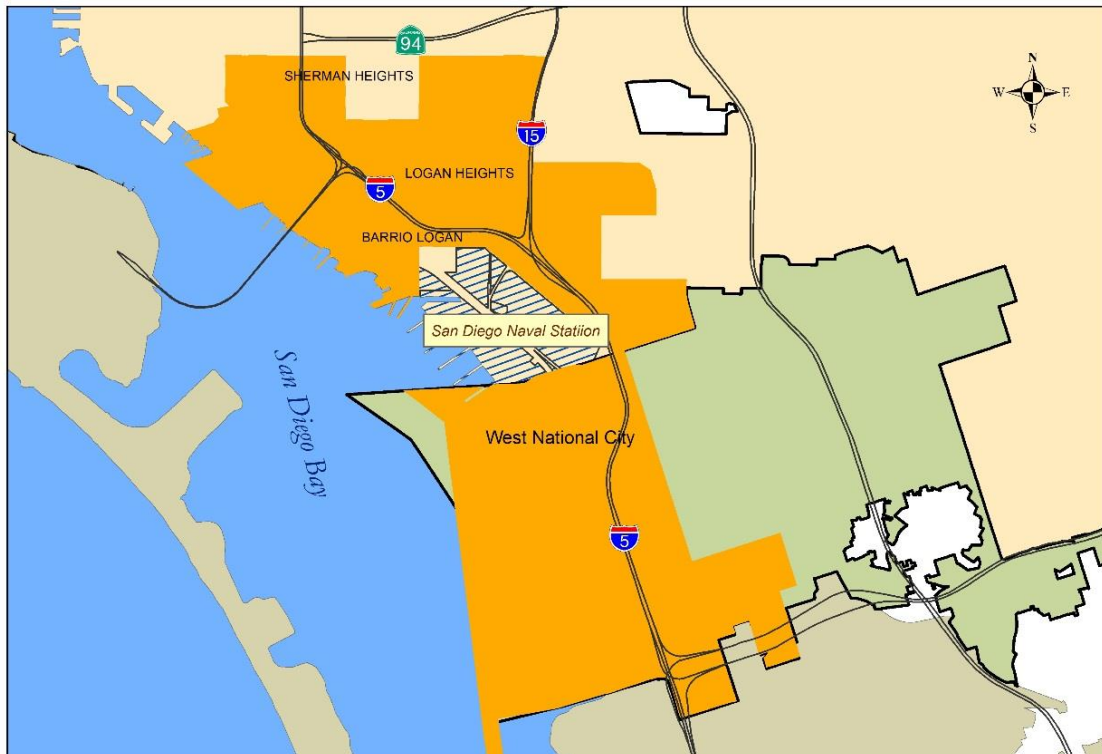
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Nominated for: Monitoring and Emission Reductions

Location of Community

The area of the Portside Environmental Justice Neighborhoods encompasses the four adjacent communities of Barrio Logan, Logan Heights, and Sherman Heights in the city of San Diego, and West National City in the city of National City. These are all low income, communities of color that are adjacent to and downwind of the industrialized waterfront and Port areas along San Diego Bay.

Portside Environmental Justice Communities



EHC, 2018.
Map Base Layers: SANGIS.

0 1 2 4 Kilometers

Community Descriptions

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 bayfront and railroad jobs and the availability of affordable housing.¹ 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 as a consequence of its separation from Logan Heights 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. After City rezoning, the neighborhood experienced a massive influx of automotive scrap yards, industrial businesses and warehouses now located adjacent to residences. Barrio Logan continues to be a community of color with 96% minority residents. 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.²

Barrio Logan is also one of the communities most impacted by air pollution in the San Diego region. Residents are surrounded by air pollution sources including the Tenth Avenue Marine Terminal, large shipyards, San Diego Naval Station, the I-5 freeway, the Coronado Bridge, and a BNSF railyard, as well as smaller industries within the residential community itself. The multiple risk factors faced by residents are documented by CalEnviroScreen, California's analytical tool to identify communities most burdened by pollution from multiple sources and most vulnerable to its effects. Barrio Logan is number 1 in the county for overall pollution burden and is near the top in the county for diesel particulate pollution.³ 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 nationally².

Barrio Logan continues to rank at the top of the county for diesel hazards and asthma hospitalizations. The most recent version of CalEnviroScreen also shows that the community ranks in the top ten statewide for high rents and low income, and is ranked highly for ER visit rates for heart attacks. The community won a significant victory in December 2016 when the

¹ 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>>

² "EJSCREEN Report (Version 2016) Blockgroup: 060730050001". EJSCREEN Tool. US Environmental Protection Agency.

³ CalEnviroScreen Version 2.0. Office of Environmental Health Hazard Assessment (OEHHA).

Port agreed to limit its expansion plan at the Tenth Avenue Marine Terminal (TAMT) and agreed to incorporate electrification of diesel engines.

Reducing air pollution is a priority identified by EHC's Barrio Logan CAT and other residents, whose input was collected by our Barrio Logan community organizer. Truck pollution is a particular concern for residents, who are also actively engaged in identifying preventable sources of pollution. According to EJSCREEN, Barrio Logan ranks in the 97th percentile nationally for traffic proximity.

Logan Heights and Sherman Heights are similar in demographic makeup. An estimated 86% of residents are Latino with African American and White residents constituting the secondary and tertiary largest ethnic groups⁴. Among residents, approximately 50% have less than a high school diploma and 30.8% live below the federal poverty line⁵. At the last census, 34% of residents were under the age of 18⁶. As communities immediately adjacent to Barrio Logan and also directly abutting the I-5 freeway, Logan Heights and Sherman Heights have the same air quality impacts and high CalEnviroScreen scores as Barrio Logan.

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. 22% of residents live below the federal poverty line and 35% of the population has less than a high school education⁷. The majority of residents are people of color (88%) with Latinos constituting the greater share of the population (63%) and Asian-American/Pacific Islanders following with 20%⁷. The community is also quite young with approximately 26% of residents under the age of 18. Demographics for Old Town National City, (west National City) are included in the table below.

⁴ 2016 ACS 5-Year Estimates. "Selected Characteristics of the Total and Native Populations in the United States".

⁵ "Greater Logan Heights: Five Neighborhoods, One Community".

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

⁶ 2010 Decennial Census. "Sex by Age".

⁷ "Demographic and Socioeconomic Profile 2010, Zip 91950". San Diego Association of Governments.

DEMOGRAPHICS

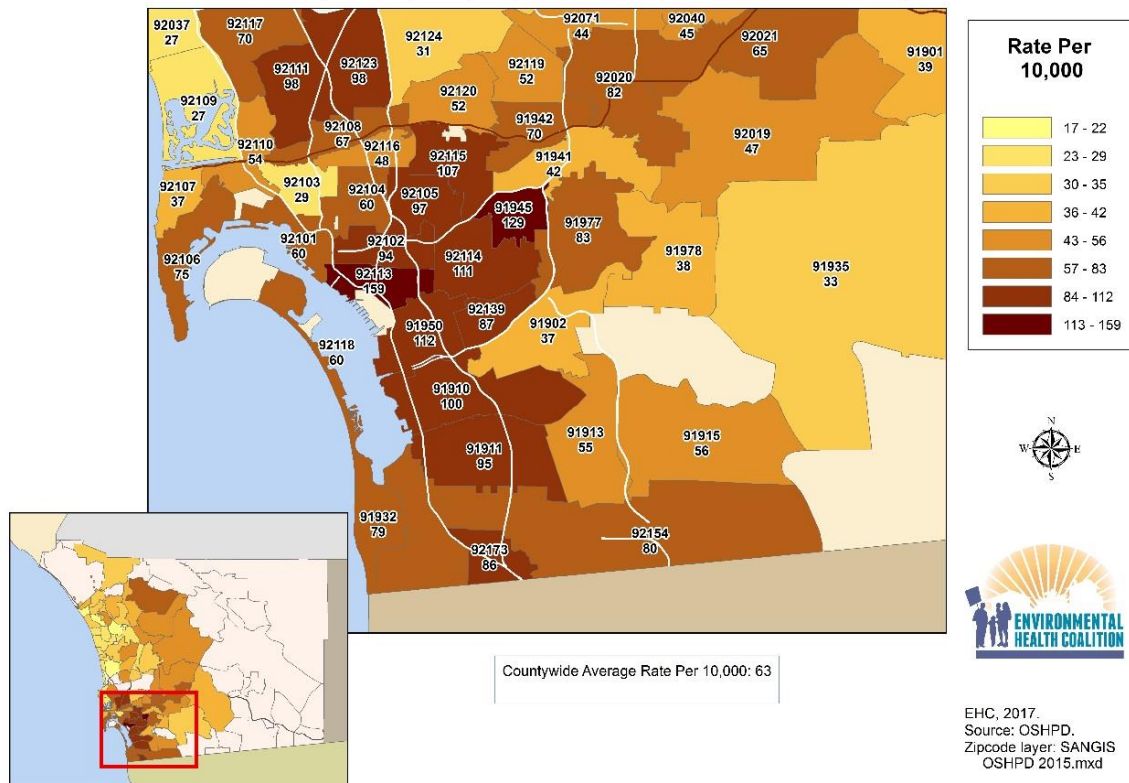
Area	2010 Census Tracts	Total Population 2010	Nonwhite	Under 18	Families in Poverty	Renter Households, Percent
Barrio Logan	50	2,227	2106, 95%	765, 34%	33%	90
Logan Heights	39.01, 39.02, 49	14,196	13802, 95%	4853, 34%	30%	70
Sherman Heights	47	1,858	1495, 81%	412, 22%	36%	87
OTNC	Selected census blocks of 219	1,433	1348, 94%	400, 28%	41%	75
Totals		19,714	18,751	7,713	7,440	14,633
Percents			95%	39%	38%	74%

Air Quality Concerns

Cumulative Impacts. The high CalEnviroScreen scores of these areas reflect the communities' location adjacent to multiple sources of mobile and stationary diesel emissions: Port cargo terminals, shipyards and other waterfront industries, industries within the community, the I-5 freeway, the BNSF Railyard, the Naval Station, the Coronado Bridge, and the 94 freeway. The high scores confirm the residents' own experiences of living in these diesel- and traffic-impacted communities. Respiratory, cardiovascular, and cancer health concerns, as well as physical safety, noise, dust, and parking impacts of truck traffic top residents' voiced concerns about the environmental state of their neighborhoods. For many years, residents have spoken up at meetings with elected officials to share their experiences with taking asthmatic children to the emergency room, about window screens and foliage coated with black soot, about truck traffic on surface streets in their neighborhoods, about premature deaths of family members from cancer or heart disease.

Asthma. Asthma hospitalization and ER visit rates are persistently high in these neighborhoods. Children's asthma ER visit rates in a recent year, for example, were 2.5 times the regionwide average in 92113, the zipcode that includes Barrio Logan, Logan Heights, and Sherman Heights.

2015 Children's Asthma ER Rates by Zipcode,
Rate per 10,000, Zipcodes with More than 5 Only



Trucks and Traffic. Residents from all the neighborhoods report daily issues with truck traffic, idling, and parking on city streets in their communities. Throughout the Barrio Logan and Logan Heights areas, residents experience severe parking shortages caused by waterfront industry workers who park on their streets; the vehicles add to the pollution loads as well as causing inconvenience from lack of parking.

Polluting Industries within Residential Neighborhoods. These neighborhoods are home to industries such as Praxair, a large supplier of welding gases; Carlson & Beauloye, a metal plater; Atlas Chemical, a wholesale chemical supplier whose products include cyanide and acids; New Leaf Biofuel, a producer of biodiesel, Southern California Plating, whose inventory includes hydrofluoric, nitric, and sulfuric acids; and others – in close proximity to residential housing. Caltrans also maintains a facility -- directly next door to a childcare center -- with large volumes of volatile and flammable coatings and solvents. Pacific Ship Repair, on Rigel Street in Barrio Logan, is on the SD APCD list of facilities that must conduct biennial public notification under the district’s Air Toxics Hot Spots rule.

Smaller stationary sources. Throughout the area, problems with industries such as autobody shops on residential streets are also common and troubling to residents. Autobody and tow shops proliferate and contribute paint spray and auto exhausts to the pollution mix. Frequent lack of code compliance is indicated in problems such as blocking of sidewalks, auto repairs being done outdoors or after hours, and tow truck traffic on residential streets. Barrio Logan residents are particularly concerned about industrial scale recycling centers, with mountains of debris visible to residents, auto crushing operations, and offroad equipment such as backhoes. Autobody shops

and recycling centers have both been sources of fires and explosions that produced toxic smoke in residential communities in National City and Barrio Logan.

Large Waterfront Industry. Three large shipbuilding and repair businesses are located on the San Diego Bay waterfront directly upwind of the Portside neighborhoods. There is also a kelp processing plant, Kelco, bulk fuel terminals, and a BNSF railyard. These industries are the source of ongoing air emissions from their standard operations, and occasional emissions from accidents, such as the 2015 fire that occurred at BAE, one of the shipyards. CARB did an analysis of cancer risk from the combined emissions of the three shipyards, an analysis which CARB included in the 2008 Health Risk Assessment for the BNSF railyard in order to provide an estimate of the health risk from local emission sources other than BNSF. The analysis found that the combined shipyard emissions added up 250 cancers per million throughout much of the community, on top of the 50 to 100 cancers per million contributed by BNSF. NASSCO is on the SD APCD list of facilities that are required to perform biennial public notification, under the Air Toxics Hot Spots rules. The shipyards are expecting significant increases in their operations as the Navy concentrates more of its ships and activities on the West Coast – the Pacific Pivot, as this shift is termed. More shipyard activity translates to more emissions from ships, tugboats, and maintenance operations, as well as more employee driving and parking in the community.

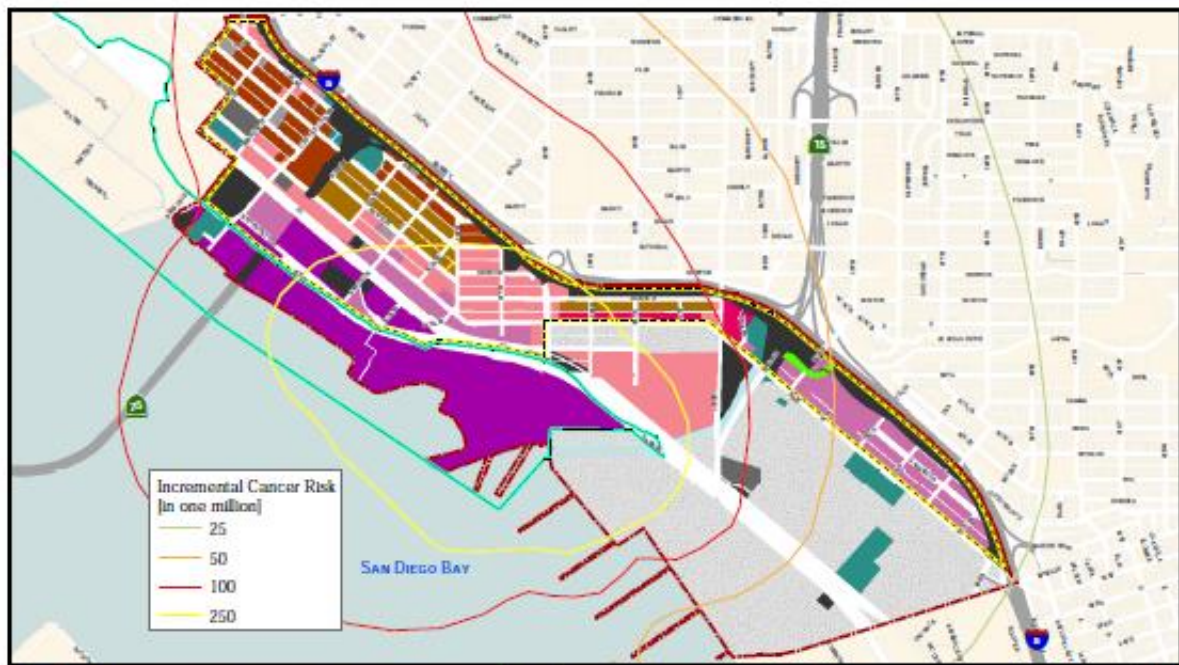


FIGURE 13
BNSF Yard Study Off-Site Incremental Cancer Risk Contours
Overlay on the Adopted Community Plan Land Uses

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Port Cargo Terminals. The Portside communities host the Port of San Diego's two cargo terminals: Tenth Avenue Terminal (TAMT) in San Diego, adjacent to Barrio Logan, and the National City Marine Terminal (NCMT), adjacent to West National City. Both terminals are sources of emissions from ships, cargo handling equipment, harbor craft, trains, and trucks. TAMT has planned a major expansion of up to 450% of its current cargo tonnage, and is actively seeking new shippers and cargos. NCMT imports some 400,000 vehicles per year, all of which leave the terminal on rail or on car carrier trucks.

Summary of Emissions of Concern to Portside Communities

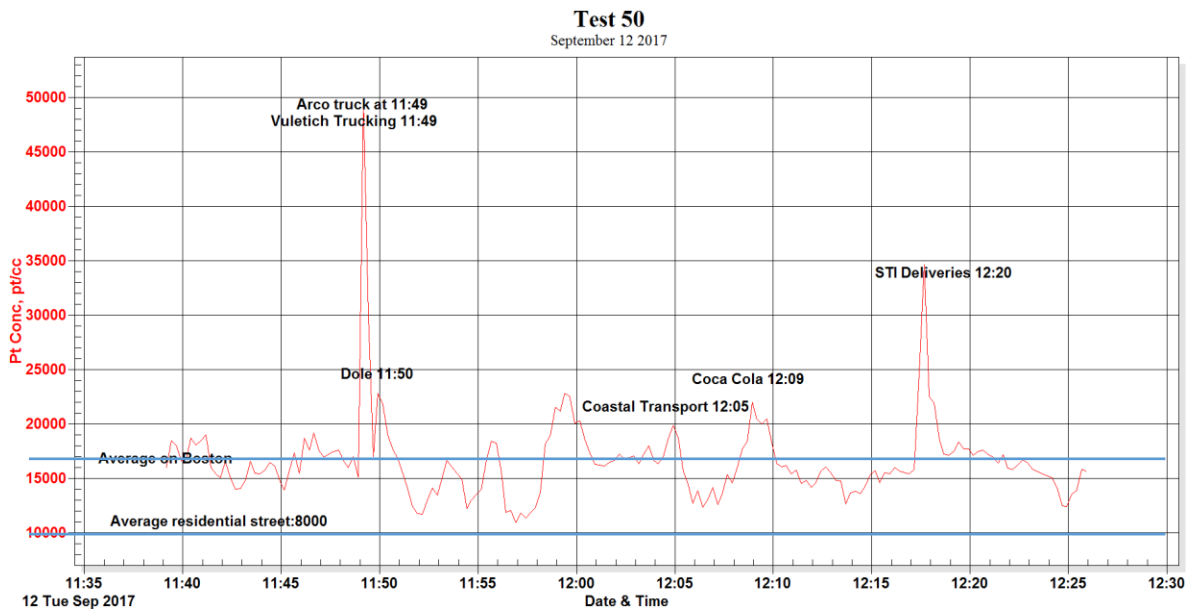
- Diesel PM, or black carbon
- Hexavalent Chromium
- Cadmium
- Nickel
- Ethyl Benzene
- 1,3-Butadiene
- Formaldehyde
- Arsenic
- Benzene
- Acetaldehyde
- Naphthalene
- Lead
- Toxic emissions from fires in local industries or spills of stored materials such as cyanides, hydrofluoric acid, nitric acid, or sulfuric acid.
- Autobody shop emissions including paint spray and diisocyanates
- PM2.5 and ultrafine particles

Community Engagement

Residents of all Portside communities are organized to respond to the environmental health threats in their neighborhoods. At present, 44 community leaders participate on Community Action Teams organized by Environmental Health Coalition in Portside communities, and approximately 2,500 community residents are actively involved with environmental justice activities. Many are also represented on local planning boards, such as the Barrio Logan Planning Group. Community institutions such as the elementary schools, Barrio Logan College

Institute, Chicano Park Steering Committee, and local business owners are also deeply engaged in the struggle to reduce freight and industry impacts, while maintaining a favorable climate for small businesses and resisting displacement of residents.

Barrio Logan residents have engaged in air monitoring projects over the years, most recently a project to document the impact of truck traffic on residential streets that residents want the city of San Diego to put off-limits to truck traffic. This effort included use of hand held, ultrafine particle counters, and truck counting. Results including the chart below, were presented to a City Council committee in March of 2018.



Further back in the history of community activism on air quality, residents fought an ultimately successful battle to end methyl bromide fumigation of imported fruit at the Tenth Avenue Terminal; the imported fruit was fumigated in an on-dock cold storage warehouse, after which the methyl bromide was vented to ambient air. After 5 years of pushing the Port of San Diego to end the practice, the community prevailed and the fumigation was stopped.

Residents also participated in community meetings at which ARB discussed findings of its Barrio Logan Air Monitoring Project in the early 2002- 2004 timeframe. As the result of that monitoring – undertaken by ARB at the request of the community – a metal plating shop directly next door to homes on Newton Avenue was shut down after it was found to be emitting high levels of hexavalent chromium.

Monitoring Needs

At this time, the SD APCD air monitoring station has been relocated from Perkins Elementary School in Barrio Logan to Sherman Elementary school in Sherman Heights. We are pleased that there is still a monitor in the area of the Portside communities. At the same time, we would like

APCD to resume sampling for elemental carbon and organic carbon. Over the 4 years during which this sampling was occurring, the Perkins monitor (“Beardsley”) consistently registered a higher percentage of elemental to organic carbon, indicating a greater percentage of PM2.5 carbon was from diesel, compared to the two other communities where this sampling was done. Continuation of this monitoring would help us track the trends in diesel in ambient air in the Portside area.

Table 1. Elemental Carbon (EC) as a Percentage of Total PM2.5 Carbon, 2012

Air Monitor	Average EC Percent	Maximum EC Percent
Barrio Logan (Beardsley)	21.9	44.3
El Cajon	14.6	24.5
Escondido	15.2	24.7

Source of data: US EPA, Air Data, from monitoring data submitted by SD APCD. Percentages compiled by EHC.

US EPA Air Data website: <https://ofmext.epa.gov/AQDMRS/aqdmrs.html>

We are also interested in fenceline monitoring of within-community emission sources such as the large recycling centers, and near-community sources such as BNSF and the shipyards.

Emission Reduction Needs

The most pressing need for improved air quality in the Portside EJ communities is for reduction in diesel emissions. Full electrification of the cargo terminals and equipment is our number one priority for emission reductions.

We are also in full support of additional resources for SD APCD for enforcement and compliance inspections in our communities, along with a robust reporting system to make compliance information readily accessible to the public.

Resources for development of an Indirect Source Rule by the SD APCD would reduce impacts of new facilities that generate mobile source emissions, and could prevent new occurrences of warehouse-related truck traffic in residential areas in the entire air basin.

Conclusion

The Portside Environmental Justice Neighborhoods have high cumulative air quality impacts from the many emission sources surrounding the area. AB 617 was designed to provide monitoring and emission reduction plans for communities exactly like these. We request that the Portside communities be selected for the first year of AB 617 implementation.