APPENDICES

AB 617 COMMUNITY AIR MONITORING PLAN (CAMP) FOR THE EAST LOS ANGELES / BOYLE HEIGHTS / WEST COMMERCE COMMUNITY

South Coast Air Quality Management District

April 2019

Version 1

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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 community, and availability will depend on the specific air monitoring needs and objectives at each community, which is to be determined after consulting with the CSCs.

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 ELABHWC 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 South Coast AQMD staff 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 and Railyards), Railyard (On-site Emissions), Warehouse (On-site Emissions), Metal Processing (including Valmont Coating), Toxic Waste Facilities (Including Household Waste Facilities), Rendering Facilities, Auto Body Shops, and Schools/Hospitals/Parks/Community (ranked in this order). Below is a more detailed description on each of these groups. A more detailed description on each of these groups is provided in the following sections. Since the ELABHWC 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 a robust strategy 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 ELABHWC where appropriate monitoring should commence, as explained in the "Air Monitoring Prioritization Based on Community Input" section of the CAMP.

Meteorology

The meteorological condition is an important aspect of the monitoring plan. Figure 1 shows the wind rose for the South Coast AQMD Central Los Angeles station located at 1630 North Main Street, Los Angeles CA 90012, which is just outside and northwest of the community boundary. In 2018, winds were variable with westerly/southwesterly and northwesterly components being more predominant. Wind directions can vary greatly throughout the day and impact all communities in proximity to emission sources.

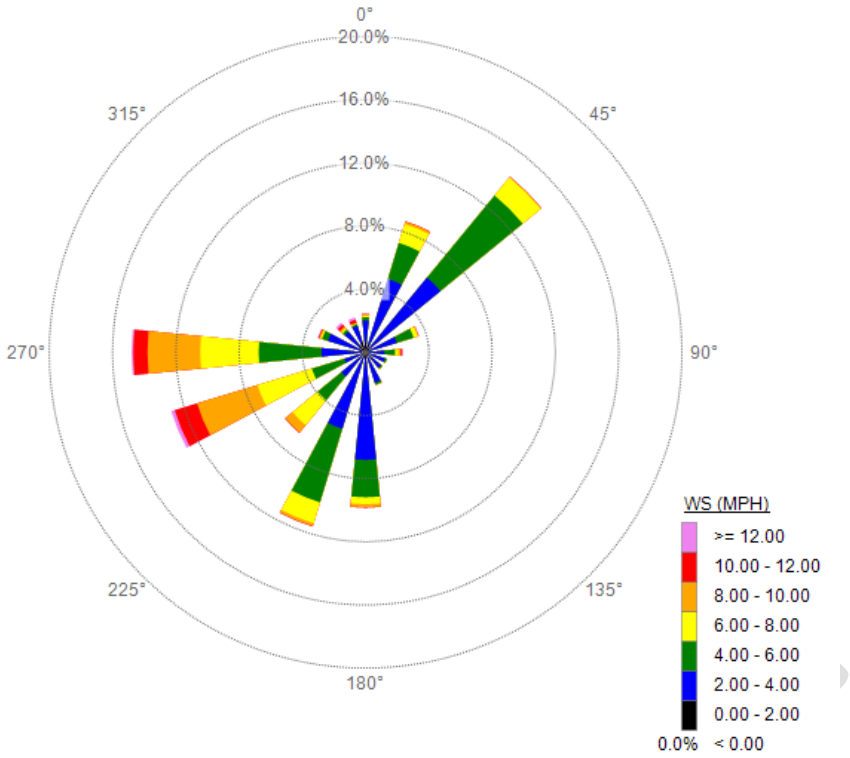

FIGURE 1 - WIND ROSE OBTAINED FROM DATA COLLECTED AT THE SOUTH COAST AQMD CENTRAL LOS ANGELES AIR MONITORING STATION IN 2018

Main Air Quality Concerns Identified by the CSC

Neighborhood Truck Traffic (Including from/to Warehouses and Railyards)

The ELABHWC 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, network of freeways, railyards, and the associated goods movement. Truck idling and traffic including traffic related to warehouses and railyards were considered the highest priority air quality concern by CSC members in ELABHWC. The CSC also identified idling and moving trucks operated on freeways, intersections and major roadways, and their impact on local residents as a major air quality concern in ELABHWC. This section discusses the monitoring approach for the truck traffic on roadways and around warehouses and railyards. The monitoring approach for on-site truck traffic and idling at the warehouses is discussed later in this document.

"Traffic density" data from CalEnviroScreen 3.0 was used to screen for areas with the highest traffic impacts (Figure 2). Based on this information, two major areas with the highest traffic density 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 3.0 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 and public members 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 analysis (Figure 3). Although this information gathering is meant to identify high priority areas where monitoring will begin, air quality measurements will extend to other areas in ELABHWC. This is because this community potentially is disproportionally impacted by diesel emissions from truck traffic related to goods movement around warehouses and industrial facilities.

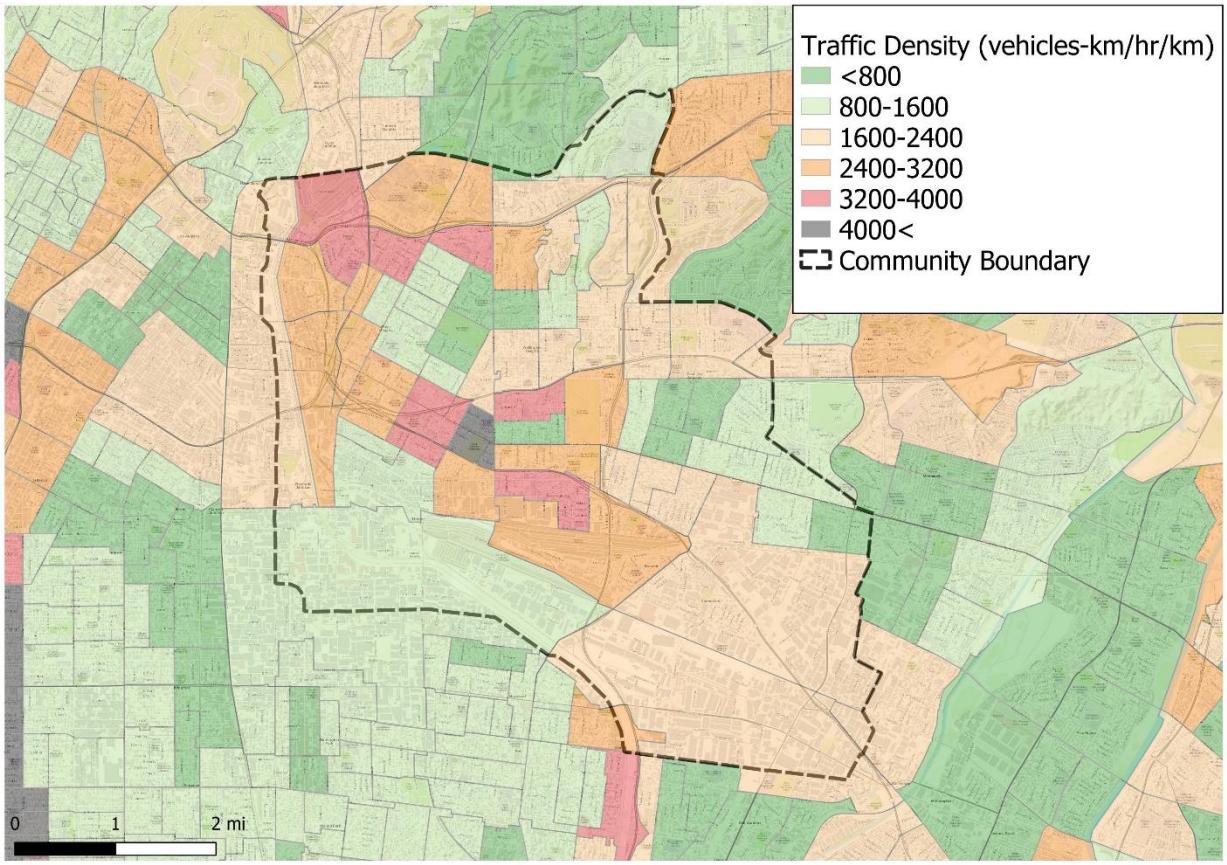

FIGURE 2 - TRAFFIC DENSITY BY CALENVIROSCREEN 3

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.

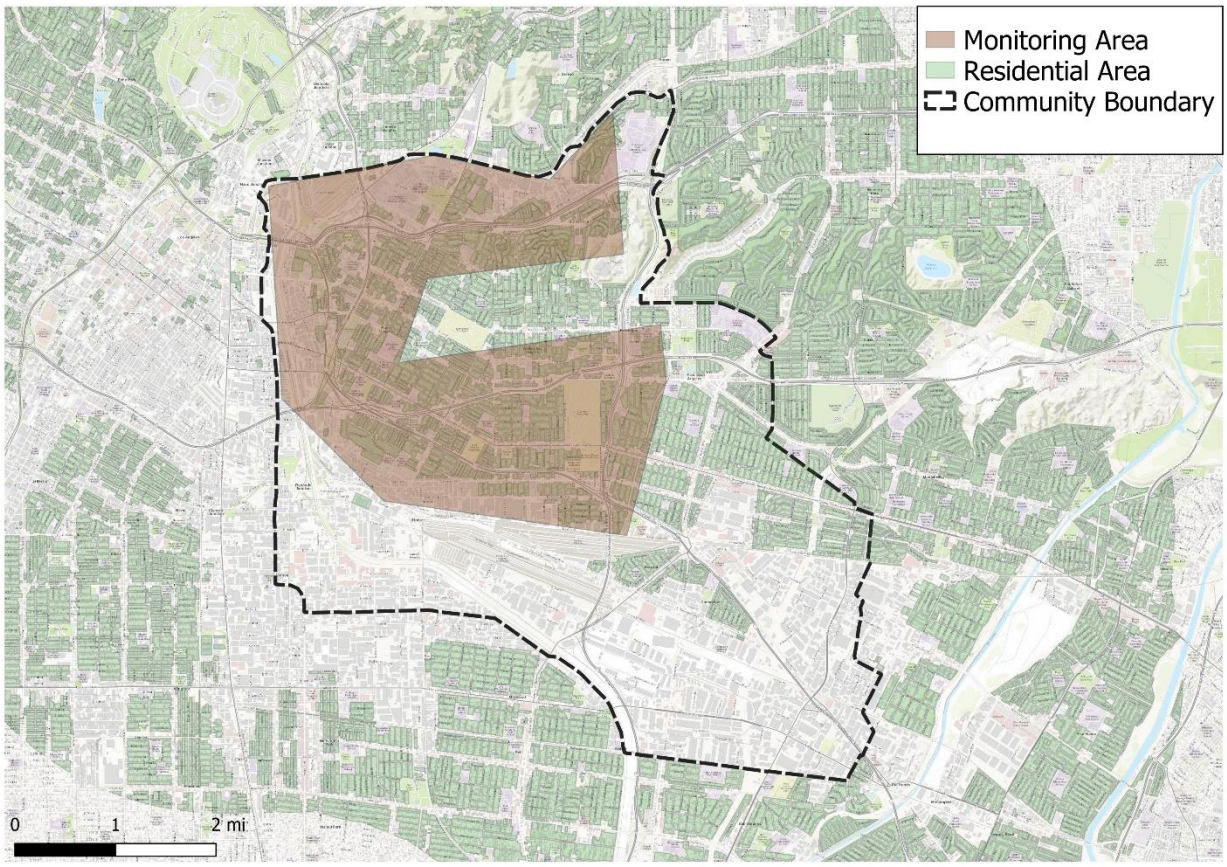

FIGURE 3 - PROPOSED MONITORING AREAS BASED ON DATA RELATED TO TRAFFIC DENSITY AND THE DISTANCE TO THE RECEPTORS

The monitoring strategy to study and characterize this air quality priority 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. Air pollutant concentrations are generally expected to be higher at near-road locations compared to locations 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 stations in ELABHWC. South Coast AQMD staff will also consider adding traffic counters at specific near road locations identified by the CSC to better characterize traffic patterns and study the potential impact of truck traffic emissions on nearby communities. 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.

Railyards

The CSC identified on-site emissions from railyards 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, cargo handling equipment, terminal operations and on-road vehicles, and heavy-duty diesel trucks. In this case, the major pollutants of concern are diesel PM and BC, Volatile Organic Compounds (VOCs) and other air toxics including metals. There are five railyards in the ELABHWC community (Figure 4-7): Union Pacific Railroad Los Angeles Transportation Center Railyard, Union Pacific Commerce Railyard, BNSF Hobart Railyard, BNSF Commerce Eastern Railyard, and BNSF Sheila Mechanical railyard. While railyards were identified as a high priority air quality concern by the CSC, some of the emissions related to railyards can occur due to train emissions along the railroads and other related activities at the railyards. Therefore, the proposed monitoring strategies also take into consideration all the railways in this community.

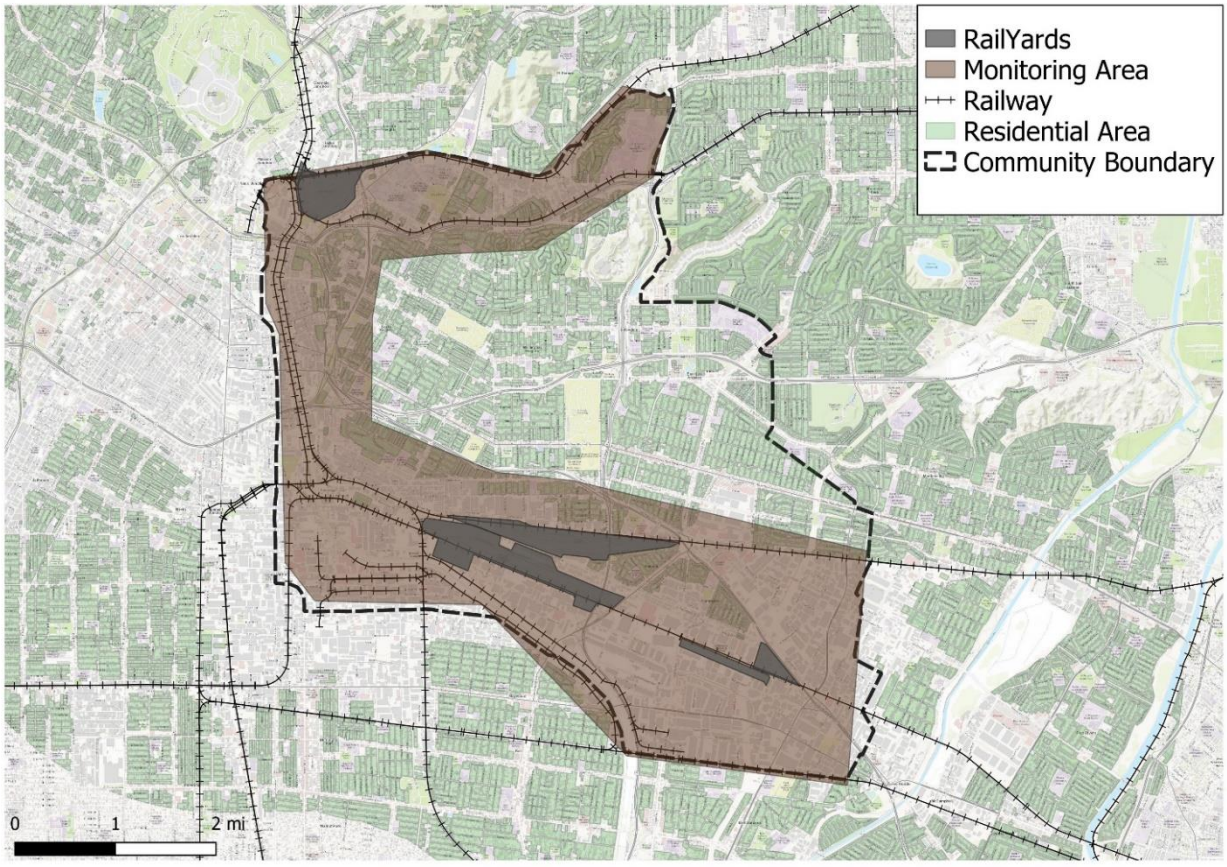

FIGURE 4 - RAILYARDS IN ELABHWC AND THEIR SURROUNDING AREA

Air monitoring concerning railyards 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 look at activities that may have the potential to increase levels of air pollution, 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.

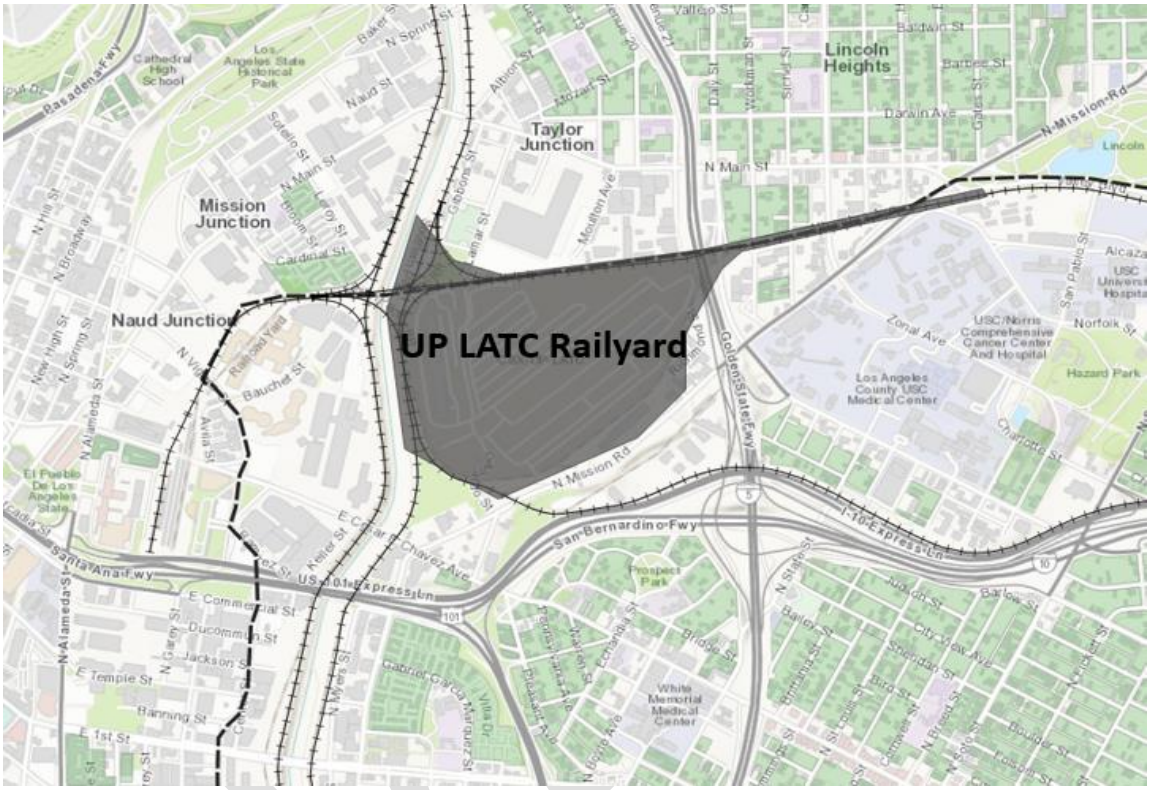

FIGURE 5 - UNION PACIFIC RAILROAD LOS ANGELES TRANSPORTATION CENTER RAILYARD

The shaded areas in Figure 4 are the highest priority considered for initial monitoring purposes based on proximity of railways and railyards to residential areas and sensitive receptors, and considering general wind patterns. These areas will be prioritized for the purposes of monitoring, although air quality measurements will extend to other areas in the ELABHWC community. The strategy to better characterize this particular air quality concern will include fenceline monitoring at the railyards to identify activities that may cause increased levels of air pollution, and mobile and/or fixed monitoring near transportation corridors as shown in Figures 5 to 7. Mobile measurements will extend into the community to assess how railyards and railways 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.

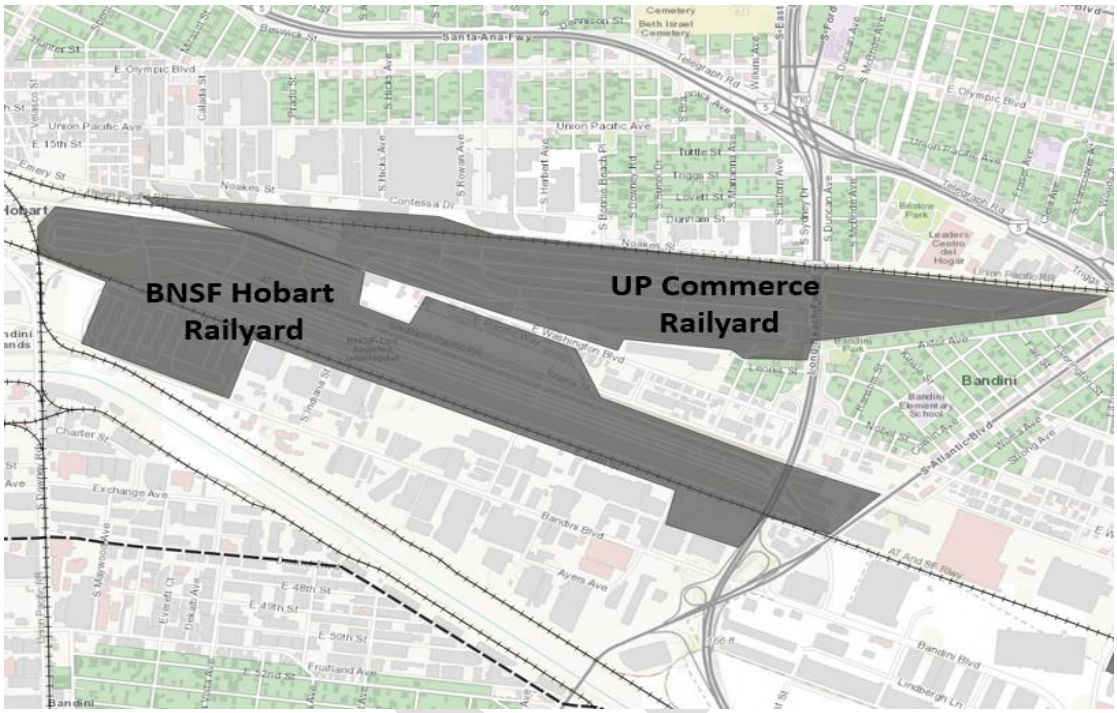

FIGURE 6 - UNION PACIFIC COMMERCE RAILYARD AND BNSF HOBART RAILYARD

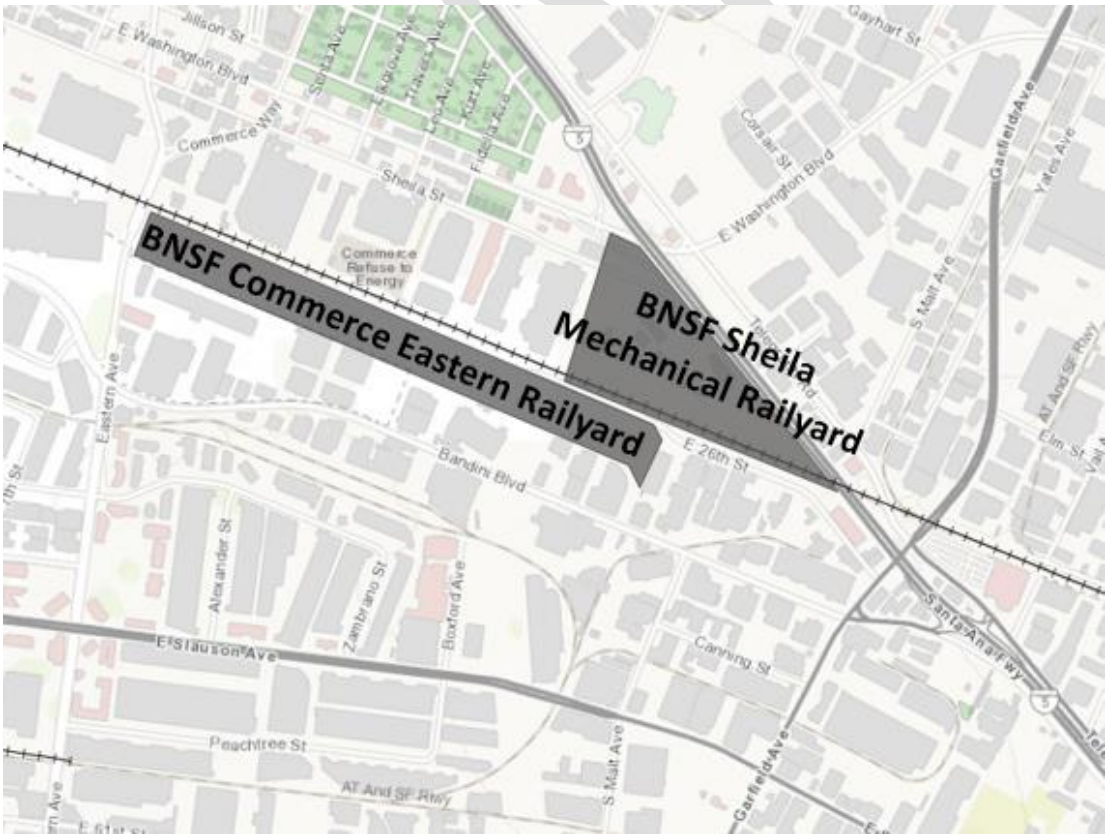

FIGURE 7 - BNSF COMMERCE EASTERN RAILYARD AND BNSF SHEILA MECHANICAL RAILYARD

Warehousing

Warehousing is one of the components of the goods movement chain, and a growing demand for warehousing and related activities is projected for the next few years. Significant growth has been projected for warehousing as one of the critical components of the goods movement chain, especially in this community. As the warehousing industry goes through a rapid growth, majority of the ocean freight containers arriving at the ports of Los Angeles and Long Beach are transported through communities in Los Angeles to clusters of warehouse distribution centers and railyards before distribution to the rest of the country. This expansion potentially may have air quality impacts to the ELABHWC community. The ELABHWC community is one of the major distribution hubs in the Basin with multiple railyards and a network of major freeways, as well as warehouse distribution centers. In addition, this 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 available in the warehouse database provided by the Southern California Association of Governments (SCAG), which refers to 2012 information. Therefore the rapid development of new warehouses that has occurred in the past few years has not been taken into account in this analysis (Figure 8)[1]. South Coast AQMD staff will conduct comprehensive surveys of the ELABHWC area and will interview CSC and community members, and individual stakeholders to gather additional input and information.

[1] Land-Use for 2012 from SCAG: http://www.scag.ca.gov/Pages/default.aspx

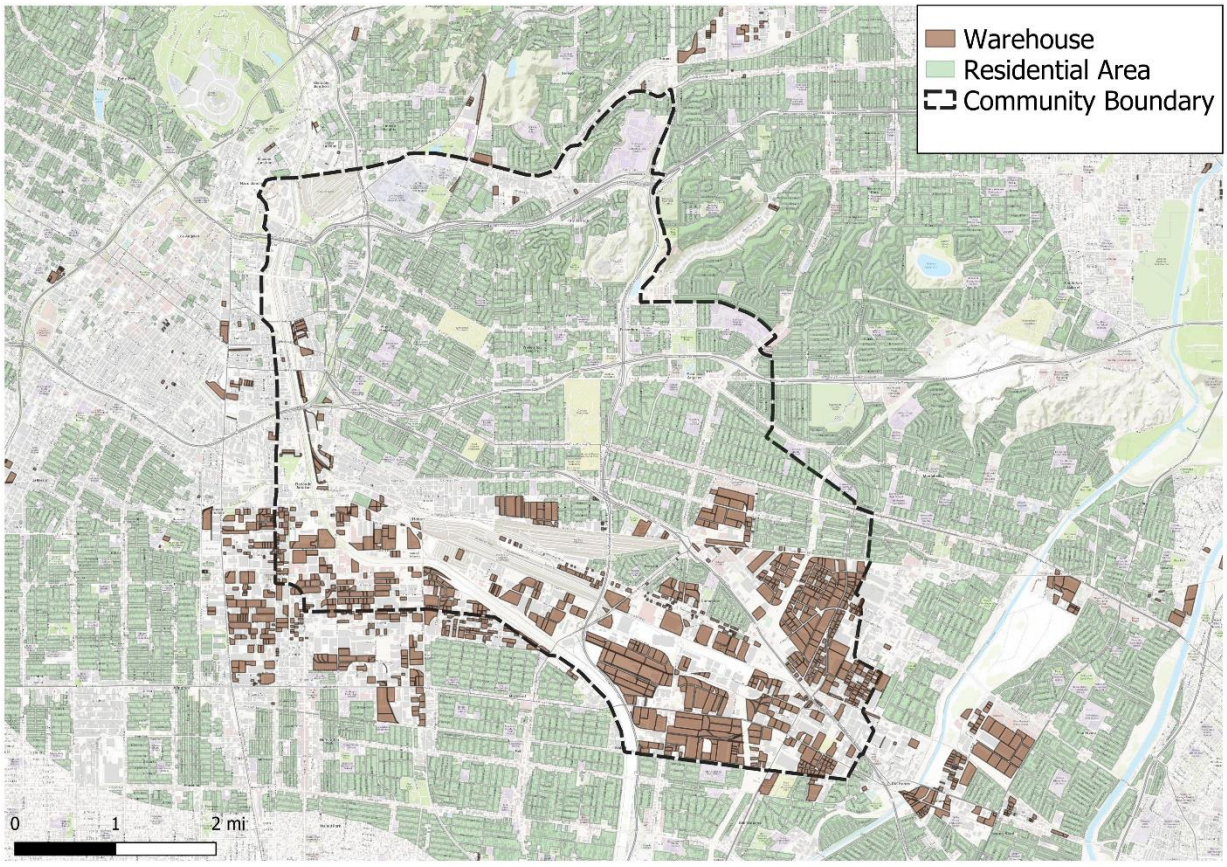

FIGURE 8 - LOCATION OF WAREHOUSE DISTRIBUTION CENTERS BASED ON DATA PROVIDED BY SCAG

The first step to properly characterize this air quality concern is to prepare a comprehensive map of the warehouses located within the ELABHWC 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 near the identified warehouses and in nearby residential areas to determine pollution gradients, identify potential hot spots, and assess the effects of warehouse activities on the surrounding neighborhoods. These type of measurements could also be used to help determine the effectiveness of some of the potential mitigation measures that will be developed as part of the Community Emissions Reduction Plan (CERP).

Metal Processing

The main concern about these facilities are the fugitive emissions that are not controlled through air pollution controls and can emit into the ambient air or accumulate on surfaces in and around the facility. The fugitive emissions that deposit on surfaces can be re-entrained from foot traffic, vehicular traffic, wind, or other activities. Impact of fugitive emissions to the surrounding areas is intermittent and depend on variable processes such as wind speed and direction. For metals processing facilities, the major

pollutants of concern are particulate emissions (dust), especially dust containing toxic metals such as lead, arsenic, hexavalent chromium (Cr6+), and others.

The first step in addressing this community concern is to conduct mobile measurements around the identified facilities (including Valmont Coatings) and surrounding impacted communities to determine pollution gradients, identify hot spots, and assess the potential impact of emissions from metal processing facilities on the air quality of the nearby residential neighborhoods. If potential sources are identified, stationary measurements will be conducted near the identified sources to better characterize their emissions. For that purpose, ambient levels of PM mass and metals concentrations will be measured with high time resolution. Meteorological parameters (e.g., wind speed and direction) will be measured concurrently to help in locating the source of emissions. Findings from these monitoring efforts will provide information to support actions consistent with the CERP. Note that at this time, staff is not aware of a monitoring technique that is capable of providing ambient Cr6+ levels through mobile measurements, appropriate for these purposes. However, for metal processing facilities that have been identified by the CSC as potential sources of Cr6+, fixed monitoring (through the collection of integrated samples and subsequent chemical analysis) will be utilized. Moreover, if well-known sources of air pollution are identified as high priorities for air monitoring by the CSC, the nearby location(s) will be surveyed to check the possibility of doing fixed monitoring without conducting preliminary mobile measurements prior.

The South Coast AQMD staff is in the process of developing Proposed Rule 1480 (PR 1480) – Air Toxic Metals Monitoring. The proposed rule would set-forth requirements for ambient air monitoring of toxic emissions. The findings from AB 617 monitoring efforts related to the metal processing facilities may provide information for PR 1480 designation. As mentioned in the CAMP, there are three permanent air monitoring sites operated by South Coast AQMD staff around the closed Exide Technologies facility site that will continue daily measurements of lead and arsenic.

Toxic Waste Facilities (Including Household Waste Collection Facilities)

The CSC identified at least three individual facilities concerning toxic waste transfer and handling. Strong and distinctive odors are the main concerns raised by the CSC about these facilities. The South Coast AQMD responds to these complaints by sending inspectors to confirm them by sense of smell, who then trace the odor to the operation of a unique source (excluding other potential sources via upwind/downwind surveillance) before enforcement action can be taken against the verified source. Inspectors may also conduct routine surveillance activities to identify sources of alleged odors. If a significant number of people are affected and the odor is verified, South Coast AQMD inspectors may issue a Notice of Violation (NOV) against the inspected facility for creating a public nuisance, in violation of South Coast AQMD Rule 402 and California Health and Safety Code Section 41700. Odors may be produced from an associated process or materials at the facility that may be a source of regulated air contaminants. The AB 617 monitoring program will support these enforcement actions, as needed and appropriate, by deploying highly sensitive continuous monitors that can measure certain pollutants in part-per-trillion (ppt) concentrations. To address this air quality concern, the South Coast AQMD staff will conduct mobile monitoring of toxics air contaminants, PM and VOC around the identified facilities (upwind and downwind) to map potential emission hotspots and pinpoint potential emission sources. The mobile monitoring will be conducted within the community to assess how these emissions impact the air quality and quality of life in the nearby community. Fenceline monitoring can be also conducted to identify

specific activities that cause the odor events and/or increased levels of toxic air contaminants, PM or VOC. It should be noted that most sources of odors are difficult to measure even with modern air monitoring techniques and, at times, the human nose can detect the presence of odiferous compounds better than air measurement equipment.

Rendering Facilities

The main concerns raised by the CSC about rendering facilities in ELABHWC are frequent strong and distinctive odors from their operations. In general, odors are mainly comprised of VOCs, some of which are known as air toxics. To address this community concern mobile monitoring of VOCs will be conducted around the identified rendering facilities. The mobile platform which is equipped with highly sensitive Proton Transfer Reaction – Mass Spectrometer (PTR-MS) (refer to mobile platform #3 in the CAMP) is capable of simultaneous real-time monitoring of hundreds of VOCs with high sensitivity to very low concentration (limit of detection (LOD) < 1 ppt). Concurrent measurements of VOCs and wind speed/direction while driving around target facilities will enable locating the source(s) of emissions. Community monitoring will be conducted to assess the extent to which emissions from the identified rendering facilities impact the air quality of the nearby community. As stated previously, most sources of odors are difficult to measure even with modern air monitoring techniques and, at times, the human nose can detect the presence of odiferous compounds better than air measurement equipment.

Auto Body Shops

The CSC has identified emissions from a number of auto body shops along certain corridors and main streets as an air quality priority. Automotive refinishing includes the use of paints or coatings that may emit toxic air contaminants, and auto body paint and repair shops can be significant sources of lead, odors, and VOCs. Moreover, sanding and grinding operations at auto body shops can result in emissions of metal compounds, including chromium and nickel, in the form of fine dust. The dust containing metal compounds can accumulate over time and re-suspend as a result of human activity and wind, leading to fugitive emissions of toxic metals. The air monitoring strategy to address this air quality concern will include mobile monitoring near and around auto body shops to determine hotspots and potential high emitters that contribute to increased levels of total PM mass, metals, and VOCs. While the initial focus will be on the auto body shops identified by the CSC, South Coast AQMD staff will extend the monitoring efforts around other auto body shops within the community to investigate the overall impact of auto body shop emissions in ELABHWC community. Fenceline monitoring of PM (including metals) and VOCs at the high emitting auto body shops can be conducted to identify activities that may cause high levels of air pollution and to look at the levels of pollutants of interest near the sources. The strategy will also involve community air monitoring to assess the extent of community impact and how the emissions from auto body shops contribute to the overall air pollution burden in this community.

Schools/Hospitals/Parks/Community

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 9.

Monitoring activities and strategies to better characterize potential impacts on sensitive receptors in the ELABHWC 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 select locations with well-defined air pollution sources that have an impact on the community.

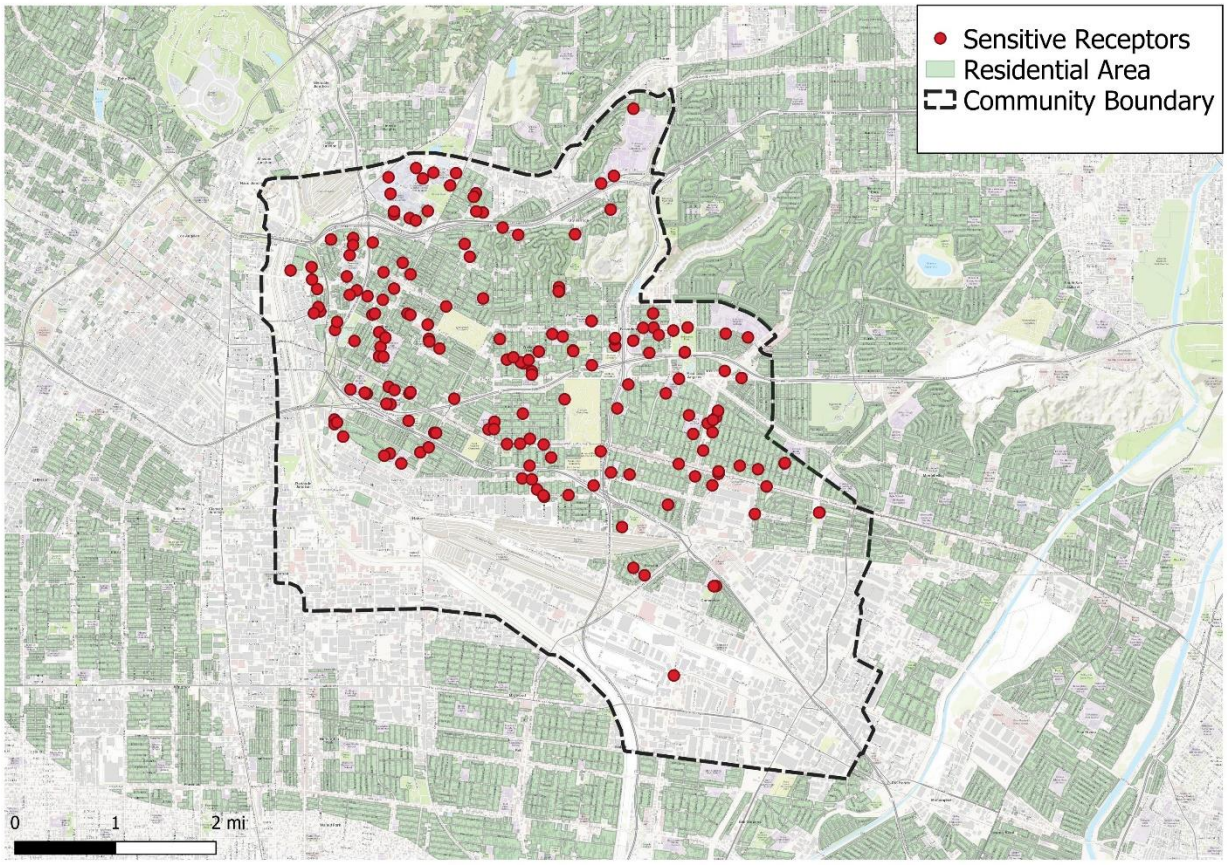

FIGURE 9 - LOCATION OF SCHOOLS, MEDICAL CENTERS, CHILD CARE FACILITIES