APPENDICES

AB 617 COMMUNITY AIR MONITORING PLAN (CAMP) FOR THE SAN BERNARDINO/MUSCOY COMMUNITY

South Coast Air Quality Management District

April 2019

Version 1

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Appendix A: List of Available Field and Laboratory Instruments

TABLE 1 - LIST OF AVAILABLE FIELD EQUIPMENT

MAKE MODEL	SPECIES MEASURED	MEASUREMENT PRINCIPLE	SOUTH COAST AQMD SOP	MINIMUM REPORTING LIMIT	UNITS AVAILABLE	TYPE	SAMPLING RATE
MET ONE, BAM 1020	PM2.5, PM10	Beta Ray Attenuation	SOP00072	4.8 µg/m^3 (hourly) 1 µg/m^3 (daily)	1	Continuous	Hourly
THERMO SCIENTIFIC, MODEL 55I	Methane, and Non-methane Hydrocarbons	Gas Chromatography (Flame Ionization Detector)	SOP00145	0.05 ppm (300s)	2	Continuous	Hourly
MOCON, 9000 NMHC ANALYZER	Methane, and Non-methane Hydrocarbons	Gas Chromatography (Flame Ionization Detector)	SOP00138	0.5, 0.1 ppm (Daily)	2	Continuous	Hourly
XONTECK, 901 VOC SAMPLERS	VOC	Active Sampler	SOP00080 (For Previous Model 910)		6	Time Integrated	NA
MESALABS, OMNI SAMPLER	PM Speciation, Metals, Hexavalent Chromium	Active Sampler	SOP00170		36	Time Integrated	NA
PICARRO, G2204	CH_4, H_2S	Cavity Ring Down Spectroscopy	SOP00157	5 ppb	1	Continuous	One Second

MAKE MODEL	SPECIES MEASURED	MEASUREMENT PRINCIPLE	SOUTH COAST AQMD SOP	MINIMUM REPORTING LIMIT	UNITS AVAILABLE	TYPE	SAMPLING RATE
PQ100 SAMPLERS	PM Speciation, Metals, Hexavalent Chromium	Active Sampler	SOP00146		6	Time Integrated	NA
MET ONE , SASS SAMPLERS	PM	Active Sampler	SOP0086		5	Time Integrated	NA
XONTECK, 924 SAMPLERS	PM Speciation, Metals, Hexavalent Chromium	Active Sampler	SOP00094		8	Time Integrated	NA
TSI, DUSTTRAK	PM2.5, PM10	Light Scattering, Laser Diode	Draft in Progress	1 $\mu g/m^3$	3	Continuous	One Minute
MAGEE SCI. AETHALOMETER AE33	BC	Optical attenuation	SOP000142	0.01 $\mu g/m^3$	3	Continuous	One Minute
COOPER ENVIRONMENTAL XACT 625	Multi-Metals	Energy Dispersive X-Ray Fluorescence (EDXRF) Analysis	Draft in Progress	depends on the species	1	Continuous	One Minute
TELEDYNE, CPC MODEL 651	UFP	Condensation Particle Counter Super Saturated Vapor	SOP00143			Continuous	One Second
TSI, CPC	UFP	Condensation Particle Counter Super Saturated Vapor	SOP00143			Continuous	One Second

MAKE MODEL	SPECIES MEASURED	MEASUREMENT PRINCIPLE	SOUTH COAST AQMD SOP	MINIMUM REPORTING LIMIT	UNITS AVAILABLE	TYPE	SAMPLING RATE
TELEDYNE, T200	NO, NO_2, NOx	Chemi-luminescence Detection	User Manual	0.4 ppb	3	Continuous	One Minute
TELEDYNE, T640	PM2.5	Scattered Light Spectrometry	User Manual	0.1 µg/m^3	3	Continuous	One Minute
TELEDYNE, T300	CO	Gas Filter Correlation (GFC)	User Manual	0.2 ppm	3	Continuous	One Minute
VOC MONITOR (TBD)	VOC	TBD	TBD	TBD	2	Continuous	TBD
WIND SYSTEM	Meteorological Parameters				3	Continuous	One Second
LI-COR BIOSCIENCES, LI-7700	Methane	Wavelength Modulation Spectroscopy (WMS)	User Manual		1	Continuous	One Second
ENVIRO TECHNOLOGY, PAX	BC	Photoacoustic Extinctiometer	User Manual		1	Continuous	One Second
TBD (FAST-RESPONSE O_3)	O_3	TBD	TBD	TBD	1	Continuous	One Second
TBD (REFERENCE PM MONITOR)	PM	TBD	TBD	TBD	1	Continuous	Hourly

MAKE MODEL	SPECIES MEASURED	MEASUREMENT PRINCIPLE	SOUTH COAST AQMD SOP	MINIMUM REPORTING LIMIT	UNITS AVAILABLE	TYPE	SAMPLING RATE
TBD (FAST RESPONSE PM MONITOR)	PM	TBD	TBD	TBD	1	Continuous	One Second
TBD (PARTICLE SIZER)	PM	TBD	TBD	TBD	1	Continuous	One Second
TBD (H_2S MONITOR)	H_2S	TBD	TBD	TBD	3	Continuous	TBD
TBD (H_2S, O_3, NOX, CO)	H_2S, O_3, NOx, CO	TBD	TBD	TBD	12	Continuous	TBD
FIELD GAS CHROMATOGRAPH (AUTO-GC)	Speciated VOC	Gas Chromatography	User Manual	Depends on the species	1	Continuous	Hourly
PTR-TOF (PROTON TRANSFER-TIME OF FLIGHT MASS SPECTROMETER)	Speciated VOC	Chemical Ionization Mass Spectrometry	User Manual	10 ppt	1	Continuous	One Second

Note: The list of instruments provided in Appendix A is not exhaustive and the monitoring equipment that will be used for AB 617 may change depending on the project needs and CSC input. It should be noted that these resources will be used to satisfy the needs of all present and future AB 617 communities, and availability will depend on the specific air monitoring needs and objectives at each community, which is to be determined after consulting with each CSC.

TABLE 2 – LIST OF AVAILABLE LABORATORY EQUIPMENT

MAKE MODEL	SPECIES MEASURED	MEASUREMENT PRINCIPLE	SOUTH COAST AQMD SOP	MINIMUM REPORTING LIMIT	# OF INSTRUMENTS
AGILENT GC/MS WITH GAS PRECONCENTRATOR	VOC Air Toxics	TO-15, Gas Chromatography (Flame Ionization Detector)/Mass Spectrometry	SOP00008B	ppt	2
AGILENT GC WITH GAS PRECONCENTRATOR	C2-C12 Hydrocarbon Speciation (60 Components)	TO-14a, Gas Chromatography (Dual Column with Flame Ionization Detectors)	SOP00007	ppt	2
THERMO UHPLC	Formaldehyde, Acetaldehyde,	Adsorbent Cartridge / Ultra High Performance Liquid Chromatography with Photodiode Array Detector	SOP00175	ng/m^3	1
DIONEX® ION CHROMATOGRAPHIC SYSTEM	PM Speciation, Hexavalent Chromium	Ion Chromatography	SOP0046	ppt	4
METROHM® CHROMATOGRAPHY SYSTEM	PM2.5 Cations	Ion Chromatography	SOP00002	ppb	1
DIONEX® MODEL ICS-2100	PM2.5 Anions	Ion Chromatography	SOP00003	ppb	1

MAKE MODEL	SPECIES MEASURED	MEASUREMENT PRINCIPLE	SOUTH COAST AQMD SOP	MINIMUM REPORTING LIMIT	# OF INSTRUMENTS
DRI MODEL 2001 THERMAL/OPTICAL CARBON ANALYZER	PM2.5 Elemental, Organic & Total Carbon	Thermal/Optical Carbon Analysis	SOP00001	µg/cm^2	2
SARTORIUS MC5 MICROBALANCE	PM2.5 Mass	Gravimetric Analysis	SOP00104	µg	2
PERKIN ELMER ELAN® DRC II ICP-MS	PM Speciation, Metals	Inductively Coupled Plasma – Mass Spectrometry	SOP00096/ QA0057	ppt to ppb	1
PANALYTICAL EPSILON 5®	PM2.5 Metals	Energy Dispersive X-Ray Fluorescence Spectrometry	SOP00004	µg/cm^2	1
ZEISS EVO|MA 10 EQUIPPED W/ BRUKER XFLASH 6|10	Bulk Samples	Scanning Electron Microscopy/ Energy Dispersive X-ray	Manufacture Manual	trace	1
OLYMPUS BH2 / BH51	Bulk Samples/ Asbestos Fibers	Polarized Light Microscopy	SCAQMD Method 300 (Asbestos),301 (Bulk), 317 (Fibers)	trace	2 (BH2) / 1 (BH51)
BRUKER LUMOS FTIR-MICROSCOPE WITH MACRO DIAMOND ATR	Bulk Materials/ Fibers	FT-IR Microscopy	SCAQMD Method 301 (Bulk), SOP00178	trace	1
PANALYTICAL X'PERT PRO X-RAY DIFFRACTOMETER (XRD)	Bulk Materials	X-Ray Diffraction Spectroscopy	SCAQMD Method 301 (Bulk)	trace	1
AGILENT 7890 GC WITH AGILENT 355 SULFUR CHEMILUMINESCENCE DETECTOR	Sulfur	Chemi-luminescence	SCAQMD Method 307	ppb	1

MAKE MODEL	SPECIES MEASURED	MEASUREMENT PRINCIPLE	SOUTH COAST AQMD SOP	MINIMUM REPORTING LIMIT	# OF INSTRUMENTS
THERMO FINNIGAN TRACE GC ULTRA	TNMNEVOC	Conversion to Methane Prior to Gas Chromatography with Flame Ionization Detector	SCAQMD Method 25.1	ppm	1
THERMO FINNIGAN TRACE GC ULTRA	Fixed Gases (Methane, Hydrogen, Oxygen, Nitrogen)	Gas Chromatography with Thermal Conductivity Detector	SCAQMD Method 10.1	%	1

Note: None of the laboratory equipment listed above has been purchased using AB 617 funds.

Appendix B: Air Monitoring Prioritization

The first step in implementing the proposed monitoring approach is to identify the areas within the SBM community that are most impacted by local air pollution sources and include the highest number of air quality concerns based on CSC and community feedback. The District gathered information on the main CSC air quality concerns through a series of community meetings, as described in the CAMP document. The following categories were selected as the highest priorities: neighborhood truck traffic (including from/to warehouses), railyard, warehouses, cement batch plants, Omnitrans bus yard, and sensitive receptors (ranked in this order). A more detailed description on each of these groups is provided in the following sections. Since the SBM community covers a vast geographical area characterized by a wide variety of air pollution sources, a monitoring approach that integrates complementary air monitoring strategies (i.e. mobile, fixed and sensor monitoring; as described in detail in the CAMP document) is appropriate for addressing the highest priority concerns identified by the CSC in an effective and comprehensive manner.

The considerations provided below along with information on the specific air quality concerns identified by the CSC were used to prioritize the areas within SBM where appropriate monitoring should commence, as explained in the "Air Monitoring Prioritization Based on Community Input" section of the CAMP.

Meteorology

Understanding wind patterns and the typical meteorological conditions in SBM is important to better understand the potential impact of air pollution sources in this community. Figure 1 shows the wind rose obtained from data collected at the South Coast AQMD Inland Empire – San Bernardino monitoring station, located at 24302 E 4th St. San Bernardino, CA 92410, inside the SBM community boundary. In 2018, the winds were predominantly from southwest and thus, communities on the northeast side of SBM are likely to be the most impacted by air pollution sources in the area. However, wind directions can vary greatly throughout the day and affect air quality conditions in all communities in proximity to emission sources.

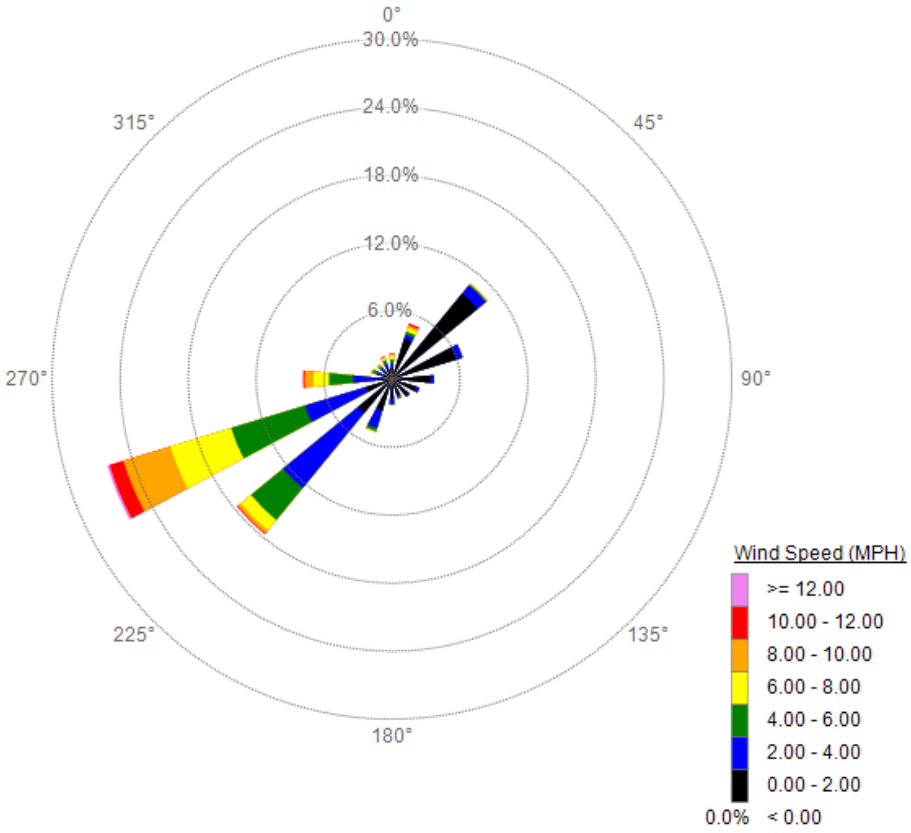

FIGURE 1 - WIND ROSE OBTAINED FROM DATA COLLECTED AT THE SOUTH COAST AQMD SAN BERNARDINO AIR MONITORING STATION IN 2018

Main Air Quality Concerns Identified by the CSC

Neighborhood Truck Traffic (Including from/to Warehouses)

Truck traffic and truck idling were selected by the CSC as the most important air quality concern in this community. The SBM area is intersected by a multitude of public roads and freeways with high traffic volumes and a high fraction of diesel truck traffic due to the presence of warehouses and railyards, and associated goods movement. The CSC also identified moving trucks operating on freeways, intersections and major roadways, and their impact on local residents as major air quality concerns in SBM. This section discusses the proposed air monitoring approach for on-road truck traffic on roadways and around warehouses. The monitoring approach for on-site truck traffic and idling at the warehouses is discussed later in this document.

"Traffic density" data from CalEnviroScreen was used to screen for areas with the highest traffic impacts (Figure 2). Based on this information, two major areas with the highest density traffic and proximity to residential areas were prioritized for initial mobile measurements (Figure 3). It should be noted that the traffic density index provided by CalEnviroScreen to identify areas with increased motor vehicle traffic

does not separate truck traffic from general traffic, and does not provide any information about idling trucks. Some of the specific areas with high density of idling trucks were identified by the CSC during the community meetings. These areas will be prioritized for initial air monitoring. Residential areas in close proximity to major roadways were also identified as part of this exercise (Figure 3). Although this informational gathering is meant to identify high priority areas where monitoring will begin, air quality measurements will extend to other areas in SBM. This is because this community is disproportionally impacted by diesel emissions from truck traffic related to goods movement around warehouses and industrial facilities.

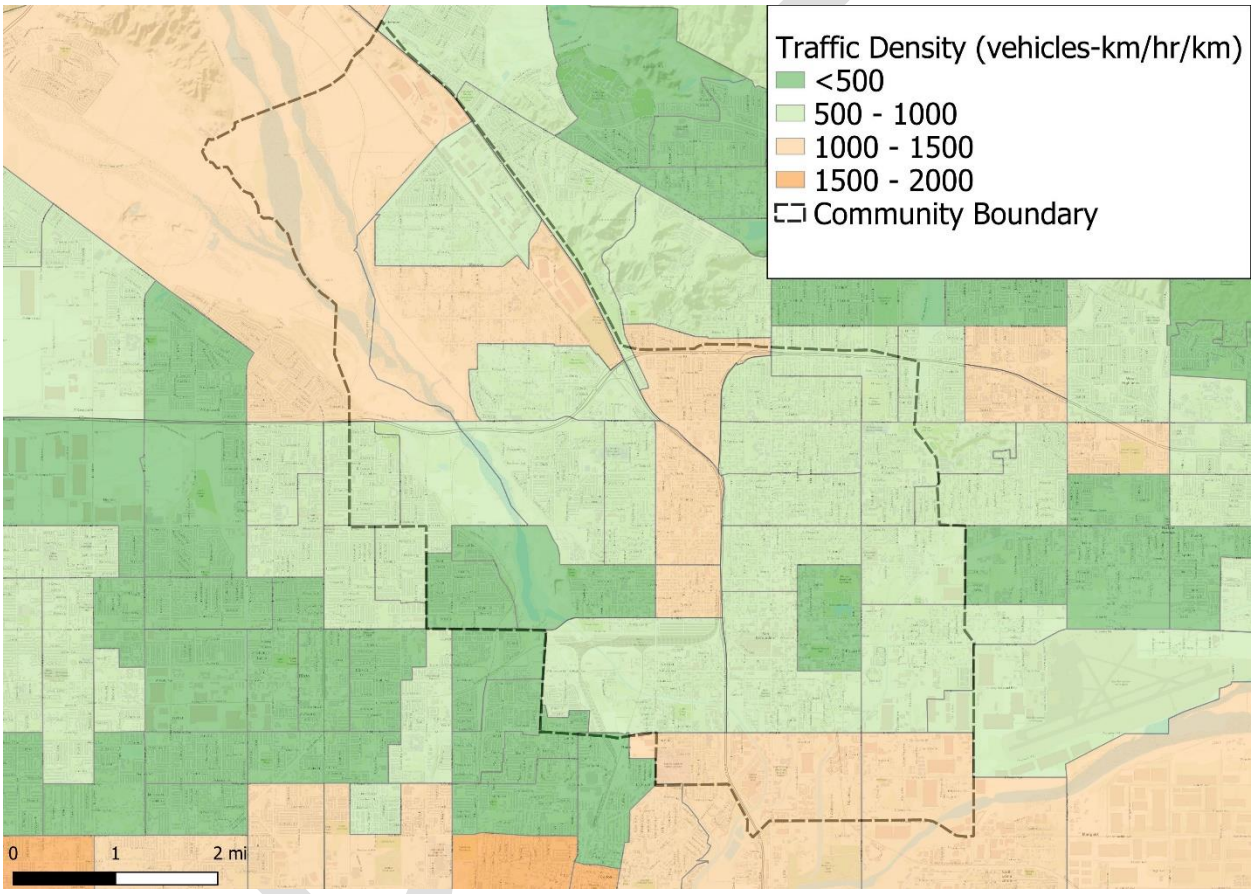

FIGURE 2 - TRAFFIC DENSITY MAP OBTAINED USING CALENVIROSCREEN 3

Note: Traffic density is the sum of traffic volumes adjusted by road segment length (vehicle-kilometers per hour) divided by the total road length (kilometers) within 150 meters of the census tract boundary.

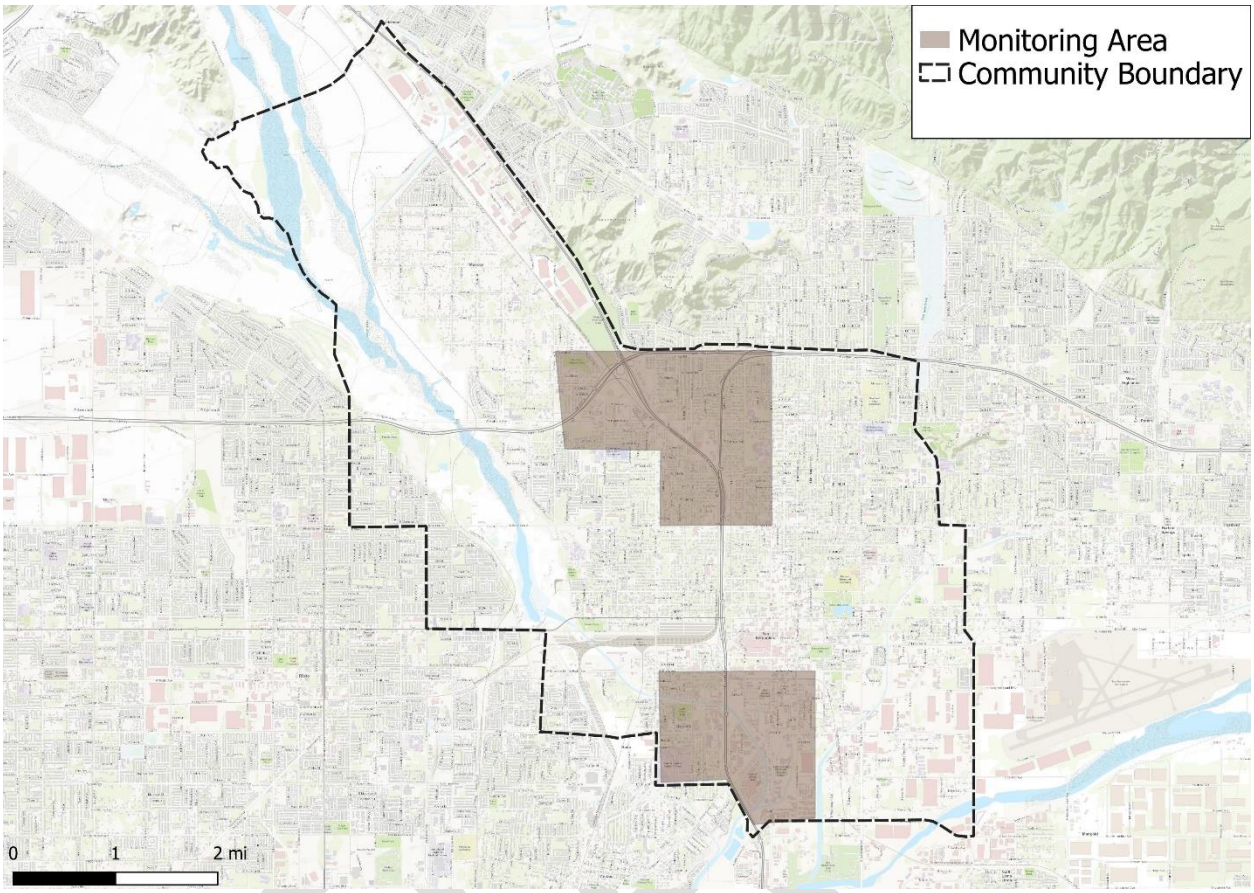

FIGURE 3 - PROPOSED MONITORING AREAS BASED ON DATA RELATED TO TRAFFIC DENSITY AND THE DISTANCE TO THE RECEPTORS

The monitoring strategy to study and characterize this particular air quality concern includes comprehensive mobile measurements and near-road monitoring with a focus on black carbon (BC; a tracer for diesel PM), NOx, PM, and VOCs to identify air pollution hot spots and assess the impact of idling truck emissions on community exposure. Elevated air pollutant concentrations are generally expected at near-road locations than further away from the freeways and transportation corridors. South Coast AQMD staff will conduct comprehensive near road monitoring at transportation corridors and busy roads with high diesel truck traffic, and will work with the CSC to determine whether to establish one or more near-road monitoring station in SBM. Near-road measurements will provide representative pollutant exposure information for people who live, work, or go to school adjacent to freeways or who spend significant time traveling on some of the busiest roadways in Southern California.

BNSF Railyard and Omnitrans Bus Yard

The CSC identified the BNSF railyard, railways, and related activities as one of their highest air quality concerns for the purpose of this CAMP. Railyards are a complex mix of many source types including trains, stationary equipment, terminal operations and on-road vehicles, and heavy-duty diesel trucks. In this case, the major pollutants of concern are diesel PM, BC, Volatile Organic Compounds (VOCs) and other air

toxics including metals. The BNSF San Bernardino Railyard is located in close proximity of a residential area and the Ruben Campos Community Center (Figure 4). While the railyard was identified as a high priority air quality concern by the CSC, some of the emissions related to railyard activities can occur due to train emissions along railroads. Therefore, the proposed monitoring strategies also take into consideration all the railways in this community.

FIGURE 4 - BNSF SAN BERNARDINO RAILYARD AND ITS SURROUNDING AREA

The BNSF railyard SBM is located close to the Omnitrans bus yard, which was also identified as one of the high priority air quality concerns by the CSC. While the CSC expressed concerns about odors and potential air toxic emissions from the bus yard, it is likely that emissions from the Omnitrans bus yard also include diesel PM from diesel bus traffic. Thus, traffic related emissions from the Omnitrans bus yard are expected to be similar in nature to those from the BNSF railyard. For this reason, these two areas are combined together for the purpose of this proposed monitoring prioritization (Figure 5). The monitoring approach to address community concerns regarding odors and potential toxic emissions from Omnitrans bus yard is provided later in this document.

South Coast AQMD staff conducted air monitoring near SBM during the Multiple Air Toxics Exposure Study (MATES) in 2013, which identified high levels of diesel PM near the BNSF railyard. The community near this railyard was part of the pilot communities for the South Coast AQMD Clean Communities Plan (CCP), which included significant community engagement activities, and emissions and exposure reduction efforts (e.g. air filtration projects, use of low-VOC paints, and other emission reduction measures). South Coast AQMD also funded the Environmental Railyard Research Impacting Community Health (ENRRICH) study, which consisted of a community health assessment and public health outreach project led by the late Dr. Sam Soret of Loma Linda University. These efforts have enabled South Coast AQMD staff to develop relationships with community leaders to better understand the community's air quality concerns and priorities. The unique information provided through these assessments will help inform AB 617 efforts and further improve air quality in this disadvantaged area. While the CCP addressed several of the highest priority community issues in the community near the San Bernardino railyard, there are additional air quality concerns that remain in San Bernardino as well as in the neighboring Muscoy area, which will be addressed as part of AB 617. Specifically, monitoring will be focused on determining source locations, and emission and exposure variability. The strategy to better characterize this particular air quality concern will include fenceline monitoring at railyards to identify activities that may have the potential to increase air pollution levels in the area, and mobile and/or fixed monitoring near transportation corridors. Community monitoring will also be conducted to assess how railway/railyard emissions may contribute to the overall air pollution burden in this community. The pollutants that will be monitored include diesel PM markers, such as BC, NOx, PM mass and number concentrations, and other relevant criteria pollutants, such as metals and other air toxics.

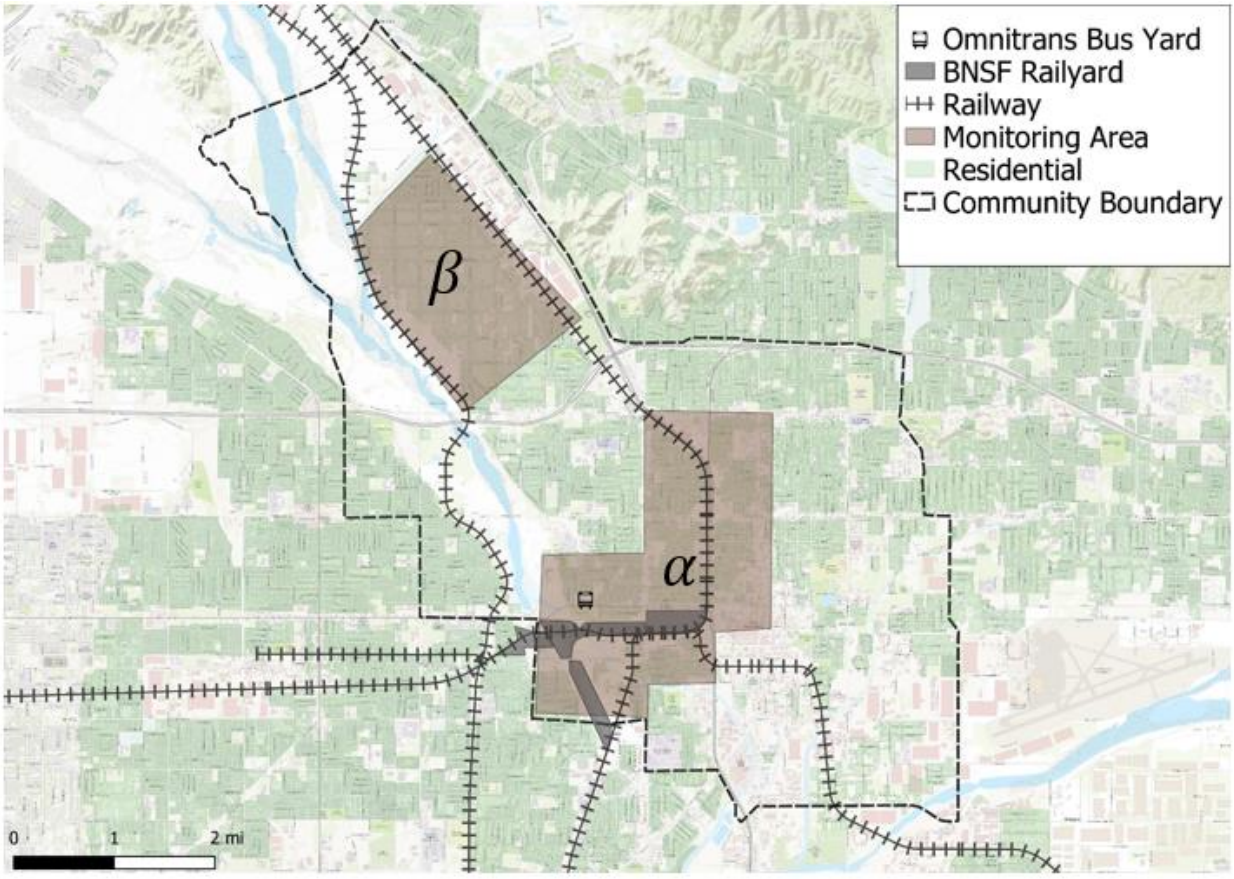

FIGURE 5 - RAILYARD, RAILWAYS, BUS YARD, AND SELECTED MONITORING AREAS

The shaded areas in Figure 5 are the highest priority considered for initial monitoring purposes based on proximity of railways, railyards, and the bus yard to residential areas and sensitive receptors, and considering general wind patterns. Area α is located in San Bernardino and includes the BNSF San Bernardino Railyard and the Omnitrans bus yard (Figure 6). Area β is located in Muscoy and San Bernardino and includes a few railways surrounding a residential neighborhood (Figure 7). These areas will be prioritized for the purposes of monitoring, although air quality measurements will extend to other locations within the SBM community. The strategy to better characterize this particular air quality concern will include fenceline monitoring at the railyard and Omnitrans bus yard to identify activities that may cause increased levels of air pollution, and mobile and/or fixed monitoring near transportation corridors. Mobile measurements will extend into the community to assess how railyard, railway and Omnitrans traffic related emissions may contribute to the overall air pollution burden in this community. A combination of continuous air monitoring and meteorological data is extremely valuable in determining source locations, and emission and exposure variability.

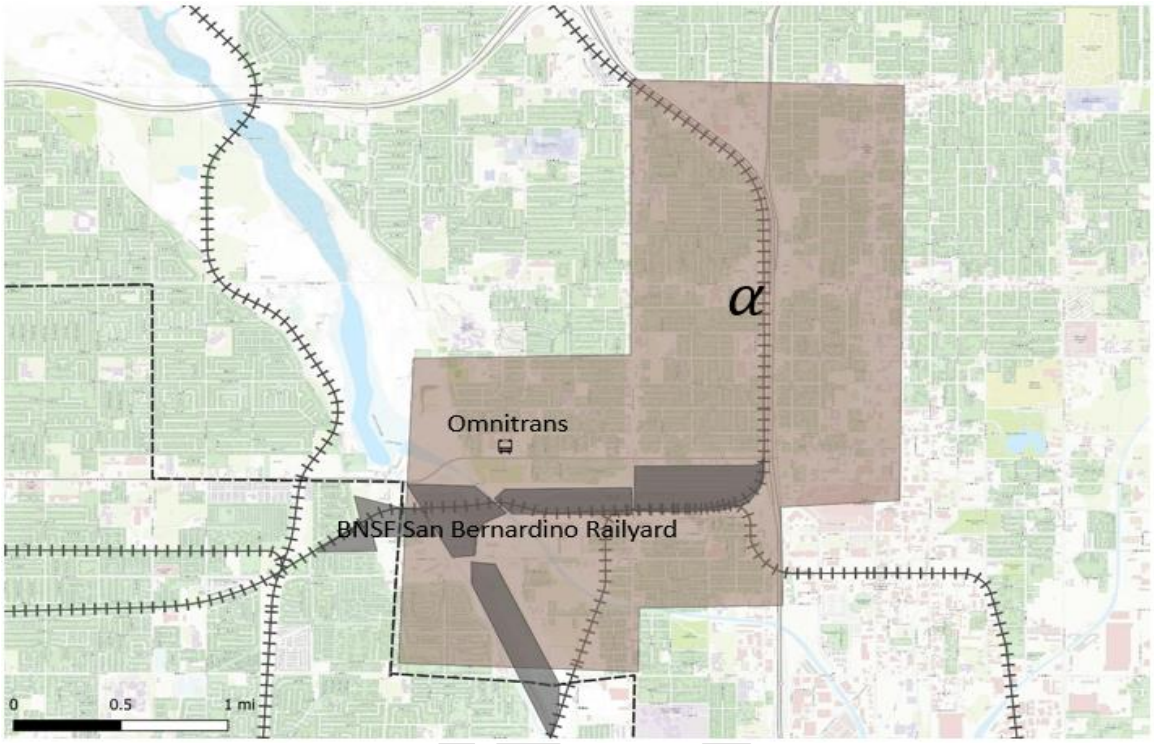

FIGURE 6 - PROPOSED MONITORING AREA α FOR RAILROADS/RAILYARD, THE BNSF RAILYARD AND OMNITRANS BUS YARD

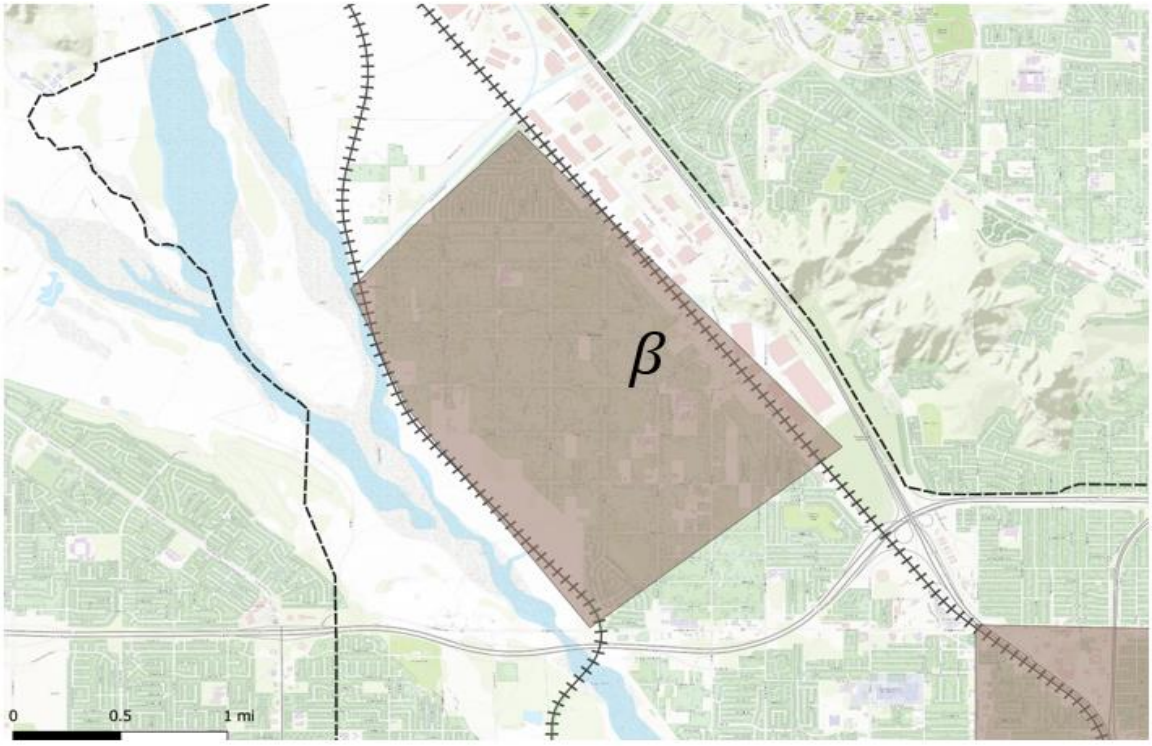

FIGURE 7 - PROPOSED MONITORING AREA β FOR RAILROADS/RAILYARD

Sensitive Receptors

Hospitals, schools, and other sensitive receptors were also identified as high priority air quality concerns by the CSC members. As defined in South Coast AQMD's Rule 1470(b)(60) a sensitive receptor "means any residence including private homes, condominiums, apartments, and living quarters, schools as defined under paragraph (b)(57) [of the same rule], preschools, daycare centers and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing."

Prioritizations and monitoring activities are developed considering the location of sensitive receptors. Some of the major factors for this consideration include identification of potential emission sources impacting sensitive receptors, the type and amount of pollutants emitted and their toxicity, the distance from emission sources, and predominant wind patterns to identify the downwind and upwind receptors. The location of schools, medical centers, and child care facilities, including those identified by the CSC are shown in Figure 8.

Monitoring activities and strategies to better characterize potential impacts on sensitive receptors in the SBM community include mobile measurements at and near these receptors (e.g. schools), as well as near potential sources of emissions. Fixed monitoring can also be conducted in areas with well-defined air pollution sources that have an impact on the community.

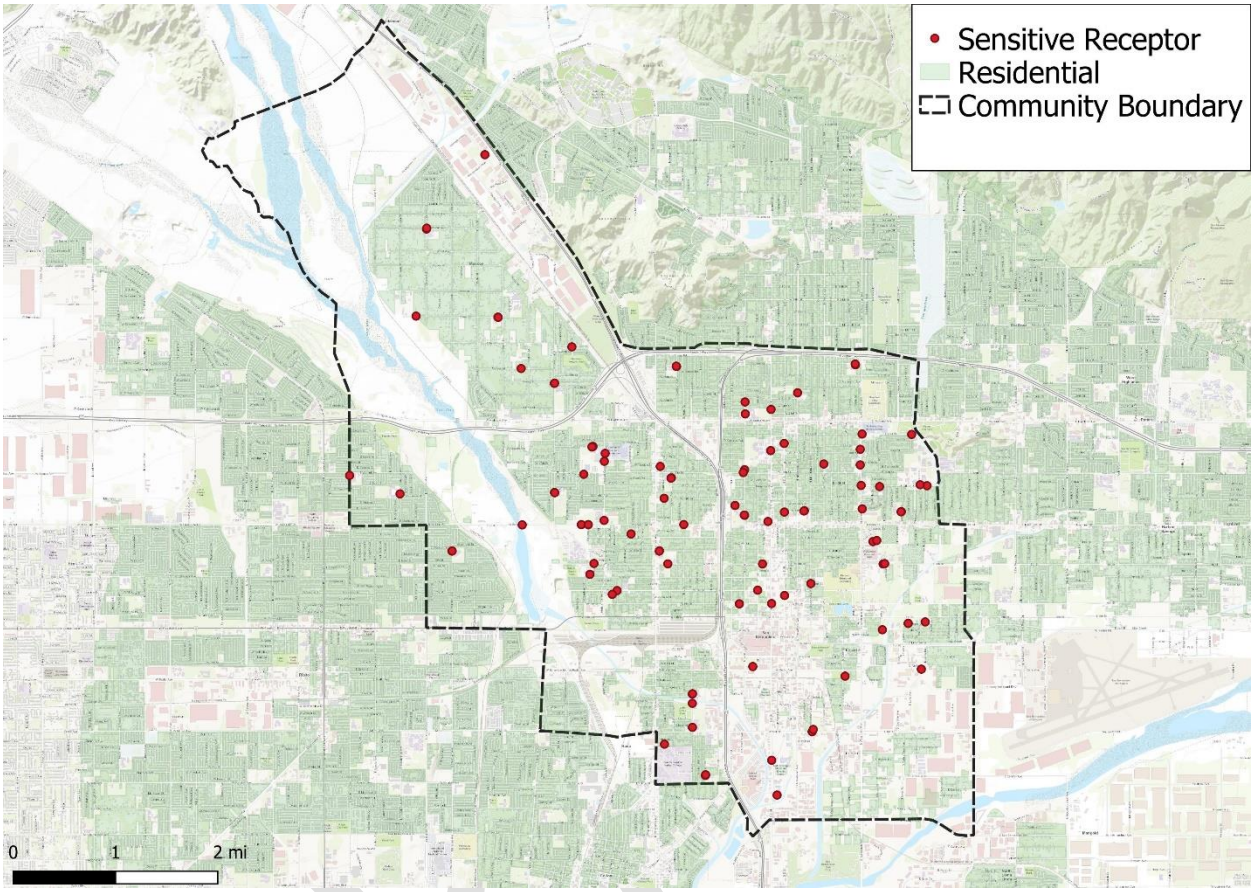

FIGURE 8 - LOCATION OF SCHOOLS, MEDICAL CENTERS, AND CHILD CARE FACILITIES WITHIN THE SBM COMMUNITY

Warehousing

Warehousing is one of the most critical components of the goods movement chain, and a growing demand for warehousing and related activities is projected for the next few years. The Inland Empire which includes the counties of San Bernardino and Riverside has become one of the largest distribution hubs in the nation, due to rapid growth, more affordable property values, and convenient access to freeways, airports and rail lines. The majority of the ocean freight containers arriving at the ports of Los Angeles and Long Beach are transported through communities in the Inland Empire to clusters of warehouse distribution centers and railyards before distribution to the rest of the country. This expansion potentially results in negative impacts to the SBM community, without sharing the economic benefits. The SBM community is currently going through rapid development of new warehouse distribution centers and warehousing was one of the major air quality concerns identified by the CSC. This includes, but is not limited to, exposure to emissions from new warehouse construction and development, truck traffic

associated with warehouses, and truck idling on warehouse properties and on nearby streets, particularly in proximity to residences and sensitive receptors.

The location of all the new and projected warehouses is not currently available as the warehouse database provided by Southern California Association of Governments (SCAG) used in this analysis (which refers to 2016 information) is not current and does not take into account the rapid development of new warehouses that has occurred in San Bernardino County during the past few years (Figure 9)[1]. South Coast AQMD staff will conduct comprehensive surveys of the SBM area and will interview CSC and community members, and individual stakeholders to gather additional input and information.

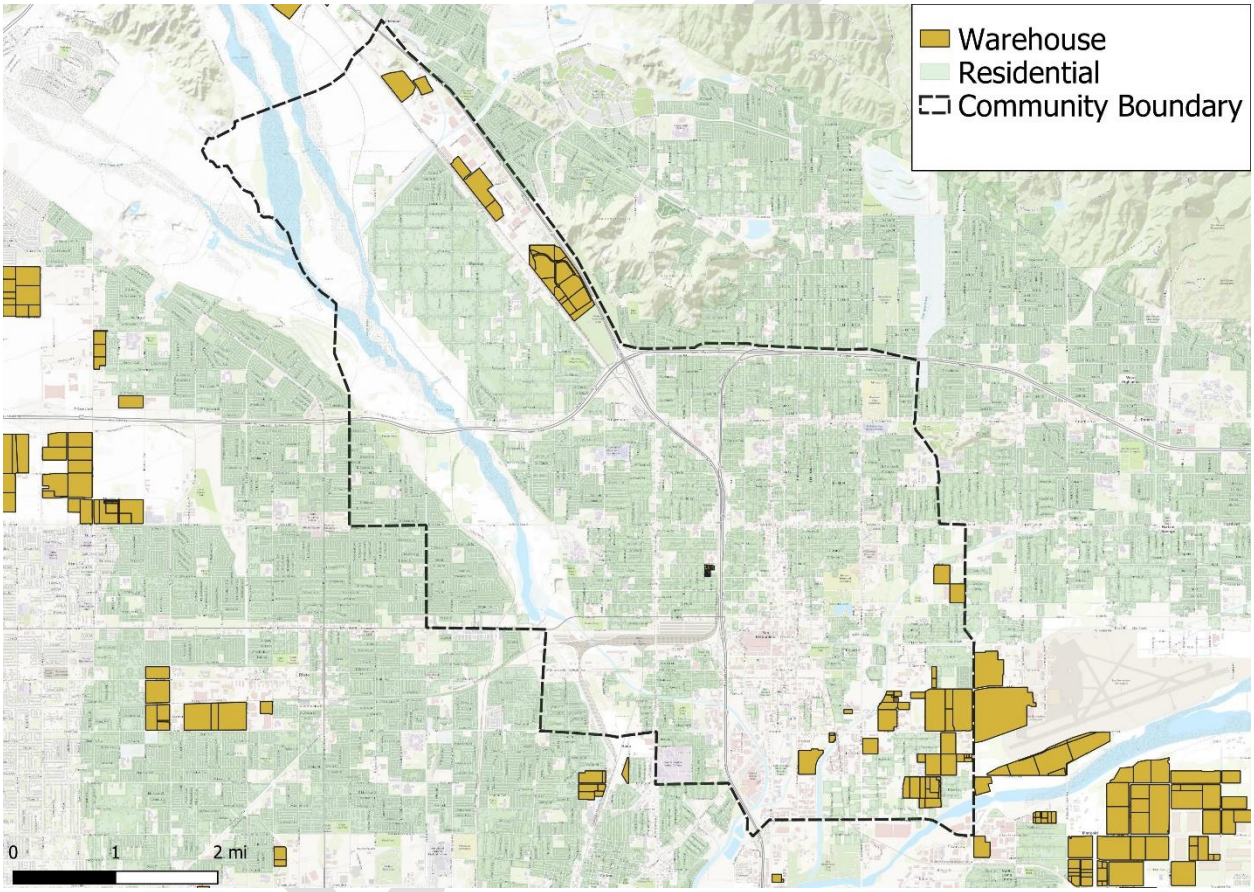

FIGURE 9 - LOCATION OF WAREHOUSE DISTRIBUTION CENTERS BASED ON DATA PROVIDED BY SCAG

The first step to properly characterize this air quality concern is to prepare a comprehensive map of the warehouses located within the SBM community boundary. The proposed air monitoring strategy to characterize emissions from this source category includes a series of surveys to identify which warehouse(s) may have the highest impact on nearby communities. This includes mobile measurements

[1] Land-Use for 2016 from SCAG: http://www.scag.ca.gov/Pages/default.aspx

near the identified warehouses and in nearby residential areas to determine pollution gradients, identify hot spots, and assess the effects of warehouse activities on the surrounding neighborhoods. These type of measurements will also help determine the effectiveness of some of the potential mitigation measures that will be developed as part of the Community Emissions Reduction Plan (CERP).

Omnitrans Bus Yard

Omnitrans is a public transportation agency and the largest transit operator within San Bernardino County. Specifically, the Omnitrans bus yard located at 1700 West Fifth Street in San Bernardino (Figure 10), right across from the Ruben Campos Community Center and Nunez Public Park, was identified by the CSC as one of the high priority air quality concerns in SBM. The major CSC concerns include odor, potential toxic emissions, and proximity to residential homes (mainly on the north and west sides) and Ramona-Alessandro Elementary School (located directly to the northeast of the Metro Station, across Medical Center Drive). As the largest transit operator in this community, operating throughout the urbanized areas of SBM, Omnitrans activities can also contribute significantly to diesel PM. The monitoring approach for addressing traffic related emissions from Omnitrans activities is discussed in detail earlier in this document, as part of the monitoring approach for truck idling and traffic. Moreover, due to the proximity of the Omnitrans bus yard to the BNSF railyard, it is important to develop a monitoring strategy that can evaluate the impacts from each of these air quality concerns.

In this section, the monitoring approach for addressing odors and potential fugitive emissions from the Omnitrans facility is discussed. Omnitrans operates fueling stations to dispense compressed natural gas (CNG) and diesel fuel to buses that use the facility. Unleaded gas is also dispensed to Omnitrans staff cars, vans, and trucks. For several years, nearby residents and environmental groups, including the Center for Community Action and Environmental Justice (CCAEJ), have been concerned about the potential risks of the natural gas tanks located at the Omnitrans bus yard. The community members started filing odor complaints with the South Coast AQMD back in 1998 describing health effects (e.g. nose bleeds) and safety concerns when Omnitrans began CNG fueling at the Metro Station. This led to several inspections and sample collections conducted by the South Coast AQMD staff, which resulted in the issuance of a Notice of Violation. Consequently, Omnitrans opted to replace the CNG stations with liquefied natural gas (LNG) stations and began operating odorless LNG fueling stations in 2002.

Two 30,000 gallon CNG tanks were removed from the site by Omnitrans in the summer of 2015 in an effort to address community concerns and to transition to the use of an underground pipeline instead. The new CNG system utilizes underground natural gas pipelines, eliminating the need for on-site CNG or LNG storage tanks. Omnitrans staffers fuel the facility's fleet of buses nightly. Lately, the Metro Station has been the main focus of community odor concerns.

The shaded area in Figure 10 shows the Omnitrans facility and the impacted areas nearby after an analysis of the typical wind patterns in the region and considering the location of residential homes and sensitive receptors. The monitoring approach proposed for AB 617 implementation focuses on the earlier detection of leaks to provide information and next actions; on improving emissions inventory estimates; providing

public alerts and notifications if high levels are found; and on supporting the CERP by tracking progress of the proposed emission reduction strategies. Air pollution monitoring will include mobile measurements with a focus on VOC emissions near the facility and in the impacted community; potential VOC sensor deployments at the Metro Station; and if necessary, taking time-integrated canister samples for subsequent chemical analysis to assess potential air toxics emissions and support stronger actions.

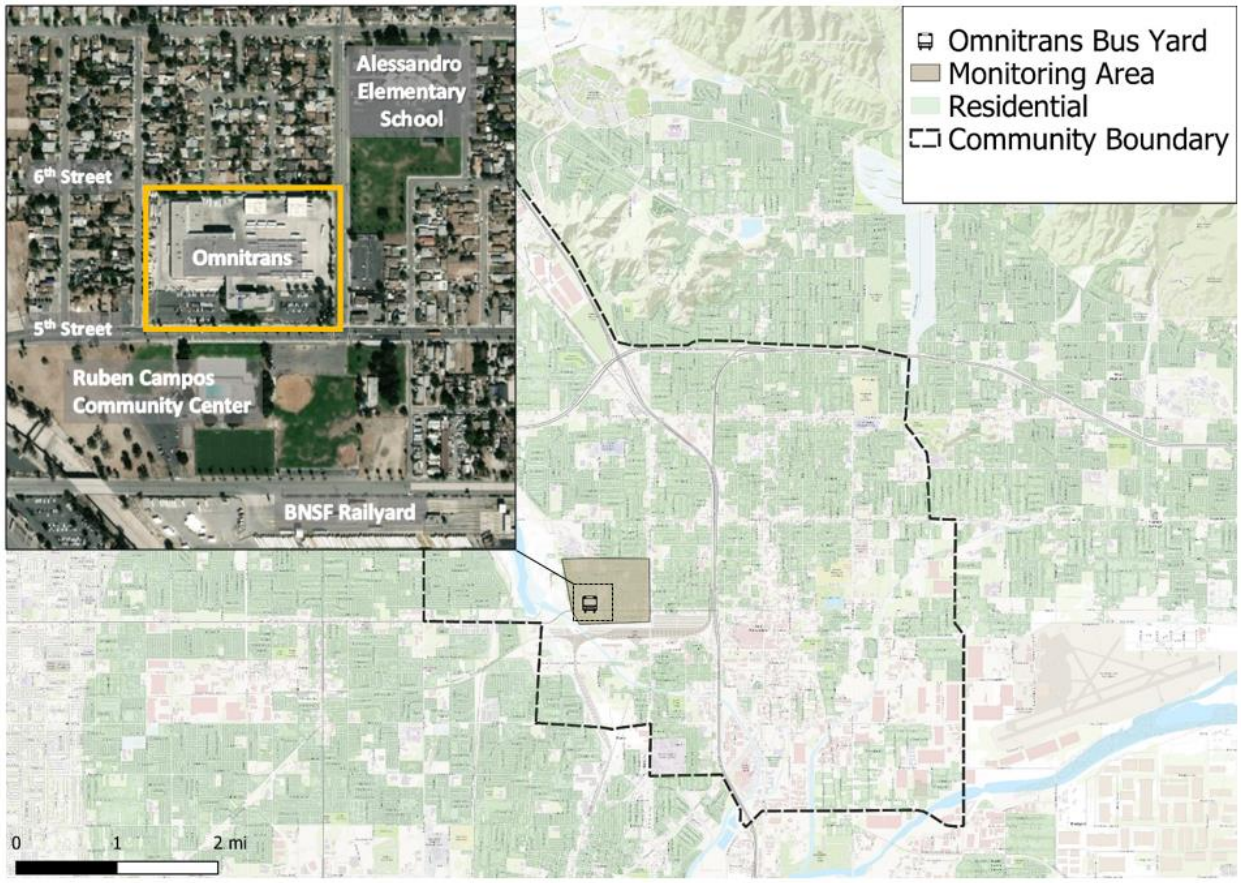

FIGURE 10 - LOCATION OF THE OMNITRANS FACILITY IN SAN BERNARDINO

Cement Manufacturing

Cement manufacturing has the potential to emit particulate matter (PM) containing hexavalent chromium (Cr6+) from operational activities and fugitive dust. Two major cement plants, a batch plant (Robertson Cements) and an aggregate facility (Vulcan Materials) are located within the SBM community boundary. The South Coast AQMD proposes to conduct fenceline air monitoring of Cr6+ and PM to identify activities that may cause high levels of air pollution and to measure levels of pollutants near these sources. If elevated levels of emissions are detected, South Coast AQMD staff will investigate further with other tools (e.g. on site testing or other types of data review). These investigative efforts will help determine potential

concentration gradients and thereby identify areas where sources of Cr6+ may exist and support other actions to reduce emissions.

Community air monitoring for PM can also be conducted to assess the extent of community impact and how the emissions contribute to the overall air pollution burden in this community. The proposed monitoring areas γ and δ were identified based on the proximity of these cement plants to nearby community and sensitive receptors, and considering the general wind patterns (Figure 11). These areas are also shown in more details in Figure 12.

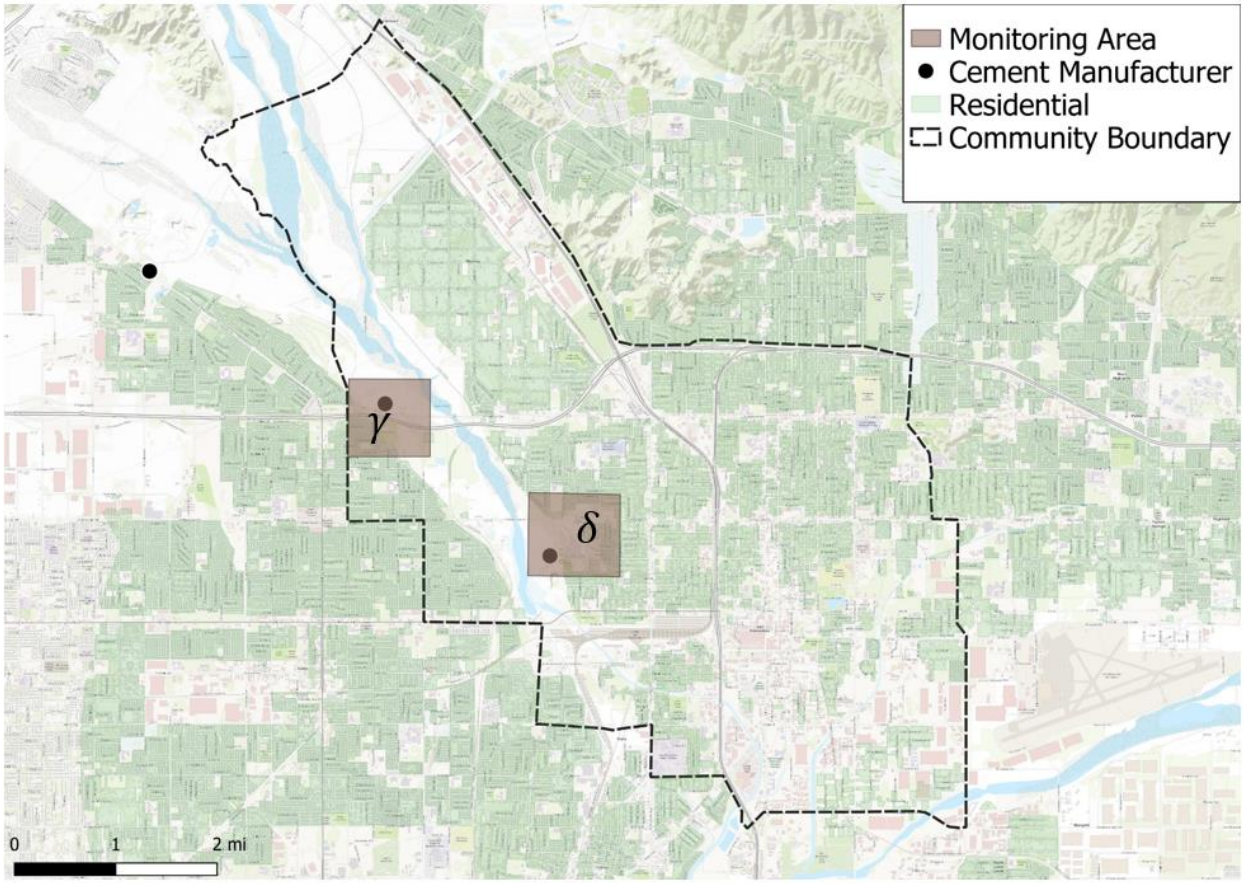

FIGURE 11 - LOCATIONS OF CEMENT PLANTS AND PROPOSED MONITORING AREAS γ AND δ

FIGURE 12 - PROPOSED MONITORING AREAS γ NEAR VULCAN FACILITY (LEFT) AND δ NEAR ROBERTSON'S FACILITY (RIGHT)