



South Coast
AQMD

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ANNUAL AIR QUALITY MONITORING NETWORK PLAN

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INTRODUCTION

An annual review of the Air Quality Monitoring Network is required by Federal Regulations as a means to identify and report needs for additions, relocations, or terminations of monitoring sites or instrumentation. This report describes the network of ambient air quality monitors in the jurisdiction of and operated by the South Coast Air Quality Management District (SCAQMD). It includes a review of actions taken during the 2016-2017 fiscal year and plans for action in the year ahead. This plan addresses the requirement for an annual network plan as listed in Title 40, Part 58, Section 10 of the Code of Federal Regulations (40 CFR § 58.10). Regulations require the report be submitted to the U.S. Environmental Protection Agency (EPA) by July 1 of each year after a 30 day public comment period. All monitors meet the requirement of appendices A, B, C, D, and E as required in 40 CFR § 58.10(a)(1) where applicable.

The SCAQMD staff, along with the California Air Resources Board (CARB), conducted an extensive review of the air monitoring sites in the South Coast Air Basin (SCAB) in late 1980. During the review, State and Local Air Monitoring Stations (SLAMS) designations, site type, and spatial scales of representativeness were assigned to the criteria pollutants monitored at each site. Since that time, the EPA Region IX and CARB staff visited selected sites to confirm compliance with applicable siting criteria and related requirements. The most recent site visits occurred in 2013 to conduct a comprehensive Technical System Audit (TSA) of the ambient air monitoring network. Each year, SCAQMD staff conducts an annual review of its air monitoring network and submits it to the EPA. The review process focuses on current and future network air monitoring strategies and network changes are made in consultation with the EPA and CARB. When relocation of monitoring sites is required, site reports are updated in the EPA's Air Quality System (AQS) to document compliance with established siting criteria for the new locations.

Public Comments

Pursuant to Federal regulations, a draft plan was made available for public inspection from May 24 through June 24, 2017 for a comment period 30 days. No comments were received during the period. Hard copies of the final document are available June 27, 2017 at the SCAQMD's Public Information Desk in Diamond Bar, CA. The document is also available on the SCAQMD website as of June, 27, 2017 in the drop down menu under the "Library", "Clean Air Plans" and "Air Monitoring Network Plan." (<http://www.aqmd.gov/home/library/clean-air-plans/monitoring-network-plan>). The final document is available to the EPA June 27, 2017 and a hardcopy will be provided.

Network Design

The SCAQMD operates 38 permanent monitoring stations and 5 single-pollutant source impact Lead (Pb) air monitoring sites in the SCAB and a portion of the Salton Sea Air Basin in Coachella Valley. This area includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The newest permanent sites were added as part of the near road monitoring network at Ontario Etiwanda and Route 60; Long Beach Route 710 and Anaheim Route 5. The newest source impact Pb sites were added in January 2010 as required by EPA regulation. Table 1 provides a list of monitoring locations, the EPA AQS site codes, and the pollutants measured at each site. Table 2 provides the spatial scale and the site type for each monitor at all sites.

Table 3 describes the monitoring purpose for the monitors at each site. Table 4 describes the site type, spatial scale and monitoring purpose for continuous particulate analyzers at each site. A requirement of the annual network plan, the *monitoring purpose* is the reason why a certain pollutant is being measured at a certain site.

A list and description of monitoring purposes are provided below and portions are adapted from the CARB annual network plan for 2007.

Background Level monitoring is used to determine general background levels of air pollutants as they enter the SCAB.

High Concentration monitoring is conducted at sites to determine the highest concentration of an air pollutant in an area within the monitoring network. A monitoring network may have multiple high concentration sites (i.e., due to varying meteorology year to year).

Pollutant Transport is the movement of pollutant between air basins or areas within an air basin. Transport monitoring is used to assess and mitigate upwind areas when transported pollutant affects neighboring downwind areas. Also, transport monitoring is used to determine the extent of regional pollutant transport among populated areas and to rural areas.

Population Exposure monitoring is conducted to represent the air pollutant concentrations that a populated area is exposed to.

Representative Concentration monitoring is conducted to represent the air quality concentrations for a pollutant expected to be similar throughout a geographical area. These sites do not necessarily indicate the highest concentrations in the area for a particular pollutant.

Source Impact monitoring is used to determine the impact of significant sources or source categories of air quality emissions on ambient air quality. The air pollutant sources may be stationary or mobile.

Trend Analysis monitoring is useful for comparing and analyzing air pollution concentrations over time. Usually, trend analyses can be used to assess the progress in improving air quality for an area over a period of many years.

Site Comparison monitoring is used to assess the effect on measured pollutant levels of moving a monitoring location a short distance (usually less than two miles). Some monitoring stations become no longer usable due to development, change of lease terms, or eviction. In these cases, attempts are made to conduct concurrent monitoring at the old and new site for a period of at least one year in order to compare pollutant concentrations.

Real Time Reporting/Modeling is used to provide data to EPA's AIRNOW system which reports conditions for air pollutants on a real time basis to the general public. Data is also used to provide accurate and timely air quality forecast guidance to residents of the SCAB.

Multiple purposes for measuring a pollutant at a particular site are possible. There is some overlap between site type and monitoring purposes as defined by EPA and given in Tables 2, 3, and 4.

TABLE 1. List of Monitoring Sites

	Location	AQS No.	Pollutants Monitored	Start Date
1	Anaheim	060590007	CO,NO2,O3,PM10,PM2.5	08/01
2	Anaheim Route 5 Near Road	060590008	CO, NO2	01/14
3	ATSF (Exide)	060371406	Pb	01/99
4	Azusa	060370002	CO,NO2,O3,PM10,PM2.5	01/57
5	Banning Airport	060650012	NO2,O3,PM10, PM2.5	04/97
6	Big Bear	060718001	PM2.5	02/99
7	Closet World (Quemetco)	060371404	Pb	10/08
8	Compton	060371302	CO,NO2,O3,Pb,PM2.5	01/04
9	Costa Mesa	060591003	CO,NO2,SO2,O3	11/89
10	Central San Bernardino Mountains	060710005	O3,PM10	10/73
11	Fontana	060712002	CO,NO2,SO2,O3,PM10,PM2.5,SO4	08/81
12	Glendora	060370016	CO,NO2,O3,PM2.5,PM10	08/80
13	Indio	060652002	O3,PM10,PM2.5	01/83
14	La Habra	060595001	CO,NO2,O3	08/60
15	Lake Elsinore	060659001	CO,NO2,O3,PM2.5,PM10	06/87
16	LAX Hastings	060375005	CO,NO2,O3,PM10,Pb,SO4	04/04
17	Long Beach (Hudson)	060374006	CO, NO2,SO2,O3,PM10	01/10
18	Long Beach Route 710 Near Road	060374008	NO2, PM2.5	01/15
19	Long Beach (North)	060374002	PM2.5	10/62
20	Long Beach (South)	060374004	PM10,Pb,PM2.5,SO4	06/03
21	Los Angeles (Main St.)	060371103	CO,NO2,SO2,O3,PM10,Pb,PM2.5,SO4	09/79
22	Mecca (Saul Martinez)	060652005	PM10	01/11
23	Mira Loma (Van Buren)	060658005	CO,NO2,O3,PM10,PM2.5	11/05
24	Mission Viejo	060592022	CO,O3,PM10,PM2.5	06/99
25	Norco	060650003	PM10	12/80
26	Ontario Etiwanda Near Road	060710026	CO, NO2	06/14
27	Ontario Route 60 Near Road	060710027	NO2, PM2.5	01/15
28	Palm Springs	060655001	CO,NO2,O3,PM10,PM2.5	04/71

TABLE 1. (cont) List of Monitoring Sites

	Location	AQS No.	Pollutants Monitored	Start Date
29	Pasadena	060372005	CO, NO2, O3, PM2.5	04/82
30	Perris	060656001	O3,PM10	05/73
31	Pico Rivera #2	060371602	CO,NO2,O3,Pb,PM2.5,SO4,PM10	09/05
32	Pomona	060371701	CO,NO2,O3	06/65
33	Redlands	060714003	O3,PM10	09/86
34	Rehrig (Exide)	060371405	Pb	11/07
35	Reseda	060371201	CO,NO2,O3,PM2.5	03/65
36	Rubidoux	060658001	CO,NO2,SO2,O3,PM10,Pb,PM2.5,SO4	09/72
37	San Bernardino	060719004	CO,NO2,O3,PM10,Pb,PM2.5	05/86
38	Santa Clarita	060376012	CO,NO2,O3,PM10,PM2.5	05/01
39	SA Recycling	060711407	Pb	06/12
40	Temecula	060650016	O3, PM2.5	06/10
41	Uddelholm (Trojan Battery)	060371403	Pb	11/92
42	Upland	060711004	CO,NO2,O3,Pb,PM2.5,PM10,SO4	03/73
43	West Los Angeles	060370113	CO,NO2,O3	05/84

TABLE 2. FRM Criteria Pollutant Spatial Scales and Site Type

SPATIAL SCALE

MI – Microscale
 MS – Middle Scale
 NS – Neighborhood Scale
 US – Urban Scale

SITE TYPE

HC – Highest Concentration
 PE – Population Exposure
 IM – Source Oriented (Impact)
 BK – General Background

	Location	CO	NO2	SO2	O3	Manual PM10	Manual PM2.5	Pb
1	Anaheim	NS/PE	US/PE		NS/PE	NS/PE	NS/PE	
2	Anaheim Route 5 Near Road	MI/HC	MI/HC					
3	ATSF (Exide)							MI/IM
4	Azusa	NS/PE	US/PE		US/HC	NS/PE	NS/PE	
5	Banning Airport		NS/PE		NS/PE	NS/PE		
6	Big Bear						NS/PE	
7	Closet World (Quemetco)							MI/IM
8	Compton	MS/HC	MS/PE		NS/PE		NS/PE	NS/PE
9	Costa Mesa	NS/PE	NS/PE	NS/PE	NS/PE			
10	Crestline				NS/HC	NS/PE		
11	Fontana	NS/PE	US/PE	NS/PE	US/PE	NS/HC/PE	NS/PE	
12	Glendora	NS/PE	NS/PE		NS/HC			
13	Indio				NS/PE	NS/HC	NS/PE	
14	La Habra	NS/PE	US/PE		NS/PE			
15	Lake Elsinore	NS/PE	NS/PE		NS/PE			
16	LAX Hastings	MS/PE/BK	MS/PE/BK	NS/PE/BK	NS/PE/BK	NS/PE/BK		NS/PE/BK
17	Long Beach (Hudson)	NS/HC	NS/PE	NS/HC	NS/PE	NS/HC		
18	Long Beach (North)						NS/HC	
19	Long Beach Route 710 Near Road		MI/HC				MI/HC	
20	Los Angeles (Main St.)	NS/PE	NS/HC	NS/PE	NS/PE	NS/PE	NS/HC	NS/PE
21	Mecca (Saul Martinez)					NS/PE		
22	Mira Loma (Van Buren)	NS/PE	NS/PE		NS/PE	NS/HC	NS/HC	
23	Mission Viejo	NS/PE			NS/PE	NS/PE	NS/PE	
24	Norco					NS/PE		
25	Ontario Etiwanda Near Road	MI/HC	MI/HC					
26	Ontario Route 60 Near Road		MI/HC				MI/HC	
27	Palm Springs	NS/PE	NS/PE		NS/PE	NS/PE	NS/PE	
28	Pasadena	MS/PE	MS/HC		NS/PE		NS/PE	
29	Perris				NS/PE	NS/PE		
30	Pico Rivera #2	NS/PE	NS/HC		NS/PE		NS/PE	NS/PE
31	Pomona	MI/PE	MS/PE		MS/PE			
32	Redlands				NS/PE/HC	NS/PE		
33	Rehrig (Exide)							MI/IM
34	Reseda	NS/PE	US/PE		US/PE		NS/PE	
35	Rubidoux	NS/PE	US/PE	NS/PE	US/HC	NS/HC	NS/HC	NS/PE
36	San Bernardino	MS/PE	US/PE		NS/HC	NS/HC	NS/PE	NS/PE
37	Santa Clarita	NS/PE	NS/PE		US/HC	NS/PE		
38	South Long Beach					NS/HC	NS/HC	NS/HC
39	SA Recycling							HC/IM
40	Temecula				NS/HC			
41	Uddelholm (Trojan Battery)							MI/IM
42	Upland	NS/PE	NS/PE		NS/PE			
43	West Los Angeles	NS/PE	MS/HC		NS/PE			

TABLE 3. FRM Criteria Pollutant Monitoring Purposes

MONITORING PURPOSE

BK – Background	RC – Representative Concentration
HC – High Concentration	RM – Real-Time Reporting/Modeling
TP – Pollutant Transport	TR – Trend Analysis
EX – Population Exposure	CP – Site Comparisons
SO – Source Impact	CO - Collocated

#	Location	CO	NO2	SO2	O3	Manual PM10	Manual PM2.5	Pb
1	Anaheim	TR	TR/RC		TR	TR/RC	TR/EX	
2	Anaheim Route 5 Near Road	SO/HC	SO/HC					
3	ATSF (Exide)							SO
4	Azusa	TR	TR/RC		TR	TR	TR/EX	
5	Banning Airport		TP/RC		TP	TP		
6	Big Bear						EX/SO/TP	
7	Closet World (Quemetco)							SO
8	Compton	TR/HC	TR/RC		TR/RC		EX/RC	EX
9	Costa Mesa	RC	TR/RC	TR	RC			
10	Crestline				HC	TP/RC		
11	Fontana	RC	TP/RC	TR	RC	HC	EX/TP	
12	Glendora	RC	TR/RC		HC			
13	Indio				TP	HC/CO	TP/EX	
14	La Habra	RC	TR/RC		RC			
15	Lake Elsinore	TP/RC	TP/RC		TP/RC			
16	LAX Hastings	BK	BK	BK	BK	BK		BK
17	Long Beach (Hudson)	TR	TR/RC	TR/HC	TR	TR/RC/HC		
18	Long Beach (North)						EX/HC	
19	Long Beach Route 710 Near Road		SO/HC				SO/HC	
20	Los Angeles (Main St.)	SO/RC	SO/HC	TR	TR/RC	TR/RC/CO	EX/HC/CO	EX/CO
21	Mecca (Saul Martinez)					EX/RC		
22	Mira Loma (Van Buren)	TR/RC	TR/RC		TR/HC	HC	EX/HC/CO	
23	Mission Viejo	RC			TR/RC	TR/RC	EX/RC	
24	Norco					TR/RC		
25	Ontario Etiwanda Near Road	SO/HC	SO/HC					
26	Ontario Route 60 Near Road		SO/HC				SO/HC	
27	Palm Springs	TP/RC	TP/RC		TP	TP/HC	EX/TP	
28	Pasadena	TR/RC	TR/HC		TR/RC		EX/RC	
29	Perris				TP	TR		
30	Pico Rivera #2	RC	HC		EX		EX/RC	EX
31	Pomona	RC	RC		EX			
32	Redlands				TP/RC	TP/RC		
33	Rehrig (Exide)							SO/CO
34	Reseda	RC	TR/RC		EX		EX/RC	
35	Rubidoux	TR/RC	TR/RC	TR	TR/HC	TR/HC/CO	EX/TR/HC/CO	EX
36	San Bernardino	TR/RC	TP/RC		TR/HC	TR/HC	EX/TR	EX
37	Santa Clarita	RC	TP/RC		TP/HC	RC	EX/RC	
38	South Long Beach					HC	EX/SO	EX
39	SA RECYCLING							SO/HC
40	Uddelholm (Trojan Battery)							SO
41	Temecula				TR/HC			
42	Upland	RC	TR/RC		TR/RC			
43	West Los Angeles	RC	TR/HC		RC			

TABLE 4. Continuous PM₁₀/PM_{2.5} Monitoring Purpose, Site Type and Spatial Scales

<u>SITE TYPE</u>	<u>SPATIAL SCALE</u>	<u>INSTRUMENT TYPE</u>
HC – High Concentration	MI – Microscale	TEOM
PE – Population Exposure	NS – Neighborhood Scale	BAM (NON-FEM)
BK - Background		BAM (FEM)

<u>MONITORING PURPOSE</u>	
SO – Source Impact	RM – Real-Time Reporting/Modeling
TP – Pollutant Transport	SPM – Special Purpose Monitoring
TR – Trend Analysis	CO - Collocated

Location	Continuous PM ₁₀				Continuous PM _{2.5}				PM ₁₀ – 2.5
	Type	Purpose	Site Type	Scale	Type	Purpose	Site Type	Scale	Operational
Anaheim	BAM/FEM	RM/TR	PE	NS	BAM/FEM	RM/TR	PE	NS	
Banning Airport					BAM/NON-FEM	RM	PE	NS	
Crestline					BAM/NON-FEM	RM	PE	NS	
Glendora	BAM/FEM	RM	PE	NS	BAM/NON-FEM	RM	PE	NS	
Indio	TEOM/FEM	RM	HC	NS					
Lake Elsinore	TEOM/FEM	RM	PE	NS	BAM/NON-FEM	RM	PE	NS	
Long Beach Route 710 Near Road					BAM/FEM	RM/SO/SPM			
Los Angeles (Main St.)	BAM/FEM	RM/TR	PE	NS	BAM/FEM	RM	HC	NS	Yes
Mecca (Saul Martinez)	TEOM/FEM	RM/CO	PE	NS					
Mira Loma (Van Buren)	BAM/FEM	RM	HC	NS	BAM/FEM	RM	HC	NS	
Ontario Route 60 Near Road					BAM/FEM	RM/SO/SPM			
Palm Springs	TEOM/FEM	RM/TP	HC	NS					
Reseda					BAM/NON-FEM	RM	PE	NS	
Rubidoux	TEOM/FEM	RM/TR	HC	NS	BAM/FEM & BAM/FEM	RM/TR/CO	HC	NS	Yes
San Bernardino	TEOM/FEM	RM/TR	HC	NS					
Santa Clarita					BAM/NON-FEM	RM	PE	NS	
South Long Beach					BAM/FEM	RM/SO	PE	NS	
Temecula					BAM/NON-FEM	RM	PE	NS	
Upland	BAM/FEM	RM	PE	NS	BAM/NON-FEM	RM	PE	NS	

A brief description of the criteria pollutant and program monitoring networks are provided below:

OZONE (O3)

The SCAQMD operates 29 sites where O3 measurements are made as part of the Air Monitoring Network. O3 sites are spread throughout the SCAB with highest concentrations measured inland. Figure 1 in Appendix A shows the spatial distribution of these sites and Table 9 shows the minimum monitoring requirements.

PM10

Size-selective inlet manual high volume samplers are operated at 20 sites to meet the requirements for PM10 Federal Reference Method (FRM) sampling. The PM10 monitoring network contains five sites within 25% of the Federal NAAQS as shown in the 2016 Air Quality Data Table (<http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year>), Figure 9. The Indio, Mira Loma and Rubidoux sites are designated PM10 collocated and shown in Tables 5, 13 and 21. All PM10 FRM monitors operate on a one day in six day schedule, with the exception of Indio, Mira Loma and Rubidoux which operate on one day in three day schedule. The Azusa and Mecca sites are shown as expected maximum value sites by MSA in Tables 13. Consequently, as expected maximum concentration sites, Azusa and Mecca meet the minimum sampling schedule requirement shown in 40 CFR §58.12. The remaining sites meet or exceed the minimum 6 day sample schedule requirement as shown in Table 5.

PM10 continuous analyzers are operated at 11 sampling sites. These real-time devices are capable of making hourly particulate concentration measurements for real-time reporting. Table 4 describes the monitor type, site type, monitoring purpose, and spatial scale for continuous particulate analyzers. Figure 2 in Appendix A shows the spatial distribution of the sampling sites and Table 18 shows the minimum monitoring requirements. Real-time monitors, for the most part, are clustered in the high concentration areas, with three located in the Coachella Valley desert area where wind-blown crustal material has caused exceedances of the twenty-four hour standard during exceptional events. In downwind areas of the SCAB, a large fraction of particulate is formed in the atmosphere; PM10 typically reaches maximum levels in the SCAB during late summer through early winter months.

Where both 24 hour PM10 FRM samplers and PM10 FEM continuous analyzers are deployed together, they are sited as collocated for data comparison purposes where possible. FRM PM10 sampler remains the primary analyzer used for attainment purposes and continuous analyzers are designated as audit samplers unless the primary 24 hour FRM PM10 is offline then continuous FEM analyzer data can be substituted.

TABLE 5. Manual PM₁₀ FRM Monitoring Stations Assigned Site Numbers

	Location	Site Code	ARB No.	AQS No.	Start Date	Schedule
1	Anaheim	ANAH	30178	060590007	01/03/99	1-in-6
2	Azusa	AZUS	70060	060370002	01/04/99	1-in-6
3	Banning	BNAP	33164	060650012	04/01/97	1-in-6
4	Central San Bernardino Mountains	CRES	36181	060710005	10/01/73	1-in-6
5	Fontana	FONT	36197	060712002	01/03/99	1-in-6
6A	Indio “A”	INDI	33157	060652002	01/30/99	1-in-6
6B	Indio “B”	INDI	33157	060652002	01/30/99	1-in-3
6C	Indio “C” ¹	INDI	33157	060652002	01/30/99	1-in-6
7	Los Angeles (Hastings)	LAXH	70111	060375005	04/01/04	1-in-6
8	Long Beach (Hudson)	HDSN	70033	060374006	01/01/10	1-in-6
9	Mecca (Saul Martinez)	SLMZ	33033	060652005	01/01/11	1-in-6
10	Los Angeles (Main St.)	CELA	70087	060371103	01/03/99	1-in-6
11A	Mira Loma (Van Buren) “A”	MRLM	33165	060658005	11/09/05	1-in-6
11B	Mira Loma (Van Buren) “B”	MRLM	33165	060658005	03/08/12	1-in-3
11C	Mira Loma (Van Buren) “C” ¹	MRLM	33165	060658005	03/08/12	1-in-6
12	Mission Viejo	MSVJ	30002	060592022	06/01/99	1-in-6
13	Norco	NORC	33155	060650003	12/01/80	1-in-6
14	Palm Springs	PLSP	33137	060655001	12/26/99	1-in-6
15	Perris	PERI	33149	060656001	05/01/73	1-in-6
16	Redlands	RDLD	36204	060714003	09/01/86	1-in-6
17A	Rubidoux “A”	RIVR	33144	060658001	01/03/99	1-in-3
17B	Rubidoux “B” ¹	RIVR	33144	060658001	01/03/99	1-in-6
18	San Bernardino	SNBO	36203	060719004	01/03/99	1-in-6
19	Santa Clarita	SCLR	70090	060376012	05/01/01	1-in-6
20	South Long Beach	SLBH	70110	060374004	06/01/03	1-in-6

¹ – Run as collocated on 1-in-6 run day.

PM₁₀-2.5

PM₁₀-2.5 (PM Coarse) were required at NCore sites until the revision to 40 CFR Part 58 on March 28, 2016. PM Coarse is derived from the continuous BAM PM₁₀ and PM_{2.5} particulate monitors. SCAQMD continues to measure this optional parameter utilizing the continuous BAM monitors at the Los Angeles (Main) and Rubidoux air monitoring sites as shown in Table 4. The Purpose, Site Type and Scale are similar to the continuous PM₁₀ and PM_{2.5} instruments from which data is calculated.

NITROGEN DIOXIDE (NO₂)

The NO₂ network consists of 23 area wide, and 4 near road sites. These sites are located in areas of highest expected NO₂ concentrations.

The Near Road monitoring network consists of four sites which were implemented in January of 2014 and 2015. These sites were selected based upon criteria based upon the U.S.

EPA Near Road TAD, which were approved by U.S. EPA and were presented publically in a Near Road Workshop. In addition, U.S. EPA representatives visited the sites during the selection process and approved monitoring locations. The Near Road sites are adjacent to the most heavily traveled roadways identified in the basin where peak hourly NO₂ concentrations are expected to occur within the near-road environment. Site selection took into consideration satisfying siting criteria, site logistics (e.g., gaining access to property and safety), and population exposure for those who live, work, play, go to school, or commute within the near-roadway environment. The spatial distribution of NO₂ monitors is shown in Figure 3 in Appendix A and minimum monitoring requirements are shown in Table 14.

Additionally, the Regional Administrator identified 40 NO₂ sites nationwide with a primary focus on siting these monitors in locations to protect susceptible and vulnerable populations. The Regional Administrator in collaboration with SCAQMD identified the Los Angeles (Main), Long Beach (North) and San Bernardino sites from the existing area-wide monitoring network to meet this requirement (58.10[a][5]). On September 30, 2013, the continuous monitors including NO₂ were discontinued at Long Beach (North) due to termination of the lease by owner. SCAQMD, in consultation with U.S. EPA, designated Compton as a RA 40 site. SCAQMD is in the process of identifying a replacement monitoring location for Long Beach (North) in collaboration with Long Beach Department of Public Health and also considering potential consolidation with nearby sites. Review of 1992 through 2016 NO₂ data shows the State and Federal standards for NO₂ were not violated.

CARBON MONOXIDE (CO)

Area wide CO monitors measure concentrations at 23 ambient locations and 2 near road locations within the SCAQMD ambient air monitoring network. Figure 4 in Appendix A shows the spatial distribution of these sites. CO emissions, primarily from motor vehicles, show a pattern consistent with major freeway arteries. A review of data for 2016 shows State and Federal standards for CO were not exceeded.

SULFUR DIOXIDE (SO₂)

SO₂ monitors are located at 6 sites. Figure 5 in Appendix A shows the spatial distribution of the sites. Most SO₂ emissions come from Federal transportation sources such as marine vessels. The monitors are clustered mostly in the areas where these sources are located.

On June 22, 2010 EPA strengthened the SO₂ National Ambient Air Quality Standard (NAAQS). Network design requirements included new minimum requirements be determined by the Population Weighted Emissions Index (PWEI).

The PWEI shall be calculated by States for each CBSA they contain or share with another State or States for use in the implementation of or adjustment to the SO₂ monitoring network. The PWEI shall be calculated by multiplying the population of each CBSA, using the most current census data or estimates, and the total amount of SO₂ in tons per year emitted within the CBSA area, using an aggregate of the most recent county level emissions data available in the National Emissions Inventory (NEI) for each county in each CBSA. The resulting product shall be

divided by one million, providing a PWEI value, the units of which are million persons-tons per year. For any CBSA with a calculated PWEI value equal to or greater than 1,000,000, a minimum of three SO₂ monitors are required within that CBSA. For any CBSA with a calculated PWEI value equal to or greater than 100,000, but less than 1,000,000, a minimum of two SO₂ monitors are required within that CBSA and for any CBSA with a calculated PWEI value equal to or greater than 5,000, but less than 100,000, a minimum of one SO₂ monitor is required within that CBSA.

TABLE 6. PWEI Calculation and Minimum Required SO₂

CBSA	Population Estimate ¹	NEI SO ₂ Emissions ²	PWEI Value	Minimum Required SO ₂
31080	13,340,068	6,049.52	80,701	1
40140	4,489,159	1,289.67	5,790	1

¹ 2015 Census estimate available at <https://www.census.gov/data/datasets/2015/demo/popest/total-metro-and-micro-statistical-areas.html>

² 2014 NEI Data most recent available at <https://www.epa.gov/air-emissions-inventories/national-emissions-inventory>

SCAQMD exceeds the minimum requirement for SO₂ monitors; the Federal standard has not been exceeded for nearly 35 years.

PARTICULATE LEAD

Total Suspected Particulate (TSP) Pb measurements are collected at 13 sites as part of the particulate network; 5 of the sites are Source Impact for Pb, and the remaining 8 sites measure ambient Pb. The Los Angeles, and Compton sites are designated as collocated for the area wide Pb monitoring network; minimum monitoring and collocation requirements are shown in Tables 17, 19 and 21. The spatial distribution of these sites is shown in Figure 6 in Appendix A.

On November 12, 2008, the EPA issued final revisions to the NAAQS for Pb. Network design requirements included monitoring for sources of Pb (source oriented monitoring) and urban Pb monitoring (non-source oriented). To meet this requirement, a source oriented site was established on January 1, 2010 at the Van Nuys Airport and monitoring continues at the sites surrounding the Exide (Vernon), Quemetco (Industry), and the Trojan Battery facilities. Existing urban Pb monitoring conducted at Compton, LAX Hastings, Los Angeles (Main), Pico Rivera, SA Recycling, Rubidoux, San Bernardino, and South Long Beach. Upland was discontinued March, 2017 at property management request. SCAQMD exceeds the minimum monitoring requirements for Pb.

The final rule for Pb went into effect on January 26, 2011. In the final rule the Van Nuys Airport was no longer included on the list of airports where Pb monitoring was required, and emissions inventory showed Pb emissions less than the minimum monitoring requirement of 1.0 ton per year. Data review from the Van Nuys Airport Pb site showed no exceedances of the three month rolling average during the monitoring period. In consultation EPA the site was discontinued on June 4, 2013 based upon conditions cited in 40 CFR 58 Appendix D 4.5.

The most recent NEI data (<https://www.epa.gov/air-emissions-inventories/national-emissions-inventory>) as of 3/16/2017 shows no airports exceed the 1.0 tpy threshold requiring a monitoring plan:

As of the end of 2016, SCAQMD is not in violation of the Pb NAAQS.

Photochemical Assessment Monitoring Stations

The Photochemical Assessment Monitoring Stations (PAMS) network was initiated in June 1994 at Pico Rivera and Upland. During 1995 sites were established at Banning and Azusa to determine speciated hydrocarbon O₃ precursor compounds in ambient air. PAMS monitoring at Hawthorne commenced in June 1997 and the Burbank station became a PAMS site in July 1997. In May 2001, the Santa Clarita location was established as a PAMS site. In April 2004, the Hawthorne site was replaced by LAX Hastings, in August 2005, the Pico Rivera station moved to a new location one half mile south of the previous site, also due to the end of the property lease.

SCAQMD utilizes PAMS data for trends analysis, trajectory modeling, and source emissions inventory reconciliation. SCAQMD has conducted an assessment of its PAMS program. The assessment indicated that although the existing program provides a robust data set, the measurement program can be modernized to compliment current and future U.S. EPA program requirements, strengthening the connection between the PAMS measurements objectives for better comprehension of ozone in the South Coast Basin. Thus, SCAQMD will focus its resources on optimizing the program, evaluating technologies, and shifting resources to prepare for the revised program. The general concept will be to conduct intensive one-year large scale Specialized PAMS (SPAMS) measurements every several years and in between SPAMS, conduct reduced core PAMS program during non-intensive years.

During non-intensive years the goal is to track annual statistics, trends (yearly, seasonally, monthly, weekly, daily, hourly), spatial distribution, comparison to other federal programs, and comparison data for special projects. Non intensive monitoring is proposed at four sites:

- Los Angeles (Main street): Proposed required by U.S. EPA, Station Leveraging, Current Type 2 site
- Azusa: Current Type 2 site, Trend site
- Rubidoux: Proposed required by U.S. EPA, Station leveraging, Current Type 3 site.
- Long Beach: Port/ Refineries activity and emissions

During the periodic intensive one year SPAMS intensive period, the goal is to conduct measurements with better spatial resolution (both vertical and horizontal), establish trend data (yearly, seasonally, monthly, weekly, daily, hourly) – develop control strategies, emissions inventory evaluations, local scale studies, full scale photochemical transport modeling, VOC/NO_x profiling, and background characterization.

The 2017 PAMS network monitoring objectives and requirements are summarized in Table 7, Table 20 and Figure 7 in Appendix A which shows the distribution of the PAMS network. SCAQMD will not conduct the intensive season sampling schedule for PAMS sites in 2017, but will continue the current non intensive schedule for all current PAMS sites. During this non-intensive season 24-hour VOC canister samples are run every 6th day and 24-hour carbonyl samples are run every 6th day. Rubidoux is a collocated site for VOC canister sampling and Pico Rivera is a collocated site for VOC canister and carbonyl sampling. SCAQMD will be evaluating implementation options for the revised PAMS/ SPAMS programs by reviewing the U.S. EPA PAMS GC assessment, upgrading its air monitoring network infrastructure, preparing mobile platforms, and evaluating instruments and methods.

During 2011, EPA along with local and state agencies evaluated the PAMS network and recommended changes to regulations published on October 1, 2015 as part of the Ozone NAAQS review. Changes to requirements include collocating PAMS sites with existing NCore sites, development of enhanced monitoring plans (EMPs) for non-attainment areas, hourly VOC measurements, and true NO₂ measurements. PAMS monitoring at NCore sites is required by June 1, 2019 and EMPs are required by October 1, 2019. SCAQMD intends to be an early adopter of required changes and implement the changes including hourly VOC measurements and true NO₂ measurements in advance of the 2019 deadline.

TABLE 7. PAMS Network

Site Type	Date Established as PAMS	Site / AQS ID#	January 1 to December 31		
			VOC	Carbonyl	Additional Requirements
2	06/01/1995	Azusa	1 x 24 hr sample every 6 th day	No Sampling	No/NOx required
2	06/01/2009	Los Angeles (Main)	1 x 24 hr sample every 6 th day	1 x 24 hr sample every 6 th day	Trace level CO required at one type 2 site.
3	06/09/2009	Rubidoux	1 x 24 hr sample every 6 th day	No Sampling	NOy required

MONITORING OBJECTIVES:

- 1 – Upwind and background characterization site (type 1 or 3)
- 2 – Maximum O3 precursor emissions impact site or above 8-hr zone
- 3 – Maximum O3 concentration site
- 4 – Extreme downwind monitoring site

MONITORING REQUIREMENTS:

- One type 1 or type 3 site required per area
- One type 2 site required per area
- No type 4 required

REDUCED REQUIREMENTS:

- Speciated VOC only required at type 2 and one other
- Carbonyl only required in areas classified as serious
- NO/NOx required only at type 2
- NOy required at one site per PAMS area (type 1 or 3)

PM2.5

A network of 17 area wide FRM samplers was first implemented in January 1999. On December 26, 1999, a second Coachella Valley PM2.5 sampling site was established in Palm Springs. On June 20, 2003, PM2.5 sampling began at the South Long Beach site. The Mira Loma site was added during October, 2005 and the Route 710 Long Beach and Route 60 Ontario near road sites were added during January, 2015. The current number of sites totals 19 area wide monitors, as depicted in Figure 8, Appendix A, and the starting date of each sampler is listed in Table 8.

Collocated sampling sites include Rubidoux, Central Los Angeles, and Mira Loma (Van Buren). Of the collocated sites, all three are located at sites with annual mean particulate concentrations among the highest 25 percent of the annual mean concentrations for all sites in the network as required in 40 CFR § 58 Appendix A 3.3.1. Supporting data is shown in Figure 9, 2016 Air Quality Data Table. The latest data can be found at:

<http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year>.

Manual, 24-hour PM2.5 monitors are sited as neighborhood scale and population exposure representing community wide air quality with multiple sites are listed as population exposure. Because all of SCAQMD are in non-attainment for PM2.5, most of the sites are in areas of with PM2.5 levels higher than the NAAQS. Therefore multiple sites are listed as population exposure and high concentration. If a PM2.5 network modification were to be implemented for a site that was in exceedance of the PM2.5 NAAQS levels, SCAQMD would notify U.S. EPA Region IX via written communication. Public notice of network modifications occurs as part of the annual network plan process which is stated in the annual network plan as required in 40 CFR § 58.10(c). All sites in the Network using FRM samplers are suitable for comparison against the annual PM2.5 NAAQS.

Daily design value sites are shown in Table 17a, as the Long Beach 710 Near Road and Ontario Route 60 Near Road sites. A replacement site is currently being sought for Burbank due to termination of lease and the Ontario Route 60 Near Road site satisfies the minimum daily monitoring requirement. Monitors exceed the minimum NCore 1 in 3 requirements at the Rubidoux and Los Angeles (Main) sites. The remaining sites meet or exceed the 1 in 3 schedule with the exception of Big Bear which was approved at the inception of the PM2.5 program as a 1 in 6 site. The Federal minimum monitoring requirements for PM2.5 are being met and/or exceeded by the SCAQMD PM2.5 monitoring network.

Continuous PM2.5 Met One BAMs were first deployed in fiscal year 2001-02. Fifteen BAM monitors are now operating in the SCAB, FEM BAM are located at: Anaheim, Los Angeles (Main), Mira Loma (Van Buren), Rubidoux, Ontario 60 Near Road, Route 710 Near Road, and South Long Beach sites. NON-FEM BAM samplers are located at Reseda, Santa Clarita, Crestline, Upland, Banning, Lake Elsinore, Temecula, and Glendora. In 2011, all FEM BAMs have been reclassified from special purpose monitors to SLAMS under 40 CFR § 58.20. During 2014, the Burbank and North Long Beach sites were discontinued due to termination of leases.

During 2013-2016, SCAQMD has conducted PM_{2.5} Continuous Monitor Comparability Assessments in accordance with the PM NAAQS rule published on January 15th, 2013 (78 FR 3086). Specific to the provisions detailed in §58.10 (b)(13) and §58.11 (e), the assessment results indicate that all of the SCAQMD PM_{2.5} Continuous Monitors do not meet the criteria to be compared against the NAAQS. Subsequently, SCAQMD requested waivers to exclude PM_{2.5} continuous monitor data from NAAQS comparison which were approved by EPA for 2013-2015. Meanwhile, SCAQMD is conducting comparison studies of newer technology to determine their ability to meet the criteria to be compared against the NAAQS. During 2015, Thermo 5014i BAM monitors were installed at the Interstate 710 and Route 60 near road sites for evaluation. Because 2016 was the first complete calendar year for PM_{2.5} collection, the comparison data included appendix C is listed as SPM and is a shorter duration than the other sites. SCAQMD is requesting a waiver for 2016 PM_{2.5} continuous monitors as shown in appendix C of this report.

Coarse particulate matter measurements (PM_{10-2.5}) were required at NCore sites until the revision to 40 CFR Part 58 on March 28, 2016. SCAQMD continues to measure this optional parameter by utilizing the continuous BAM monitors at the Los Angeles (Main) and Rubidoux air monitoring sites. These monitors are shown in Table 4.

Where both 24 hour FRM PM_{2.5} samplers and FEM PM_{2.5} continuous analyzers are deployed together, they are sited as collocated for data comparison purposes if the FEM analyzer meets the acceptance criteria under 78 FR 3086.

FRM PM_{2.5} sampler remains the primary analyzer used for attainment purposes and continuous analyzers are designated as audit samplers unless the primary 24 hour FRM PM_{2.5} is offline then continuous FEM analyzer data can be substituted if the FEM analyzer meets the acceptance criteria under 78 FR 3086.

PM_{2.5} speciation sampling is also a part of the SCAQMD PM_{2.5} program. Collocated CSN Met One SASS PM_{2.5} and one SCAQMD Met One SASS PM_{2.5} speciation samplers were deployed in March 2001 at Rubidoux. An additional CSN Met One SASS and collocated SCAQMD SASS samplers were deployed at Central Los Angeles in 2002. In 2003, SCAQMD SASS PM_{2.5} speciation samplers were installed at Fontana and Anaheim air monitoring sites. Analysis of the filters from the SCAQMD ambient network SASS samplers are being conducted at SCAQMD's laboratory. The CSN SASS sample filters are shipped to a U.S. EPA contract laboratory for analysis. This approach has the concurrence of CARB and U.S. EPA, Region IX.

TABLE 8. Manual PM_{2.5} FRM Monitoring Stations Assigned Site Numbers

Location	Site Code	ARB No.	AQS No.	Start Date	Schedule
Anaheim	ANAH	30178	060590007	01/03/99	Daily
Azusa	AZUS	70060	060370002	01/04/99	1-in-3
Big Bear	BGBR	36001	060718001	02/08/99	1-in-6
Compton	COMP	70112	060371302	11/08	1-in-3
Fontana	FONT	36197	060712002	01/03/99	1-in-3
Indio	INDI	33157	060652002	01/30/99	1-in-3
Long Beach (North) ¹	LGBH	70072	060374002	01/03/99	Daily
Long Beach Route 710 Near Road	W710	70032	060374008	01/01/15	Daily
Los Angeles “A” (Main St.)	CELA	70087	060371103	01/03/99	Daily
Los Angeles “B” (Main St.)	CELA	70087	060371103	01/06/99	1-in-6
Mira Loma (Van Buren) “A”	MRLM	33165	060658005	11/09/05	Daily
Mira Loma (Van Buren) “B”	MRLM	33165	060658005	03/08/12	1-in-6
Mission Viejo	MSVJ	30002	060592022	06/15/99	1-in-3
Ontario Route 60 Near Road	60NR	36036	060710027	01/01/15	Daily
Palm Springs	PLSP	33137	060655001	12/26/99	1-in-3
Pasadena	PASA	70088	060372005	03/04/99	1-in-3
Pico Rivera #2	PICO	70185	060371602	09/12/05	1-in-3
Reseda	RESE	70074	060371201	01/24/99	1-in-3
Rubidoux “A”	RIVR	33144	060658001	01/03/99	Daily
Rubidoux “B”	RIVR	33144	060658001	01/03/99	1-in-6
San Bernardino	SNBO	36203	060719004	01/03/99	1-in-3
South Long Beach	SLGB	70110	060374004	06/20/03	Daily

¹Although the N. Long Beach station has been closed, FRM PM_{2.5} measurements have been allowed to be continued at the location until a suitable replacement site can be implemented.

National Air Toxics Trends Station (NATTS)

The NATTS program was developed to fulfill the need for long-term Hazardous Air Pollutant (HAP) monitoring data of consistent quality nationwide. SCAQMD has conducted several air toxics measurement campaigns in the past, which demonstrated the variety and spatial distribution of air toxics sources across SCAB. A single air toxics measurement site cannot reflect the levels and trends of air toxics throughout the SCAB. For this reason, two NATTS sites are used to characterize the SCAB’s air toxics levels. The first site is a central urban core site in Los Angeles that reflects concentrations and trends due primarily to urban mobile source emissions. A second, more rural, inland site at Rubidoux captures the transport of pollutants from a variety of upwind mobile and industrial sources in the most populated areas of the air basin. NATTS monitoring began in February 2007 and continues at the Los Angeles (Main) and Rubidoux air monitoring sites. During April 2013, a system audit was conducted by the EPA, which assessed the SCAQMD NATTS program. The audit found no major issues with the operation of the network.

NCore

NCore monitoring rules required that SCAQMD make NCore sites operational by January 1st, 2011. To meet this goal, SCAQMD installed trace level analyzers for CO, NOY and SO₂ at the Rubidoux and Central Los Angeles sites. Continuous PM₁₀ and PM_{2.5} BAM

are utilized for PM10-PM2.5 measurements at both sites. Both the Los Angeles and Rubidoux sites are NATTS and PAMS monitoring locations.

Special Programs

Special monitoring programs are conducted for rule compliance purposes, to characterize the levels of toxic air contaminants and other criteria pollutants in sub-regional areas or communities in the SCAB, or to support modeling and planning efforts. The following is a list of special monitoring programs that were active during the past year. Note that this is being provided for informational purposes only.

MATES V

The SCAB is a highly urbanized area home to about seventeen million people who own and operate about eleven million motor vehicles, and contains some of the highest concentrations of industrial and commercial operations in the country. In 1986, SCAQMD conducted the first MATES study to determine the SCAB-wide risks associated with major airborne carcinogens. At the time, the state of technology was such that only ten known air toxic compounds could be analyzed. In 1998, a second MATES study (MATES II) was conducted; MATES II included a monitoring program of 40 known air toxic compounds, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize health risks from hazardous air pollutants. In April 2004, the SCAQMD conducted the third MATES study (MATES III) to assess the ambient levels of airborne compounds linked to adverse health effects in humans. And in June, 2012 SCAQMD began the MATES IV study which concluded in June, 2013. A final report was released May 1, 2015.

The MATES V is anticipated to begin January 1, 2018 and includes a monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the Basin with a focus on refineries. Additional shorter-term measurements are being conducted at various locations to assess localized impact of sources of pollution within communities. The focus of these measurements is on assessing exposure of toxics near sources such as refineries within the community.

MATES V will enhance the spatial resolution of previous studies by characterizing the ambient concentration of selected toxic air compounds in communities with varying land-type usage, such as residential, industrial, and commercial, as well as gradients from source areas downwind to receptor areas.

The local scale component to the MATES V study utilizes mobile monitoring platforms deployed for short term measurements of selected compounds near sources such refineries. Workshops for MATES V will be announced on SCAQMD website as part of the planning process.

Aliso Canyon

On November 10, 2015, SCAQMD field staff supported California Air Resources Board (CARB) monitoring efforts in the collection of samples to assess the identity and levels of pollution related to a large natural gas leak. In addition, on December 4, 2015, the SCAQMD Governing Board approved the purchase of equipment and services to enhance natural gas

monitoring capability at the Aliso Canyon Facility. This equipment is currently used inside the Aliso Canyon facility and in the surrounding communities, including Porter Ranch. The new equipment provided increased accuracy and the flexibility for deployment in mobile and stationary platforms. SCAQMD monitoring activities can be found at:

<http://www.aqmd.gov/home/regulations/compliance/aliso-canyon-update/air-sampling>

Fugitive Dust Study

In support of SCAQMD Rule 403 - Fugitive Dust, SSI PM10 samplers are deployed on an episodic basis upwind and downwind of potential sources as required under Rule 403. Since 2003, periodic sampling has been conducted around gravel quarries and other industries which seem to be producing large volumes of dust.

Hexavalent Chrome

The SCAQMD has an ongoing program to collect ambient hexavalent chromium samples in the vicinity of several chrome plating and cement production facilities located throughout the SCAB. Monitoring continues at Paramount, Newport Beach, Riverside, and other locations throughout the SCAQMD jurisdiction. SCAQMD Monitoring activities can be found at:

<http://www.aqmd.gov/home/regulations/compliance>

GERDAU-TAMCO

GERDAU North America acquired the TAMCO Rancho Cucamonga steel mini mill in October, 2010. In 2012 an environmental audit was conducted at the facility and found discrepancies in reported emissions with respect to SO_x and NO_x. Further, it was suspected that Pb emissions can contribute to an exceedance of the NAAQS. SCAQMD conducted inspections of the facility to address issues and continues monitoring for Pb, Cr+6, and other metals at the facility. Monitoring efforts at TAMCO currently measure Pb, Total Metals and Cr+6 on a one in three day schedule.

Salton Sea Monitoring

On Sunday September 9, 2012, a strong thunderstorm over the Salton Sea caused odors to be released and transported to the northwest, across the Coachella Valley and through the Banning Pass into the SCAB. The odors also crossed through the mountain passes west of the Salton Sea and into the Temecula Valley. The following day, SCAQMD received over 235 complaints of sulfur and rotten egg type odors

As the Salton Sea recedes, the potential exists for more of these large-scale odor events to occur. SCAQMD has installed PM10 and H₂S air monitors at Mecca (Saul Martinez Elementary School) and the Imperial Irrigation District's Torrez-Martinez site, located near the lakeshore, to monitor the type of expected nuisance pollutants which are released from the Salton Sea. The primary objective of this monitoring network is to place monitoring resources at a lakeside location where peak hydrogen sulfide concentrations are expected to occur and in the nearby community. The monitoring sites will provide data that can be used to assess population exposures in case of odor events and for comparison to the state standard

for hydrogen sulfide. The Mecca site has become part of the permanent ambient air monitoring network.

As the Salton Sea is projected to recede, these sites will be further enhanced for monitoring the predicted particulate matter (PM) emissions from the Salton Sea area that may influence the Coachella Valley and South Coast Air Basin PM levels.

AllenCo

AllenCo is an oil field and gas production facility located in the City of Los Angeles surrounded by residences including low income housing units, F.D. Lanterman High School, and Mount Saint Mary's College. For several years SCAQMD inspectors have responded to numerous odor complaints from the local community and suspects AllenCo to be the source of these odors. In October 2013 the SCAQMD initiated monitoring at sites around the AllenCo facility. At Mt. St Mary's College regularly scheduled VOC samples are collected on the roof of the housing building across the street from AllenCo, there is a remote controlled sampler capable of collecting a VOC grab sample should an odor complaint be called into the SCAQMD odor complaint line. In November 2013 AllenCo temporarily shut down operations to repair issues which it believes were the cause of the previous odor complaints. SCAQMD moved the continuous Non-Methane Hydrocarbon Measurements to support the Aliso Canyon monitoring efforts, but continues to collect VOC samples while AllenCo is shutdown. When AllenCo resumes operations, SCAQMD intends on resuming continuous monitoring briefly to assess air quality.

Duarte

To better assess expansion of rock and quarry operations and its impact on residents of Duarte, SCAQMD began continuous PM10 monitoring on May 21, 2013. The study assesses levels of PM10 in the City of Duarte.

CPV Sentinel

To better assess potential emission impacts from the CPV Sentinel power plant to the Desert Hot Springs area, SCAQMD has installed and is now operating an FEM PM2.5 directly downwind of the power plant at a Mission Springs Water District well site. Monitoring began on May 23, 2014 and measures levels of fine particulates (PM2.5) on a continuous basis, providing real-time hourly data (<http://www.aqmd.gov/home/library/air-quality-data-studies/special-monitoring/cpv-sentinel-monitoring>).

City of Paramount Air Monitoring Activities

In 2013, the South Coast Air Quality Management District (SCAQMD) received a series of metallic odor complaints from local community members in the Paramount neighborhood. In response to these complaints, the SCAQMD staff began conducting an investigation into local sources of emissions, including initiating a local air sampling study. The purpose of these activities was to determine the source of emissions and potential air pollution control strategies. Ambient monitoring of toxic metal emissions began in 2013 and has continued at two sites on Vermont Avenue and California Avenue. Based on the monitoring results, there were two metals of concern: nickel and hexavalent chromium. In 2014 and 2015, SCAQMD worked with Carlton Forge Works to reduce metal particulate emissions from their grinding

operation. Carlton Forge Works implemented a number of voluntary measures that substantially reduced nickel levels. Since these measures did not reduce hexavalent chromium levels, the SCAQMD needed additional data to understand the source of these emissions. In October 2016, as part of its ongoing investigation to identify and address sources of hexavalent chromium that may be impacting the nearby communities, SCAQMD staff deployed several monitors in the mostly industrial areas of the City of Paramount. Initial results showed elevated levels of hexavalent chromium upwind of Carlton Forge Works. The results of monitoring efforts, Town Hall Meetings, air monitoring and public health reports, and other related information can be found at:

<http://www.aqmd.gov/home/regulations/compliance/air-monitoring-activities>

Recent or Proposed Modifications to Network

5 Year Network Assessment

During 2015, an assessment of the monitoring network was conducted as required by EPA every 5 years. A summary of the assessment findings and proposed changes are provided below. There are many purposes and objectives for air quality monitoring, some beyond those described in the assessment. Meeting minimum monitoring requirements is just one factor in determining the value of sites and measurements. Given the challenges of meeting air quality standards in Southern California and the need for information to help in developing control strategies to achieve attainment, the SCAQMD monitoring network will far exceed the minimum requirements. Forecasting and public reporting are also critical in the network design. Furthermore, closing, relocating or creating monitoring sites requires significant resources and often a long period of concurrent monitoring to show comparability. Thus, the proposed suggestions summarized below are under review and in consultation with EPA, must be weighed against many other factors before being implemented.

- Consider a general reduction in the number of sites monitoring for SO₂, NO₂, and CO pollutants in the network while still maintaining all monitoring objectives and purposes.
- Reconsider the values of the Glendora, La Habra and Pomona sites.
- Reconsider the value of the Big Bear Lake PM_{2.5} site.
- Reconsider the number of PM_{2.5} monitors above the minimum monitoring requirements.
- Continue to transition to continuous PM measurements that can eventually replace filter-based measurements.
- Reconsider reducing the particulate collocated sampling schedule from the current 1 in 6 to EPA required 1 in 12.
- Consider consolidating all South Long Beach and North Long Beach measurements to a site that is closer to port activities and will better achieve the original purpose of the two sites.
- Reconsider the value of the Norco particulate sites, and potentially consolidate measurements at nearby sites or at a new site between the two.

Crestline

SCAQMD has been operating the Crestline site since 1973. The deteriorating state of the shelter along with compromises made to the siting criteria due to obstructions has made it a candidate for site improvement. As part of regular air monitoring station maintenance, a new station shelter has

been outfitted to replace the existing trailer. SCAQMD received approval from San Bernardino County Planning, Building and Safety departments for planned construction. During September 2016 a RPF was completed however no contractor was found that could complete the work within budget. Large scale improvements are to be postponed until a suitable contractor can be found or alternative location identified. Meanwhile, SCAQMD is currently evaluating the existing site for representativeness and determining whether the current location or an alternate in a nearby community is most suitable. Any determination will be made in consultation with CARB AND EPA Region IX prior to construction.

West LA

SCAQMD has been operating the West LA site since 1983. The deteriorating state of the shelter along with compromises made to the siting criteria due to obstructions has made it a candidate for site improvement. As part of regular air monitoring station maintenance, a new station shelter has been outfitted to replace the existing platform. Construction schedule is dependent upon pending lease renewal with Veterans Administration.

Burbank

SCAQMD has been operating the Burbank site since October, 1961. Due to the termination of the lease by the owner, the site was shut down June, 2014. SCAQMD is working with Los Angeles County Department of Public Health, City of Burbank, LA DWP, and SCE to find a suitable location for monitoring within 2.5 miles of the previous location. SCAQMD is in consultation with U.S. EPA Region IX and is assessing the relocation of the site. A waiver for closure has been submitted to EPA.

South Long Beach

SCAQMD has been operating the South Long Beach station as part of the ambient air-monitoring network. Recent construction of the buildings adjacent to the site potentially compromises the siting criteria. During the FY 2016-17 a data comparison between a more centralized monitoring location in Long Beach will be undertaken. If comparison of data between the two locations demonstrates some comparability, or if the metropolitan site shows consistently higher levels of PM, the South Long Beach site may be relocated in consultation with EPA Region IX.

Long Beach (North)

At the request of the owner, the Long Beach (North) site lease was terminated on September 30, 2013. As a result some pollutants were discontinued while a replacement site is sought. Consideration is being given to consolidation with nearby sites to better represent the Long Beach area.

Azusa

The Azusa site has been in continuous operation since 1957 and is one of SCAQMD's oldest continuous sites. Since that time the area surrounding the site has changed significantly potential compromising data. The area immediately surrounding the site has become industrialized including a welding shop, and various mechanical shops. Considering the site has been historically one of the highest ozone sites and is in close proximity to quarries it is recommended the site be relocated within one mile downwind of the City of Duarte to more accurately represent the community of Azusa and Duarte.

Ontario – Pomona – Upland

SCAQMD had been operating the Ontario site since January, 1999. Due to the termination of lease by the owner, the site was shut down June, 2014. During recent audits, EPA concluded the Pomona site did not meet established EPA siting criteria and monitoring objectives. The Ontario/Pomona/Upland group of sites is geographically compact showing high degree of comparability in measurements. In 2007 and 2008, Upland recorded the most exceedances of federal and state air quality standards of O₃, although this area is no longer the highest O₃ region in the basin. The Pomona site is also relatively close to both Ontario and Upland. Given the proximity to other correlated stations and the siting and infrastructure issues mentioned above, the sites could be considered potentially redundant in terms of measurements. It is recommended that considering the closure of Ontario, siting issues at Pomona, and infrastructure issues at Upland that a new centrally located foothill site be considered for consolidation.

Costa Mesa

SCAQMD has been operating the Costa Mesa site since November, 1989. SCAQMD has been notified the facility has been sold and is to be demolished by July 31, 2017. SCAQMD is working to find a suitable location for monitoring within 2.5 miles of the previous location. SCAQMD is in consultation with U.S. EPA Region IX and is assessing the relocation of the site. A waiver has been submitted to EPA.

Minimum Monitoring Requirements

The SCAQMD jurisdictional boundary encompasses two MSAs and two CBSAs whose boundaries and codes mirror those of the MSAs as defined by the U.S. Office of Management and Budget. Los Angeles-Long Beach-Anaheim MSA\CBSA (Code 31080) has an estimated population of 13,131,431 and the Riverside-San Bernardino-Ontario MSA\CBSA (Code 40140) has an estimated population of 4,380,878 according to U.S. Census estimates for 2013. The minimum number of monitors for each pollutant is based on MSA population as described in 40 CFR § 58 Appendix D. The SCAQMD is a Primary Quality Assurance Organization (PQAO) and the network exceeds the minimum monitoring requirements for all criteria pollutants. Details are provided below.

Table 9 Minimum Monitoring Requirements for Ozone.

(Note: Refer to section 4.1 and Table D-2 of Appendix D of 40 CFR Part 58.)

MSA	Counties	Population and Census Year	8-hr Design Value (ppb) DV, Years ¹	Design Value Site (name AQS ID)	Monitors Required	Monitors Active	Monitors Needed
30180	Los Angeles Orange	13,340,068 2015	96 2014-2016	Santa Clarita and Glendora 060376012 060370016	4	16	0
40140	San Bernardino Riverside	4,489,159 2015	108 2014-2016	Central San Bernardino Mountains 060710005	3	13	0

¹DV Years – The three years over which the design value was calculated.

Monitors required for SIP or Maintenance Plan: 29

Table 10 Minimum Monitoring Requirements for PM2.5 SLAMS (FRM)

(Note: Refer to sections 4.71, 4.72, and Table D-5 of Appendix D of 40 CFR Part 58.)

MSA	Counties	Population and Census Year	Annual Design Value [ug/m ³], DV & Years ¹	Annual Design Value Site (Name, AQS ID)	Daily Design Value [ug/m ³], DV & years	Daily Design Value site (name AQS ID)	# Required SLAMS Monitors	# Active SLAMS Monitors	# Additional SLAMS needed
30180	Los Angeles Orange	13,340,068 2015	12.4 2014-2016	Long Beach Route 710 Near Road 060374008	33 2014- 2016	Los Angeles 060371103	3	10	0
40140	San Bernardino Riverside	4,489,159 2015	14.6 2014-2016	Ontario Route 60 Near Road 060710027	39 2014- 2016	Mira Loma 060658005	3	9	0

¹DV Years – The three years over which the design value was calculated.

Monitors required for SIP or Maintenance Plan: 19

Table 11 Minimum Monitoring Requirements for Continuous PM2.5 Monitors (FEM and Non-FEM)*

(FEM/ARM and non-FEM see 40 CFR 58 Appendix D Section 4.72.)

MSA	Counties	Population and Census Year	Annual Design Value [ug/m3], DV & Years ¹	Annual Design Value Site (Name, AQS ID)	Daily Design Value [ug/m3], DV & years	Daily Design Value site (name AQS ID)	# Required Continuous Monitors	# Active Continuous Monitors	# Additional Continuous needed
30180	Los Angeles Orange	13,340,068 2015	17.0 2014-2016	Los Angeles 060371103	42.0, 2014-2016	Anaheim 060590007	2	4-FEM 3-Non FEM	0
40140	San Bernardino Riverside	4,489,159 2015	18.1, 2014-2016	Mira Loma 060658005	42.0, 2014-2016	Mira Loma 060658005	2	3-FEM2 6-Non FEM	0

¹DV Years – The three years over which the design value was calculated.

Monitors required for SIP or Maintenance Plan: 15

²FEM is collocated at the Rubidoux site.

* Currently all active continuous monitors do not meet acceptance criteria under 78 FR 3086 and is requested to not be compared to the NAAQS.

Table 12 Minimum Monitoring Requirements for Speciated PM2.5 Monitors

(Note: Refer to sections 4.74 of Appendix D of 40 CFR Part 58.)

MSA	Counties	Population and Census Year	Monitors Required ¹	Monitors Active	Monitors Needed
30180	Los Angeles Orange	13,340,068 2015	1	2	0
40140	San Bernardino Riverside	4,489,159 2015	1	2	0

¹Sites designated as part of the PM_{2.5} Speciation Trends Network (STN).

Monitors required for SIP or Maintenance Plan: 4

Table 13 Minimum Monitoring Requirements for PM10

(Note: Refer to section 4.6 and Table D-4 of Appendix D of 40 CFR Part 58.)

MSA	Counties	Population and Census Year	2016 Max Concentration [ug/m3]	Max Concentration site (name AQS ID)	# Required Monitors	# Active Monitors	# Additional Monitors Needed
30180	Los Angeles Orange	13,340,068 2015	101	Azusa 060370002	2-4 Low Conc	8	0
40140	San Bernardino Riverside	4,489,159 2015	147 ¹	Mecca 060652005	4-8 Med Conc	11	0

Monitors required for SIP or Maintenance Plan: 19

¹Excluding exceptional wind events.

Table 14 Minimum Monitoring Requirements for NO2

(Note: Refer to section 4.3 of Appendix D of 40 CFR Part 58.)

CBSA	Population and Census Year	Max AADT Counts (2015) ¹	# Required Near Road Monitors ²	#Active Near Road Monitors	#Additional Near Road Monitors Needed	#Required Area Wide Monitors	#Active Area Wide Monitors	#Additional Area wide Monitors Needed
30180	13,340,068 2015	377,600 2015	2	2	0	1	15	0
40140	4,489,159 2015	266,000 2015	2	2	0	1	8	0

¹Max AADT Counts – 2015 is the latest data available from CA DOT

²Four required beginning January 1, 2015.

Monitors required for SIP or Maintenance Plan: 13 (area wide), 4 (near road)

Monitors Required for PAMS: 7

EPA Regional Administrator-required monitors per 40 CFR 58, Appendix D 4.3.4: 3

Table 15 Minimum Monitoring Requirements for SO₂

(Note: Refer to section 4.4 of Appendix D of 40 CFR Part 58.)

CBSA	Counties	Total SO ₂ ¹ [tons/year]	Population Weighted Emissions Index ² [million persons-tons per year]	#Active Near Road Monitors	#Required Area Wide Monitors	#Active Area Wide Monitors	#Additional Area wide Monitors Needed
30180	Los Angeles Orange	6,049.52 2014	80,701	0	1	4	0
40140	San Bernardino Riverside	1,289.67 2014	5,790	0	1	2	0

¹Using latest NEI data 2014, available on EPA website: <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>

²Calculated by multiplying CBSA population and total SO₂ and dividing product by one million.

Monitors required for SIP or Maintenance Plan: 6

EPA Regional Administrator-required monitors per 40 CFR 58, Appendix D 4.4.3: 0

Table 16 Minimum Monitoring Requirements for CO

(Note: Refer to section 4.2 of Appendix D of 40 CFR Part 58.)

CBSA	Population and Census Year	#Required Near Road Monitors ¹	#Active Near Road Monitors ²	#Required Area Wide Monitors	#Active Area Wide Monitors
30180	13,340,068 2015	1	1	0	16
40140	4,489,159 2015	1	1	0	7

¹Required beginning January 1, 2015

²Required sites to be active by January 1, 2015; to be collocated with near road NO₂ sites.

Monitors required for SIP or Maintenance Plan: 23 (area wide), 2 (near road)

EPA Regional Administrator-required monitors per 40 CFR 58, Appendix D 4.4.2: 0

Table 17 Minimum Monitoring Requirements for Pb at NCore

(Note: Refer to section 4.5 of Appendix D of 40 CFR Part 58.)

NCore Site (name, AQS ID)	CBSA	Population and Census Year	# Required Monitors	# Active Monitors	# Additional Monitors Needed
Los Angeles (Main Street) 060371103	30180	13,340,068 2015	1	2 ¹	0
Rubidoux 060658001	40140	4,489,159 2015	1	1	0

¹ - Collocated Monitor.

Table 18 Source Oriented Pb Monitoring (Including Airports)

Source Name	Address	Pb Emissions ¹ (tons per year)	Emission Inventory Source ² and Data Year	Max 3-Month Design Value ¹ [ug/m3]	Design Value Date(third month, year)	# Required Monitors	# Active Monitors	# Additional Monitors Needed
TAMCO	12459-B Arrow Route, Rancho Cucamonga, CA 91739	Unavailable	NEI 2014	Unavailable	Unavailable	0	1	0
Exide Technologies ³	4010 E. 2nd St, Vernon, CA 90058	0.006	NEI 2014	0.07	3; 2014	1	2	0
Trojan Battery	9440 Ann St., Santa Fe Springs, CA 90670	0.0096	NEI 2014	0.04	6; 2015	0	1	0
Quemetco Inc.	720 S 7th Ave, City Of Industry, CA 91746	Unavailable	NEI 2014	0.03	6; 2014	0	1	0

(Note: Refer to section 4.5 of Appendix D of 40 CFR Part 58.)

¹Consider data from past three years.

²Using latest NEI data 2014, available on EPA website: <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>

³Exide facility is current closed.

Monitors Required for SIP or Maintenance Plan: 5

EPA Regional Administrator required monitors per 40 CFR 58, Appendix D 4.5(C) c: 0

Table 19 Minimum Monitoring Requirements for Pb, Non-Source, Non-NCORE Monitoring

(Note: Refer to section 4.5 of Appendix D of 40 CFR Part 58.)

CBSA	Population and Census Year	Annual Design Value [ug/m3], DV & Years ¹	# Required Area Wide Monitors	# Active Area Wide Monitors	# Additional Monitors Needed
30180	13,340,068 2015	0.01, 2014-2016	0	4	0
40140	4,489,159 2015	0.06 ² 2014-2016	0	2	0

¹DV Years – The three years over which the design value was calculated.

²Recorded at the Route 10 Etiwanda Near Road site.

Table 20 Minimum Monitoring Requirements for PAMS

(Note: Refer to section 4.5 of Appendix D of 40 CFR Part 58.)

Area	Type	# Required PAMS Sites	# Active PAMS Sites	# PAMS Sites Needed
SCAQMD Monitoring Area	1 or 3	1	3	0
	2	1	4	0
	4	0	0	0
	Upper Air Meteorology	1	5	0

Table 21 Collocated Manual PM2.5, PM10, and Non-NCORE Pb Networks

(Note: Refer to section 3.2.5, 3.3.5, 3.3.1, and 3.3.4.3 of Appendix A, 40 CFR Part 58.)

Pollutant	Method Code	# Primary Monitors	# Required Collocated Monitors	# Active Collocated Monitors
PM2.5 (RAAS)	780, 120	19	3	3
PM10 (SSI Hi-Vol)	063, 102	19	3	3
Pb (TSP Hi-Vol)	110 (Non Source)	8	1	2
Pb (Tsp Hi-Vol)	110 (Source)	5	1	1

Table 22 Collocated Automated (continuous) PM2.5 Network

(Note: Refer to section 3.2.5 & 3.3.5 of Appendix A, 40 CFR Part 58.)

Method Code	# Primary Monitors	# Required Collocated Monitors	# Active Collocated Monitors ¹
None	0	0	6

¹No FEM PM2.5 BAMs are listed as primary monitors; therefore no collocation requirement exists but all are collocated with FRM monitors.

Data Submittal and Archiving Requirements

As required in 40 CFR 58.16(a), data is reported via AQS including all ambient air quality data and associated quality assurance data for SO₂, CO, O₃, NO₂, Near Road NO₂, NO, NO_y, NO_x, Pb-TSP mass concentration, Pb-PM₁₀ mass concentration, PM₁₀ mass concentration, PM_{2.5} mass concentration, filter-based PM_{2.5} FRM/FEM field blank mass, sampler-generated average daily temperature, and sampler-generated average daily pressure, chemically speciated PM_{2.5} mass concentration data, PM_{10-2.5} mass concentration, meteorological data from NCore and PAMS sites, average daily temperature\average daily pressure for Pb sites and metadata records\information as specified by the AQS Data Coding Manual through December 31, 2016.

A data certification letter has been submitted to the EPA Regional Administrator certifying applicable data collected at all SLAMS and at all FRM, FEM, and ARM SPM stations that meet criteria in appendix A, to part 58, for January 1 through December 31, 2016.

APPENDIX A

SCAQMD Network Depictions

Ozone (O₃) Monitoring Stations



Figure 1 SCAQMD Ozone Monitoring Locations

PM 10 Monitoring Stations



Figure 2 SCAQMD PM10 Monitoring Locations

Nitrogen Dioxide (NO₂) Monitoring Stations

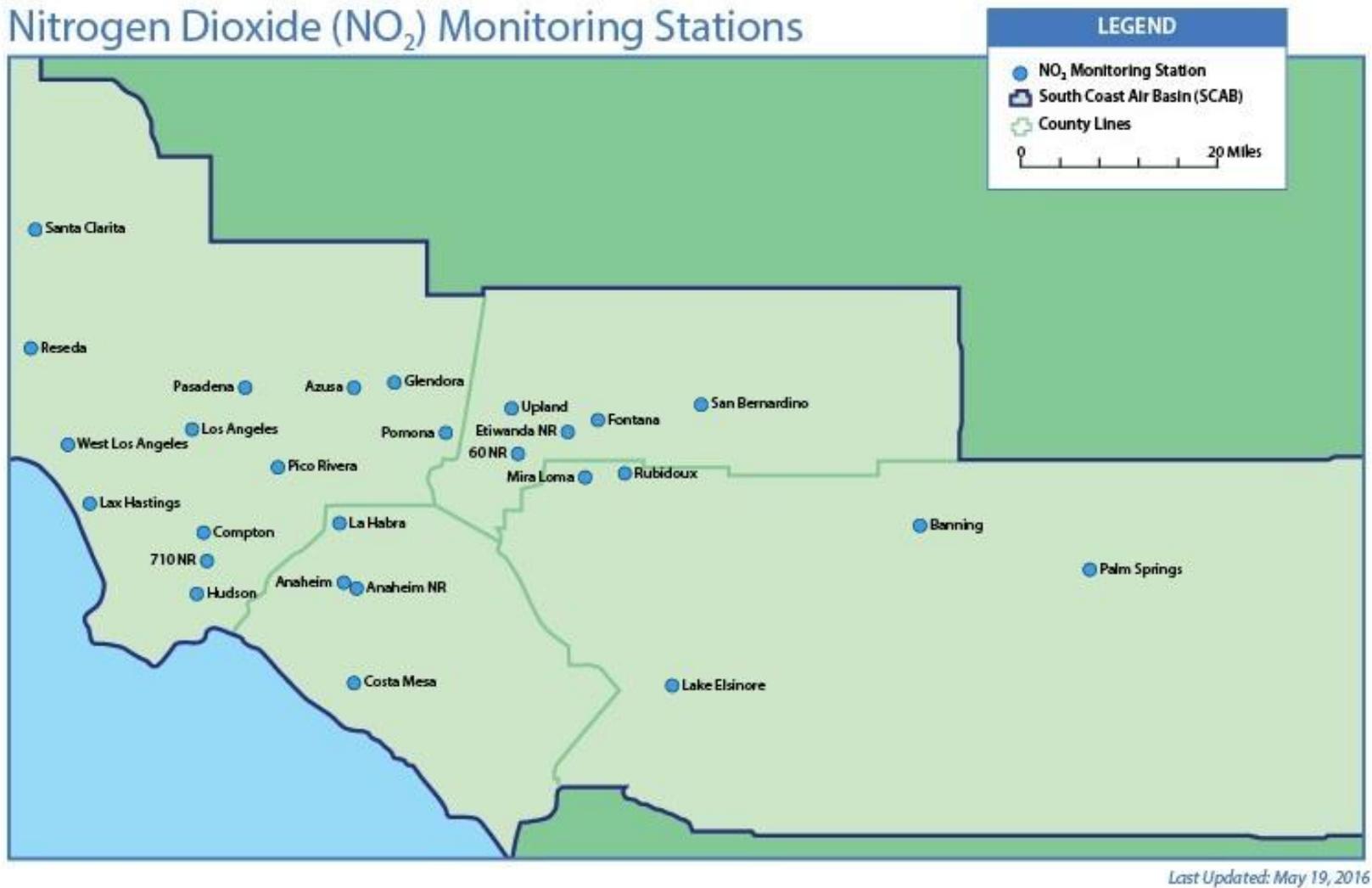


Figure 3 SCAQMD Monitoring Locations for Nitrogen Dioxide

Carbon Monoxide (CO) Monitoring Stations



Figure 4 SCAQMD Monitoring Locations for Carbon Monoxide

Sulfur Dioxide (SO₂) Monitoring Stations

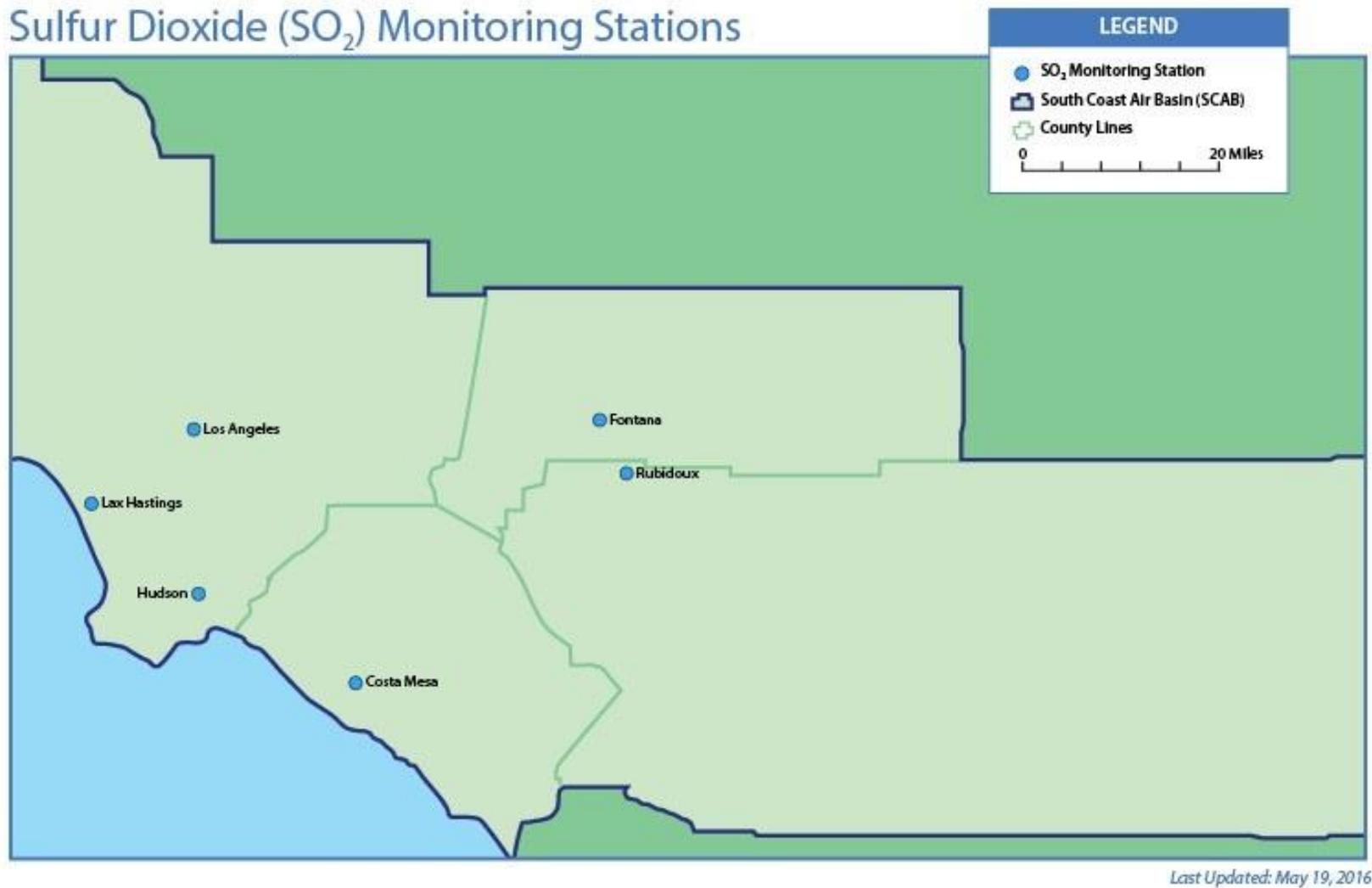


Figure 5 SCAQMD Monitoring Locations for Sulfur Dioxide

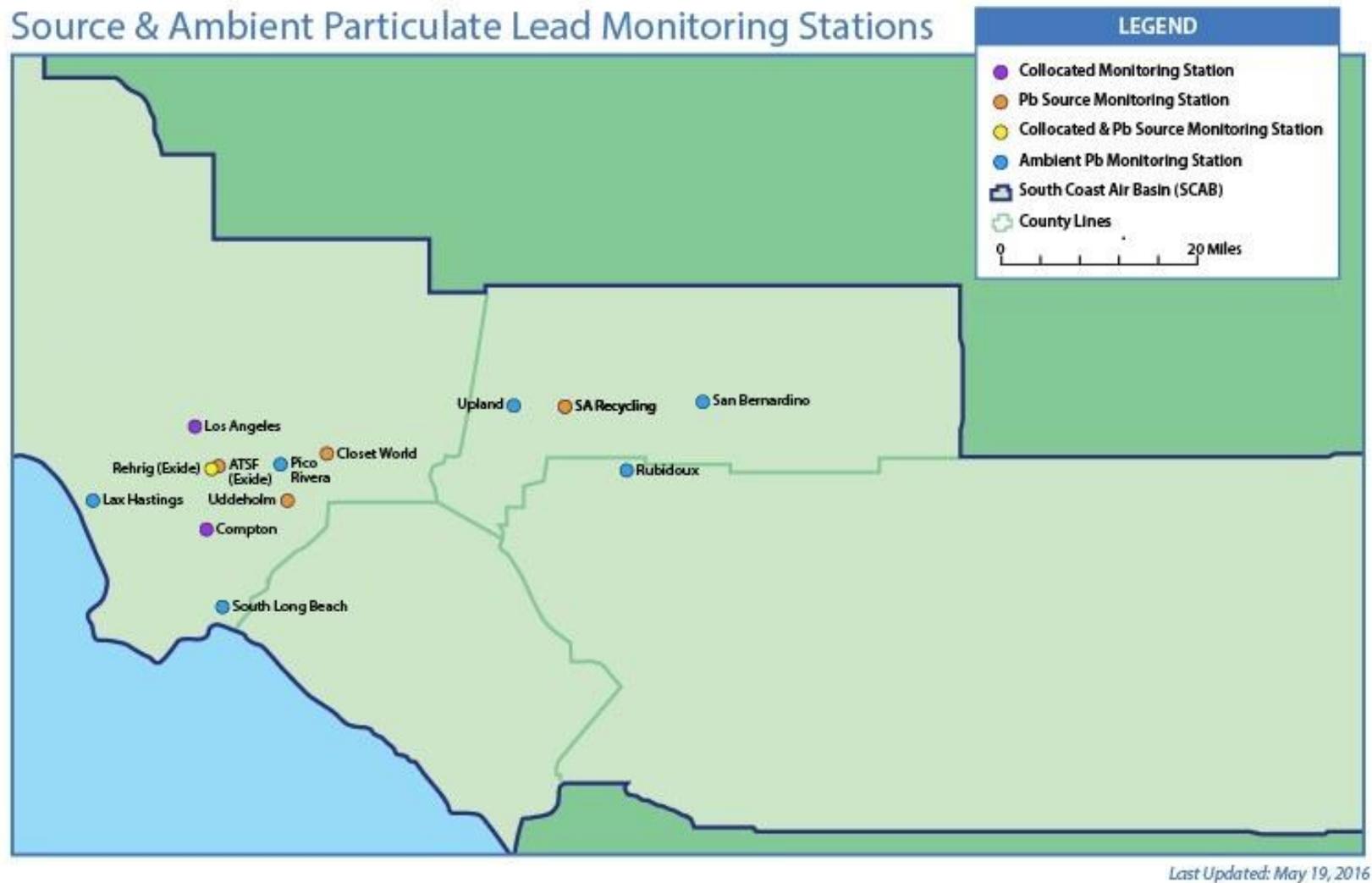


Figure 6 SCAQMD Source and Ambient Particulate Lead Monitoring Locations

PAMS Monitoring Stations

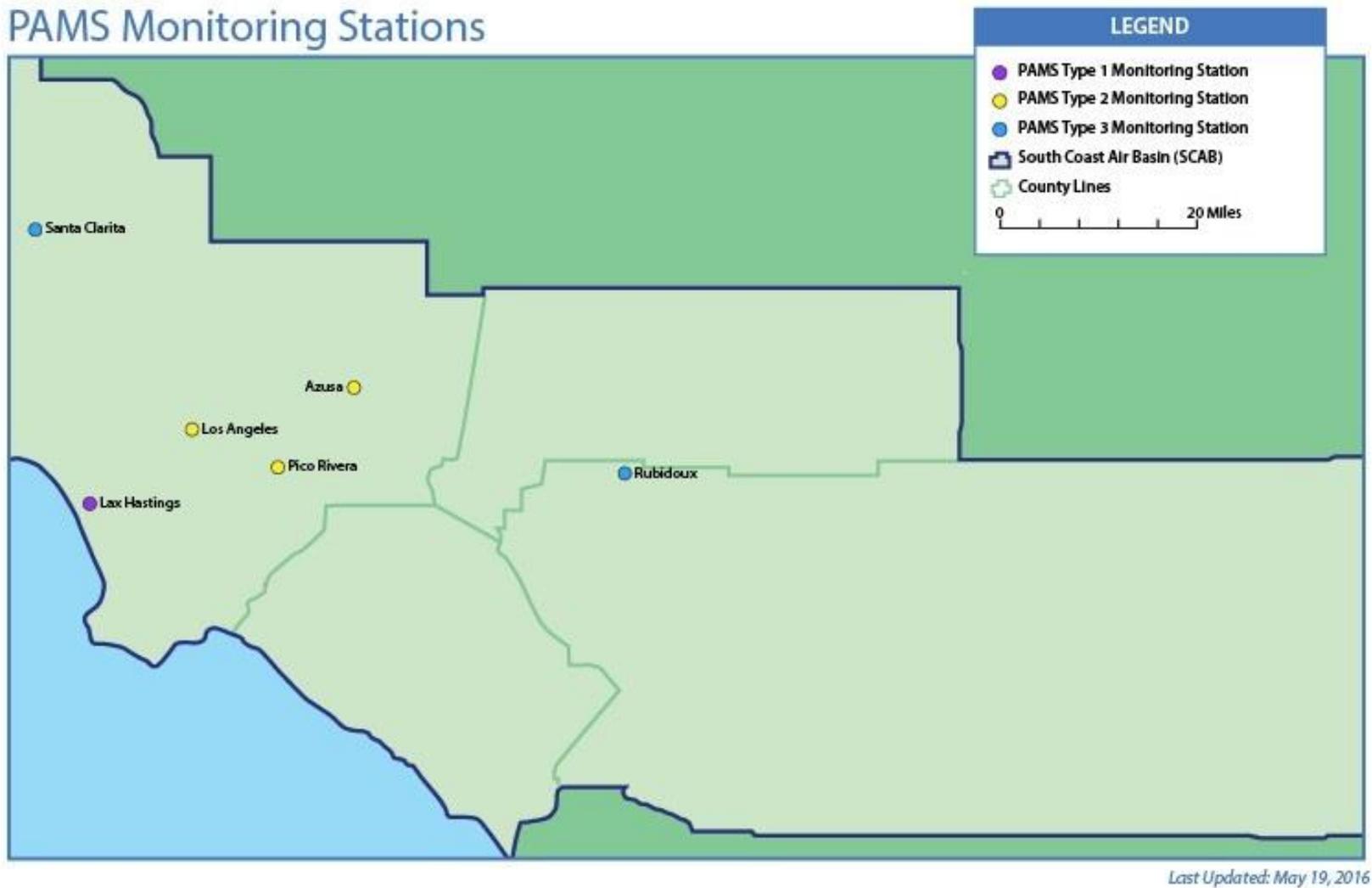


Figure 7 SCAQMD PAMS Monitoring Locations



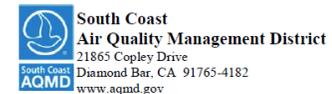
Figure 8 SCAQMD PM2.5 Monitoring Locations

Air Quality Monitoring Network Plan – July 1, 2017

**2016 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Source/Receptor Area No. Location		Station No.	Carbon Monoxide ^{a)}			Ozone ^{b)}								Nitrogen Dioxide ^{c)}				Sulfur Dioxide ^{d)}				
			No. Days of Data	Max Conc. in ppm 1-hour	Max Conc. in ppm 8-hour	No. Days of Data	Max Conc. in ppm 1-hour	Max Conc. in ppm 8-hour	Fourth High Conc. ppm 8-hour	Old Federal > 0.124 ppm 1-hour	Current Federal > 0.070 ppm 8-hour	2008 Federal > 0.075 ppm 8-hour	1997 Federal > 0.084 ppm 8-hour	Current State > 0.09 ppm 1-hour	Current State > 0.070 ppm 8-hour	No. Days of Data	Max Conc. in ppb 1-hour	98 th Percentile Conc. in ppb 1-hour	Annual Average AAM Conc. in ppb	No. Days of Data	Max Conc. in ppb 1-hour	99 th Percentile Conc. in ppb 1-hour
DRAFT																						
2016																						
LOS ANGELES COUNTY																						
1	Central LA	087	361	1.9	1.4	364	0.103	0.078	0.071	0	4	1	0	2	4	366	64.7	61	34.3	366	13.4	2.5
2	Northwest Coastal LA County	091	366	2.2	1.1	365	0.085	0.073	0.066	0	2	0	0	0	2	366	54.5	49.3	24.8	--	--	--
3	Southwest Coastal LA County	820	362	1.6	1.3	361	0.087	0.080	0.067	0	2	1	0	0	3	348	81.5	54.7	24.4	363	9.7	5.7
4	South Coastal LA County 1	072	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 3	033	363	3.3	2.2	365	0.079	0.059	0.055	0	0	0	0	0	0	366	75.6	66.3	31.7	366	17.8	12.0
4	I-710 Near Road [#]	032	--	--	--	--	--	--	--	--	--	--	--	--	--	366	95.3	76.6	39.9	--	--	--
6	West San Fernando Valley	074	366	2.4	1.9	364	0.122	0.098	0.086	0	23	14	4	9	23	355	55.5	45.9	24.7	--	--	--
8	West San Gabriel Valley	088	366	1.5	1	358	0.126	0.090	0.082	1	18	15	3	12	19	366	71.9	58.4	27.8	--	--	--
9	East San Gabriel Valley 1	060	366	1.3	1.2	366	0.146	0.106	0.095	4	39	25	10	30	40	366	74.2	58.3	28.5	--	--	--
9	East San Gabriel Valley 2	591	364	1.1	1	362	0.148	0.114	0.098	6	52	31	16	38	55	365	65.4	45.7	21.0	--	--	--
10	Pomona/Walnut Valley	075	361	1.7	1.3	360	0.127	0.092	0.087	1	26	14	5	20	29	360	69.3	62.5	34.3	--	--	--
11	South San Gabriel Valley	085	366	2.8	1.7	359	0.111	0.081	0.074	0	6	2	0	9	6	361	63.2	60.1	32.4	--	--	--
12	South Central LA County	112	366	4.4	3.9	365	0.098	0.071	0.064	0	1	0	0	1	1	366	63.7	58.4	28.9	--	--	--
13	Santa Clarita Valley	090	366	1.3	1.1	366	0.130	0.115	0.100	2	57	35	15	29	59	361	46.4	39.4	21.7	--	--	--
ORANGE COUNTY																						
16	North Orange County	3177	366	3.1	1.5	365	0.103	0.078	0.075	0	6	3	0	3	7	359	60.4	51.5	25.1	--	--	--
17	Central Orange County	3176	355	2.6	2.1	354	0.103	0.074	0.071	0	4	0	0	2	4	354	64.3	56.7	27.4	--	--	--
17	I-5 Near Road [#]	3131	360	3.7	2.2	--	--	--	--	--	--	--	--	--	--	357	75.2	60.1	34.4	--	--	--
18	North Coastal Orange County	3195	366	2.1	1.7	366	0.090	0.069	0.065	0	0	0	0	0	0	349	59.8	51.2	20.0	366	3.3	2.1
19	Saddleback Valley	3812	353	1.3	0.7	365	0.122	0.093	0.079	0	13	6	3	5	13	--	--	--	--	--	--	--
RIVERSIDE COUNTY																						
22	Corona/Norco Area	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	359	1.7	1.3	357	0.142	0.104	0.097	1	69	47	20	33	71	366	73.1	52.2	28.2	366	5.6	2.0
23	Metropolitan Riverside County 3	4165	366	1.9	1.4	365	0.140	0.106	0.095	1	65	43	23	34	70	366	64.9	48.3	25.2	--	--	--
24	Perris Valley	4149	--	--	--	366	0.131	0.098	0.092	1	55	30	11	23	56	--	--	--	--	--	--	--
25	Elsinore Valley	4158	298*	1.2	0.6	360	0.124	0.093	0.087	0	44	25	7	15	45	345*	51.3	35.6	19.1	--	--	--
26	Temecula Valley	4031	--	--	--	355	0.092	0.081	0.077	0	19	6	0	0	20	--	--	--	--	--	--	--
29	San Geronimo Pass	4164	--	--	--	358	0.128	0.106	0.094	1	52	39	14	26	54	348	46.9	42.6	22.4	--	--	--
30	Coachella Valley 1**	4137	361	3.1	1.5	363	0.103	0.092	0.087	0	46	20	4	6	48	363	42.6	34.4	15.3	--	--	--
30	Coachella Valley 2**	4157	--	--	--	331	0.099	0.089	0.081	0	27	12	2	3	29	--	--	--	--	--	--	--
30	Coachella Valley 3**	4032	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY																						
32	Northwest San Bernardino Valley	5175	366	1.7	1.3	366	0.156	0.116	0.110	10	88	65	33	53	89	366	70.1	55.1	29.0	--	--	--
33	I-10 Near Road [#]	5035	366	1.7	1.3	--	--	--	--	--	--	--	--	--	--	362	93.4	74.3	42.8	--	--	--
33	CA-60 Near Road [#]	5036	--	--	--	--	--	--	--	--	--	--	--	--	--	361	89.8	71.3	43.9	--	--	--
34	Central San Bernardino Valley 1	5197	359	1.7	1	362	0.139	0.105	0.098	3	49	39	16	34	52	357	71.7	56.4	31.9	363	6.3	2.0
34	Central San Bernardino Valley 2	5203	358	2.2	1.7	366	0.158	0.118	0.114	10	106	76	41	70	108	355	60.1	51.4	29.5	--	--	--
35	East San Bernardino Valley	5204	--	--	--	364	0.145	0.119	0.103	3	97	71	40	55	100	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	--	--	--	365	0.163	0.121	0.116	9	101	80	54	64	103	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DISTRICT MAXIMUM			4.4	3.9		0.163	0.121	0.116	10	106	80	54	70	108		95.3	76.6	43.9		17.8	12.0	
SOUTH COAST AIR BASIN			4.4	3.9		0.163	0.121	0.116	17	132	103	63	83	132		95.3	76.6	43.9		17.8	12.0	

* Incomplete data. ** Salton Sea Air Basin -- Pollutant not monitored
 ppm – Parts Per Million parts of air, by volume ppb – Parts Per Billion parts of air, by volume AAM – Annual Arithmetic Mean
 a) The federal and state 8-hour CO standards (9 ppm and 9.0 ppm) were not exceeded. The federal and state 1-hour CO standards (35 ppm and 20 ppm) were not exceeded, either.
 b) The current (2015) O₃ federal standard was revised effective December 28, 2015.
 c) The NO₂ federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO₂ > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm and 0.030 ppm.
 d) The federal SO₂ 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO₂ > 0.25 ppm (250 ppb) and 24-hour average SO₂ > 0.04 ppm (40 ppb).
 # Four near-road sites measuring one or more of the pollutants PM_{2.5}, CO and/or NO₂ are operating near the following freeways: I-5, I-10, CA-60 and I-710.



For information on the current standard levels and most recent revisions please refer to "Appendix II – Current Air Quality" of the "2016 AQMP" which can be accessed at <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp-appendix-ii.pdf?sfvrsn=4>. Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD Current Hourly Air Quality Map at <http://www2.aqmd.gov/webapp/gis/aq2/VEMap3D.aspx>. A printed map or copy of the AQMP Appendix II is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.

Figure 9 SCAQMD 2016 Air Quality Data Summary

Air Quality Monitoring Network Plan – July 1, 2017

DRAFT

2016

**2016 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Source/Receptor Area No. Location	Station No.	Suspended Particulates PM10 ^{e)}				Fine Particulates PM2.5 ^{g)}					Lead ^{d)}		PM10 Sulfate ^{d)}	
		No. Days of Data	Max. Conc. in $\mu\text{g}/\text{m}^3$	No. (%) Samples Exceeding Standards Federal > 150 $\mu\text{g}/\text{m}^3$ State > 50 $\mu\text{g}/\text{m}^3$	Annual Average Conc. ^{f)} (AAM) $\mu\text{g}/\text{m}^3$	No. Days of Data	Max. Conc. in $\mu\text{g}/\text{m}^3$	98 th Percentile $\mu\text{g}/\text{m}^3$	No. (%) Samples Exceeding Federal Std > 35 $\mu\text{g}/\text{m}^3$	Annual Average Conc. ^{h)} (AAM) $\mu\text{g}/\text{m}^3$	Max. Monthly Average Conc. $\mu\text{g}/\text{m}^3$	Max. 3-Months Rolling Averages $\mu\text{g}/\text{m}^3$	No. Days of Data	Max. Conc. in $\mu\text{g}/\text{m}^3$
LOS ANGELES COUNTY														
1 Central LA	087	277*	67	0	18(6%)	32.4	357	44.39	27.3	2(0.6%)	11.83	0.016	0.01	
2 Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	--	--	
3 Southwest Coastal LA County	820	60	43	0	0(0%)	21.6	--	--	--	--	--	0.006	0.01	
4 South Coastal LA County 1	072	--	--	--	--	--	356	29.37	23.56	0	10.36	--	--	
4 South Coastal LA County 2	077	60	56	0	3(5%)	27.8	350	28.93	22.05	0	9.62	0.008	0.01	
4 South Coastal LA County 3	033	59	75	0	8(14%)	31.9	--	--	--	--	--	--	--	
4 L-710 Near Road [#]	032	--	--	--	--	--	352	33.31	26.09	0	12.03	--	--	
6 West San Fernando Valley	074	--	--	--	--	--	113	30.05	24.59	0	9.23	--	--	
8 West San Gabriel Valley	088	--	--	--	--	--	119	29.21	25.38	0	9.59	--	--	
9 East San Gabriel Valley 1	060	60	74	0	12(20%)	33.7	122	32.17	29.01	0	10.15	--	--	
9 East San Gabriel Valley 2	591	362	74	0	21(6%)	29.8	--	--	--	--	--	--	--	
10 Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	
11 South San Gabriel Valley	085	--	--	--	--	--	120	46.59	25.13	2(1.7%)	11.75	0.011	0.01	
12 South Central LA County	112	--	--	--	--	--	115	36.35	26.35	1(0.9%)	11.13	0.016	0.01	
13 Santa Clarita Valley	090	60	96	0	1(2%)	23.4	--	--	--	--	--	--	--	
ORANGE COUNTY														
16 North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	
17 Central Orange County	3176	353	74	0	3(1%)	24.4	349	44.45	24.02	1(0.3%)	9.47	--	--	
17 I-5 Near Road [#]	3131	--	--	--	--	--	--	--	--	--	--	--	--	
18 North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	
19 Saddleback Valley	3812	59	59	0	1(2%)	21.0	117	24.79	13.41	0	7.36	--	--	
RIVERSIDE COUNTY														
22 Corona/Norco Area	4155	51*	62	0	7(14%)	31.7	--	--	--	--	--	--	--	
23 Metropolitan Riverside County 1	4144	302*	82	0	58(19%)	36.9	357*	39.12	31.65	4(1.1%)	12.54	0.007	0.01	
23 Metropolitan Riverside County 3	4165	356*	116	0	175(49%)	49.0	352*	45.64	35.14	6(1.7%)	14.02	--	--	
24 Perris Valley	4149	57	76	0	5(9%)	32.2	--	--	--	--	--	--	--	
25 Elsinore Valley	4158	366	99	0	4(1%)	21.4	--	--	--	--	--	--	--	
26 Temecula Valley	4031	--	--	--	--	--	--	--	--	--	--	--	--	
29 San Geronimo Pass	4164	57	65	0	3(5%)	24.0	--	--	--	--	--	--	--	
30 Coachella Valley 1**	4137	355*	113	0	6(2%)	20.8	112	14.71	12.43	0	5.53	--	--	
30 Coachella Valley 2**	4157	313**	137	0	56(18%)	36.9	115	25.84	15.04	0	7.74	--	--	
30 Coachella Valley 3**	4032	272**	150	0	76(28%)	43.0	--	--	--	--	--	--	--	
SAN BERNARDINO COUNTY														
32 Northwest San Bernardino Valley	5175	363	72	0	5(1%)	25.0	--	--	--	--	--	0.007	0.01	
33 I-10 Near Road [#]	5035	--	--	--	--	--	--	--	--	--	--	--	--	
33 CA-60 Near Road [#]	5036	--	--	--	--	--	347**	44.14	33.02	6(1.7%)	14.73	--	--	
34 Central San Bernardino Valley 1	5197	61	94	0	15(25%)	38.1	111*	30.45	26.25	0	12.04	--	--	
34 Central San Bernardino Valley 2	5203	333*	91	0	33(10%)	33.1	113*	32.54	27.12	0	10.84	0.010	0.01	
35 East San Bernardino Valley	5204	56	72	0	4(7%)	27.8	--	--	--	--	--	--	--	
37 Central San Bernardino Mountains	5181	61	46	0	0(0%)	17.1	--	--	--	--	--	--	--	
38 East San Bernardino Mountains	5818	--	--	--	--	--	55	28.42	22.14	0	6.83	--	--	
DISTRICT MAXIMUM			150*	0*	175*	49.0*		46.6*	35.1*	6*	14.73*	0.016**	0.01**	
SOUTH COAST AIR BASIN			116*	0*	181*	49.0*		46.6*	35.1*	9*	14.73*	0.016**	0.01**	

* Incomplete data due to the site improvement. ** Salton Sea Air Basin $\mu\text{g}/\text{m}^3$ – Micrograms per cubic meter of air AAM – Annual Arithmetic Mean -- Pollutant not monitored
e) PM10 statistics listed above are based on combined Federal Reference Method (FRM) and Federal Equivalent Method (FEM) data.
f) State annual average (AAM) PM10 standard is $> 20 \mu\text{g}/\text{m}^3$. Federal annual PM10 standard (AAM $> 50 \mu\text{g}/\text{m}^3$) was revoked in 2006.
g) PM2.5 statistics listed above are for the FRM data only. FEM PM2.5 continuous monitoring instruments were operated at some of the above locations for real-time alerts and forecasting only.
h) Both Federal and State standards are annual average (AAM) $> 12.0 \mu\text{g}/\text{m}^3$.
i) Federal lead standard is 3-months rolling average $> 0.15 \mu\text{g}/\text{m}^3$; state standard is monthly average $\geq 1.5 \mu\text{g}/\text{m}^3$. Lead standards were not exceeded.
j) State sulfate standard is 24-hour $\geq 25 \mu\text{g}/\text{m}^3$. There is no federal standard for sulfate. Sulfate data is not available at this time.
+ High PM10 ($\geq 155 \mu\text{g}/\text{m}^3$) data recorded in Coachella Valley (due to high winds) and PM2.5 data recorded in the Basin (due to Independence Day fireworks) are excluded in accordance with the U.S. EPA Exceptional Event Rule.
** Higher lead concentrations were recorded at near-source monitoring sites immediately downwind of stationary lead sources. Maximum monthly and 3-month rolling averages recorded were $0.088 \mu\text{g}/\text{m}^3$ and $0.06 \mu\text{g}/\text{m}^3$, respectively.
Four near-road sites measuring one or more of the pollutants PM2.5, CO and/or NO2 are operating near the following freeways: I-5, I-10, CA-60 and I-710.



Figure 9 SCAQMD 2015 Air Quality Data Summary Continued

APPENDIX B
Detailed Site Information

Detailed information for air monitoring locations are included in site reports. For information on monitoring objectives, purposes and scales, please refer to the main text of this plan.

1. Anaheim
2. Anaheim Route 5 Near Road
3. ATSF (Exide)
4. Azusa
5. Banning Airport
6. Big Bear
7. Closet World (Quemetco)
8. Compton
9. Costa Mesa
10. Crestline
11. Fontana
12. Glendora
13. Indio
14. La Habra
15. Lake Elsinore
16. LAX Hastings
17. Long Beach (Hudson)
18. Long Beach Route 710 Near Road
19. Long Beach North
20. Long Beach South
21. Los Angeles (Main Street)
22. Mecca (Saul Martinez)
23. Mira Loma (Van Buren)
24. Mission Viejo
25. Norco
26. Ontario Etiwanda Near Road
27. Ontario Route 60 Near Road
28. Palm Springs
29. Pasadena
30. Perris
31. Pico Rivera #2
32. Pomona
33. Redlands
34. Rehrig (Exide)
35. Reseda
36. Rubidoux
37. San Bernardino
38. Santa Clarita
39. SA Recycling²
40. Temecula
41. Uddelholm (Trojan Battery)
42. Upland
43. West Los Angeles

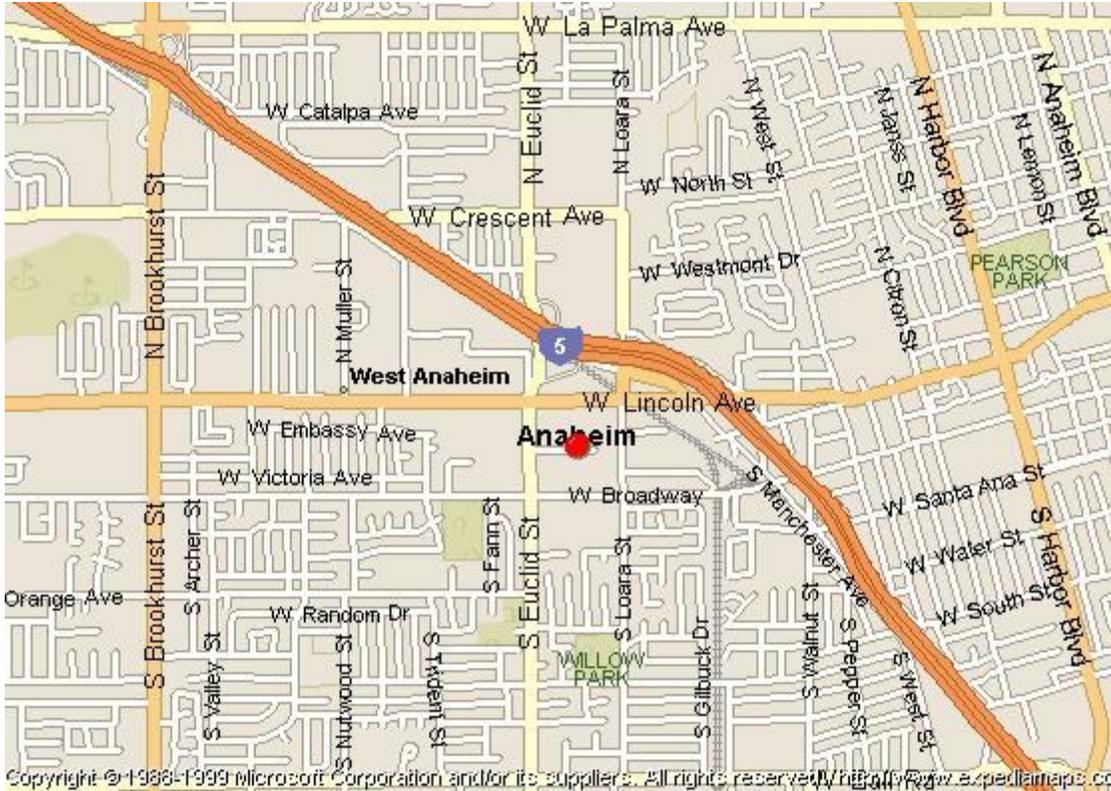
Table 26 Selected POC, Parameter and Method Codes¹

Instrument	Pollutant	POC Code	Method Code	Parameter Code
910	NATTS VOCs	4	172	43218, 43372, 43505, 43551, 43552, 43802, 43803, 43804, 43815, 43817, 43824, 43829, 43843, 43860, 45109, 45201, 45202, 45203, 45204, 45220, 45805, 45807.
910	PAMS VOCs	2, 7 or 8	126	43000, 43102, 43202, 43203, 43204, 43205, 43206, 43212, 43214, 43216, 43217, 43220, 43221, 43224, 43226, 43227, 43230, 43231, 43232, 43233, 43235, 43238, 43242, 43243, 43244, 43245, 43247, 43248, 43249, 43250, 43252, 43253, 43261, 43262, 43263, 43280, 43284, 43285, 43291, 43954, 43960, 45109, 45201, 45202, 45203, 45204, 45207, 45208, 45209, 45210, 45211, 45212, 45213, 45218, 45219, 45220, 45225.
ATEC 8000	PAMS Carbonyls	2 or 8	102	43502, 43503.
GMW 1200	PM10	1,2,4, or 6	063 and 102	81102, 85101, 82203, 82308, 82403.
Anderson RAAS	PM2.5 Particulate	1 or 2	780	68108, 68107, 68106, 68105, 68104, 68103, 68101, 68109, 68102
Anderson RAAS	PM2.5 Particulate	1 or 2	120	88101
Met One SASS	Speciated PM2.5	11 or 12	812	88301, 88306, 88302, 88403.
Met One SASS	Speciated PM2.5	11 or 12	810	68108, 68107, 68106, 68105, 68104, 68103, 88502.
Met One SASS	Speciated PM2.5	11 or 12	780	68101, 68109, 68102.
Met One SASS	Speciated PM2.5	11 or 12	811	88102, 88103, 88107, 88110, 88111, 88118, 88115, 88112, 88113, 88114, 88126, 88128, 88132, 88134, 88136, 88152, 88180, 88176, 88154, 88165, 88168, 88169, 88160, 88161, 88179, 88164, 88183, 88167.
Met One SASS	Speciated PM2.5	11 or 12	816	88380, 88383, 88384, 88385, 88370, 88374, 88375, 88376, 88377.
Xontech 924	CR6	4 or 5	920	12115
Xontech 924	Carbonyls	4	102	43502, 43503.
Xontech 924	Metals	2 or 4	110	85102, 85103, 85105, 85110, 85128, 85132, 85136.

¹ Sampler and monitor locations along with specific method codes are identified in the detailed site plans, Appendix B

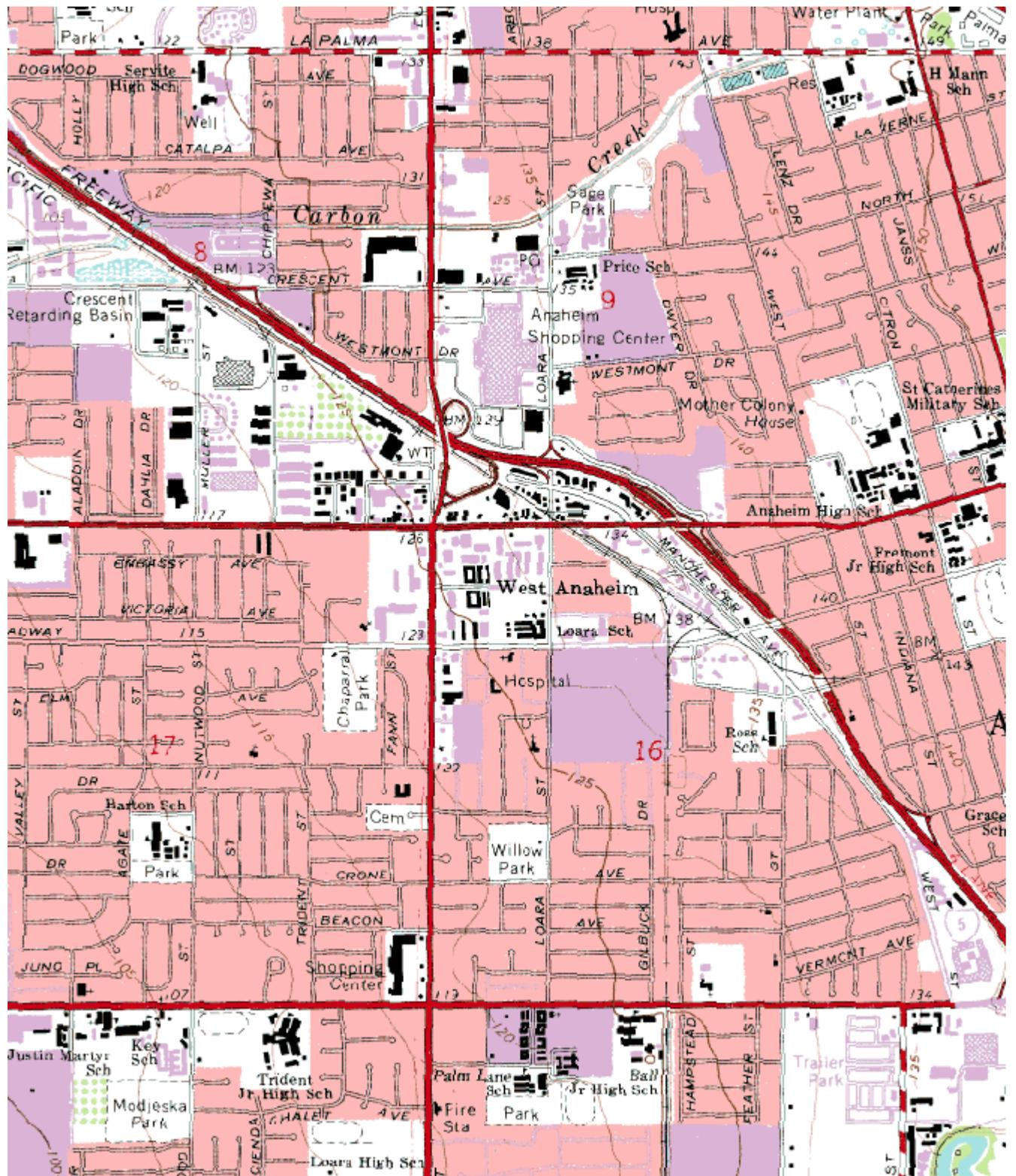
South Coast AQMD Site Survey Report for Anaheim-Loara School

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
06059007	30178	08/2001	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1630 Pampas Ln Anaheim, CA 92802	Orange	South Coast	33° 49' 50"N	117° 56' 18"W	39



Detailed Site Information

Local site name	Anaheim-Loara School			
AQS ID	060590007			
GPS coordinates (decimal degrees)	Latitude: 33° 49' 50" Longitude: 117° 56' 18"			
Street Address	1630 Pampas Ln, Anaheim, CA 92802			
County	Orange			
Distance to roadways (meters)	7.5 – 10.5; 420 meters			
Traffic count (AADT, year)	< 500 / 2012; I-5/Euclid, 256,000, I-5, 2011			
Groundcover (e.g. asphalt, dirt, sand)	Grass			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 5	Ozone, 1	PM10, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	Primary
Parameter code	42101	42602	44201	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	Thermo 49i	GMW 1200 SSI
Method code	158	074	047	063, 102
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Urban	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	08/2001	08/2001	08/2001	08/2001
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.5	4.5	4.5	3.5
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	6 (palm tree)	6 (palm tree)	6 (palm tree)	6 (palm tree)
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	2.8
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	5.6	6.8	6.7	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/01/2016	06/01/2016	06/01/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	04/21/2016 11/10/2016

Pollutant, POC	Continuous PM10, 3	Continuous PM2.5, 3	Speciated PM2.5, 11	24 Hour PM2.5, 1
Primary / QA Collocated / Other	Other	Other	Other	Primary
Parameter code	81102	88502	See Table 26	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS

Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	Met One SASS	Andersen RAAS PM2.5
Method code	122	170	See Table 26	780, 120
FRM/FEM/ARM/other	FEM	FEM	Other	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	03/04/2010	08/2001	08/2001	08/2001
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:6	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	No CFR mandated sampling schedule.	1:3
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.8	4.8	2.9	2.9
Distance from supporting structure (meters)	2.2	2.2	2.2	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	6 (palm tree)	6 (palm tree)	6 (palm tree)	6 (palm tree)
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	2.8	3.9	N/A	3.9
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A

Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	No, unless manual sampler has missing data.	N/A	Yes
Frequency of flow rate verification for manual PM samplers	N/A	N/A	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	Monthly	Monthly	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06/17/2016, 12/15/2016	06/17/2016, 12/15/2016	04/21/2016 11/10/2016	04/21/2016 11/10/2016

**Anaheim-Loara School
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Anaheim-Loara School
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



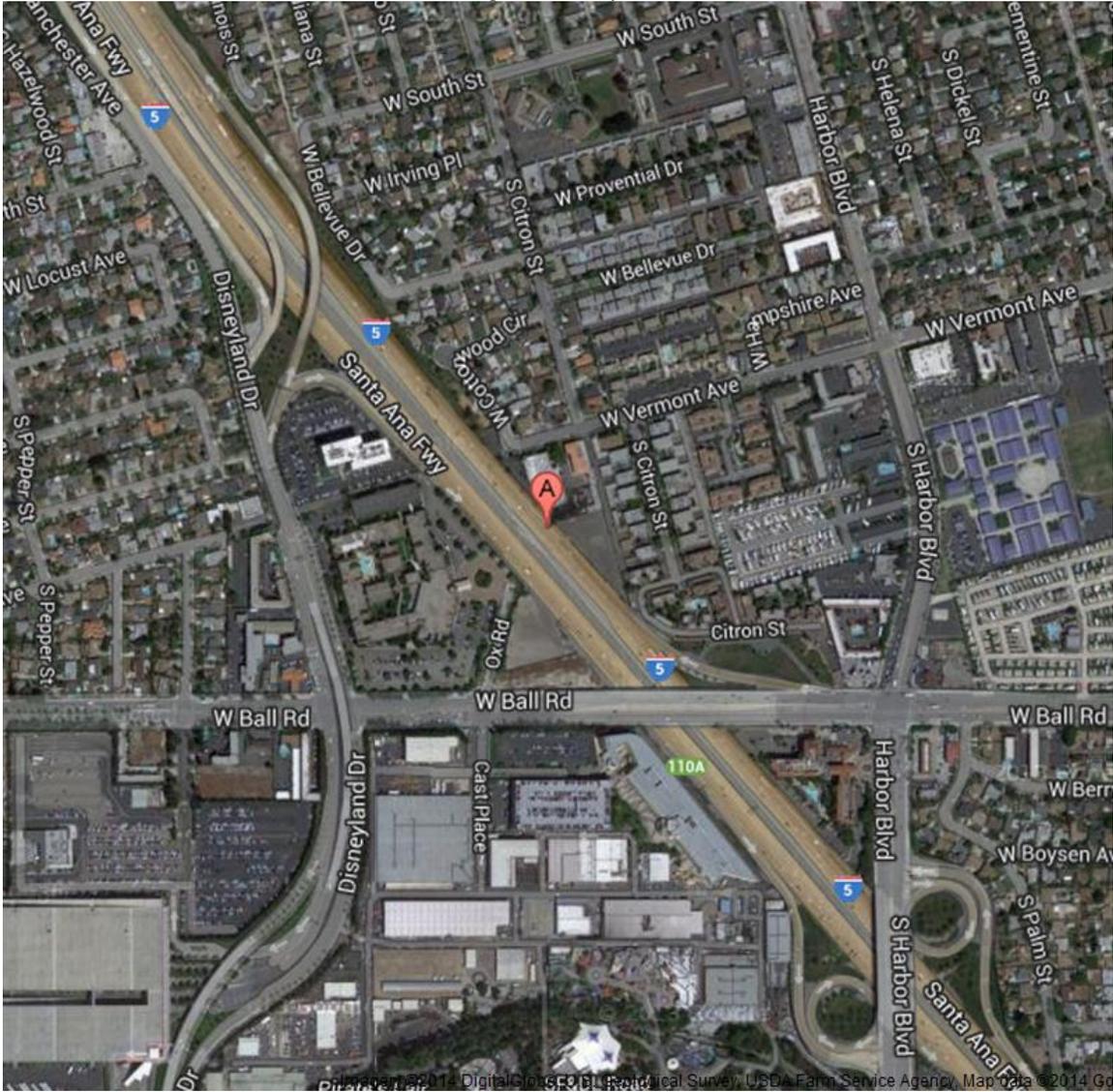
Looking at the probe from the South.



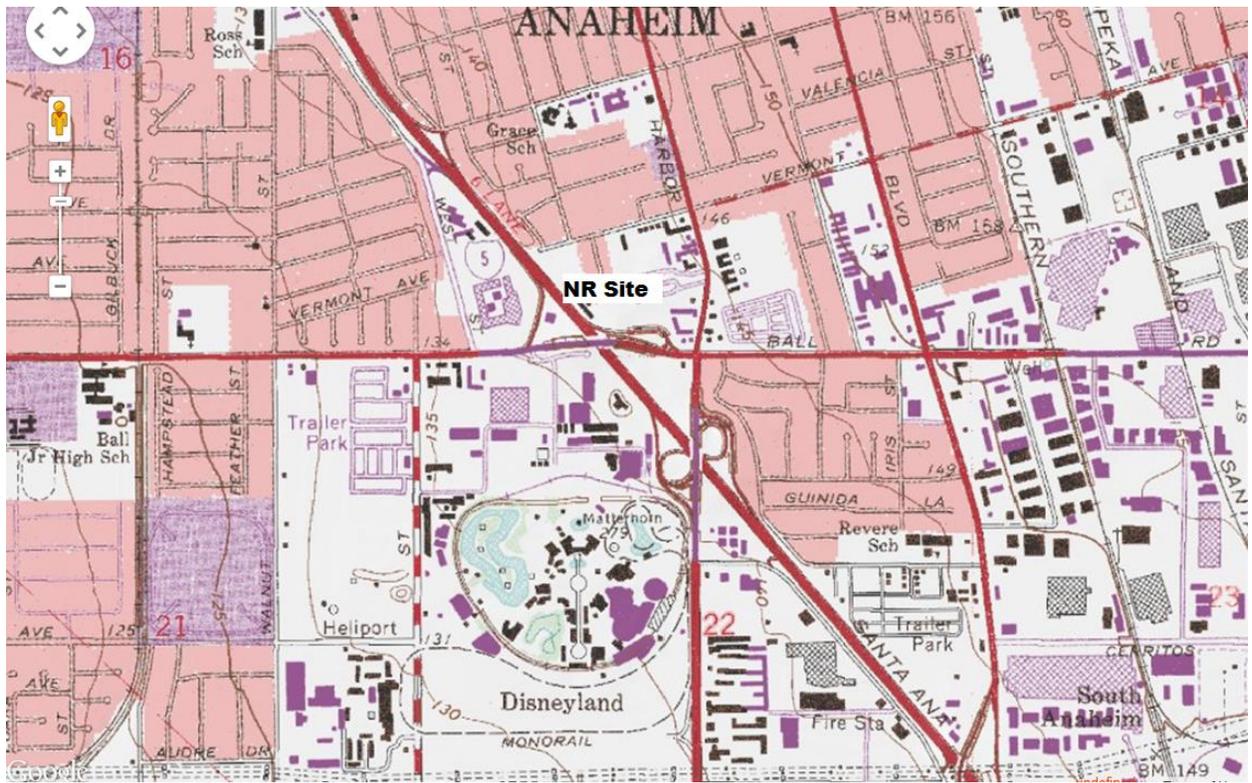
Looking at the probe from the West.

South Coast AQMD Site Survey Report for Anaheim Route 5-Near Road

Last updated: May, 2017



Site Address	County	Air Basin	Latitude	Longitude	Elevation
812 W. Vermont St.	Orange	South Coast	33.819305	-117.918759	43.6m
AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code		
060590008	30031	01/14	South Coast AQMD (061)		



Detailed Site Information

Local site name	Anaheim Near Road		
AQS ID	060590008		
GPS coordinates (decimal degrees)	Latitude: 33.819305 Longitude: -117.918759		
Street Address	812 W. Vermont Street, Anaheim, CA 92802		
County	Orange		
Distance to roadways (meters)	9.0 meters		
Traffic count (AADT, year)	695776 (FEAADT)		
Groundcover (e.g. asphalt, dirt, sand)	Asphalt		
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA		
Pollutant, POC	Nitrogen Dioxide, 1	Carbon Monoxide, 1	
Primary / QA Collocated / Other	N/A	N/A	
Parameter code	42602	42101	
Basic monitoring objective(s)	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS\Near Road	
Network Affiliation	Near Road	Near Road	
Instrument manufacturer and model	Thermo 42i	Thermo 48i-TLE	
Method code	074	554	
FRM/FEM/ARM/ other	FRM	FRM	
Collecting Agency	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Micro	Micro	
Monitoring start date (MM/DD/YYYY)	01/2014	12/2014	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	
Probe height (meters)	4.5	4.5	
Distance from supporting structure (meters)	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon		
Residence time for reactive gases (seconds)	6.8	6.8		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/02/2016	06/02/2016		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A		

**Anaheim-Near Road
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Anaheim-Near Road
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



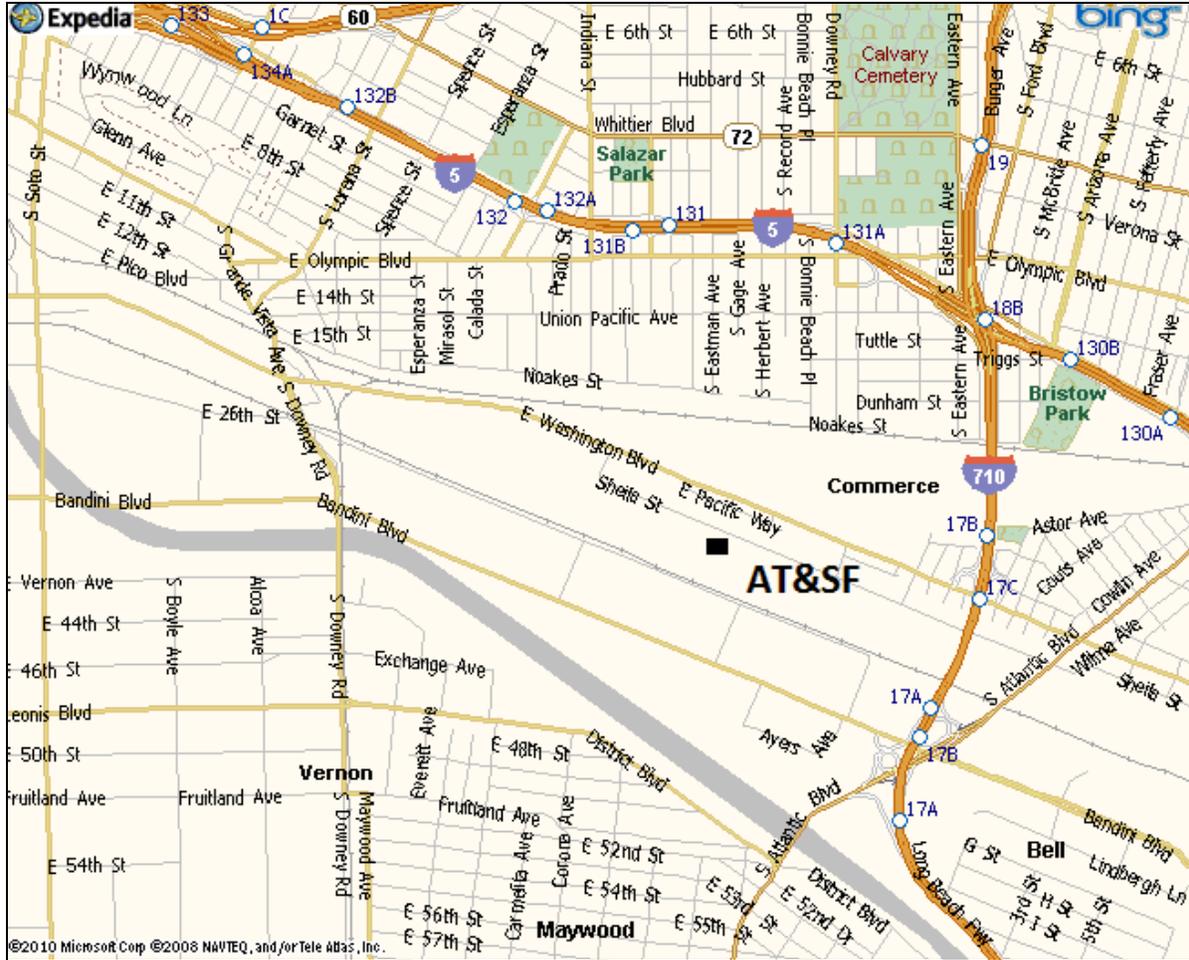
Looking at the probe from the South.

Unavailable due to freeway

Looking at the probe from the West.

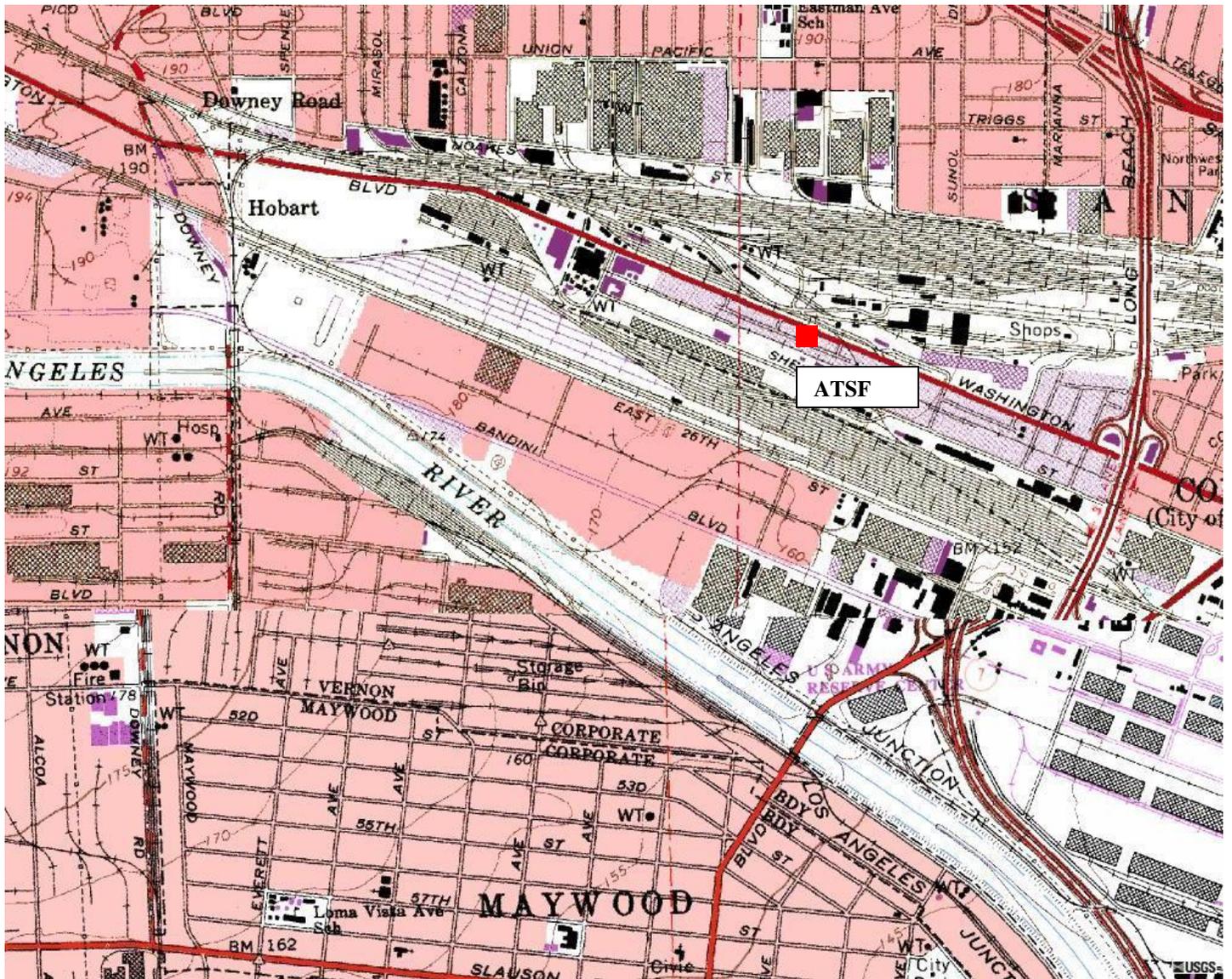
Quality Assurance Site Survey Report for AT&SF (Exide)

Last updated May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371406	70042	01/01/1999	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
Railroad Yard (Washington Blvd). City of Commerce	Los Angeles	South Coast	34° 00' 30" N	118° 11' 26" W	53 m



Detailed Site Information

Local site name	AT&SF			
AQS ID	060371406			
GPS coordinates (decimal degrees)	Latitude: 34° 00'30" Longitude: -118° 11' 26"			
Street Address	Railroad yard off Washington Blvd, Commerce, CA			
County	Los Angeles			
Distance to roadways (meters)	257 (Washington Blvd.)			
Traffic count (AADT, year)	38,513 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Dirt/Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA			
Pollutant, POC	Lead, 1			
Primary / QA Collocated / Other	N/A			
Parameter code	14129			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Source Oriented			
Monitor (type)	SLAMS			
Network Affiliation	Microscale Pb			
Instrument manufacturer and model	Hi-Q TSP			
Method code	110			
FRM/FEM/ARM/ other	FRM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Micro			
Monitoring start date (MM/DD/YYYY)	01/01/1999			
Current sampling frequency (e.g. 1:3, continuous)	1:3			
Calculated sampling frequency (e.g. 1:3/1:1)	1;6			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	3.5			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			
Distance from obstructions not on	N/A			

roof (meters)				
Distance from trees (meters)	N/A			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases (seconds)	N/A			
Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A			
Frequency of flow rate verification for manual PM samplers	Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/17/2016, 11/18/2016			

**Exide - ATSF
Site Photos (Cont.)**



Looking at the probe to the West.



Looking from the probe to the East.



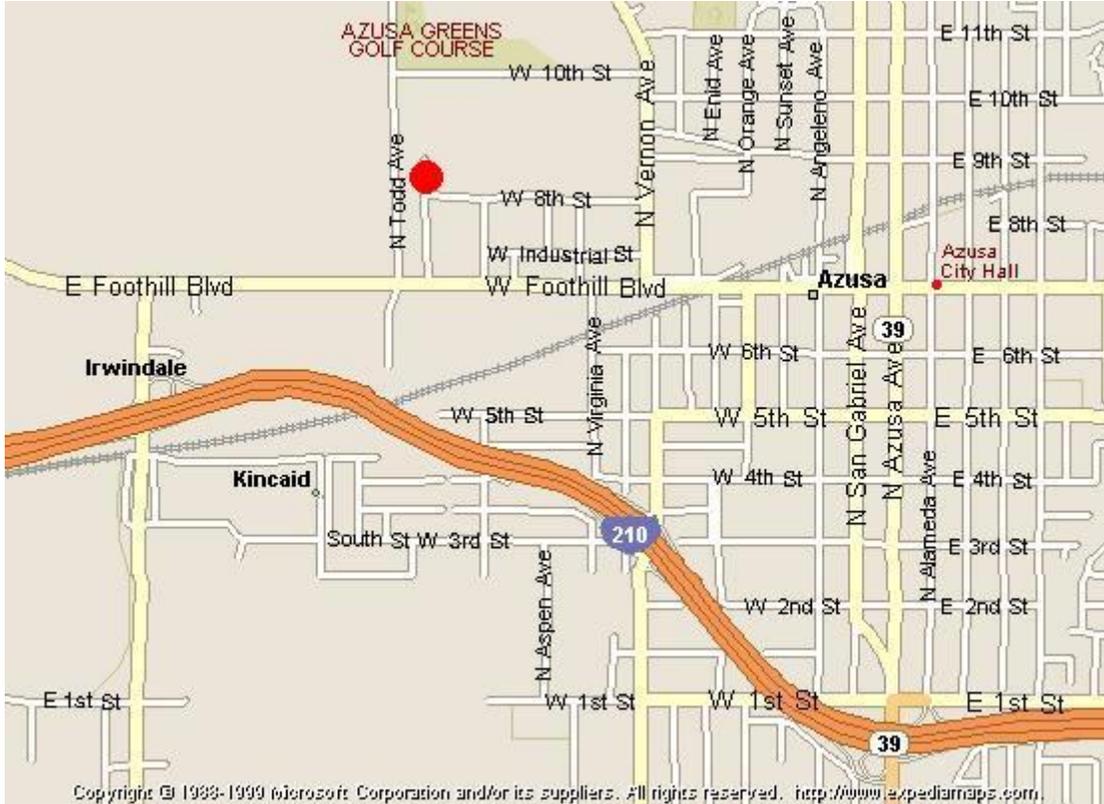
Looking from the probe to the South.



Looking from the probe to the North.

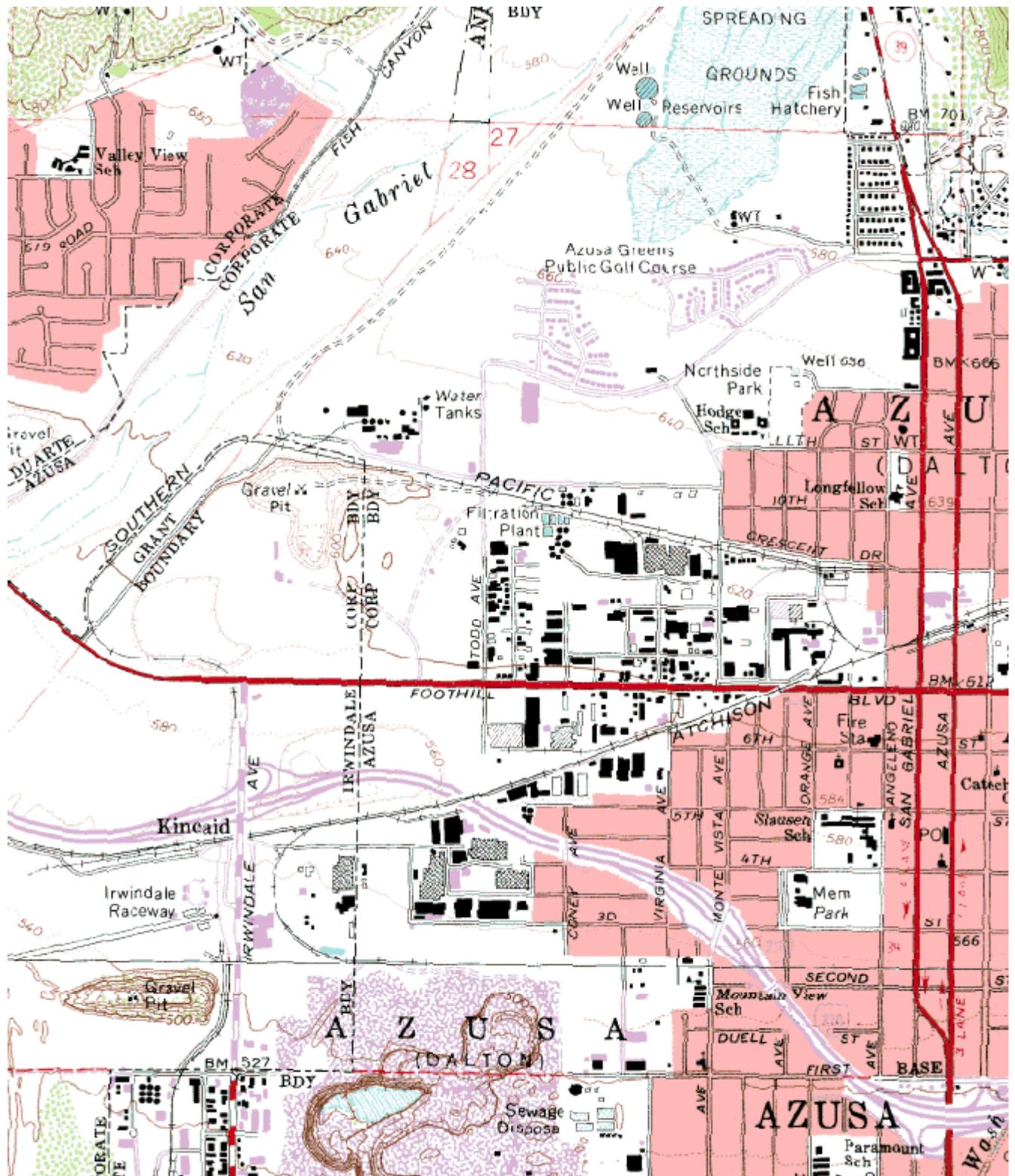
South Coast AQMD Site Survey Report for Azusa

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060370002	70060	01/1957	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
803 N. Loren Ave Azusa, CA 91702	Los Angeles	South Coast	34° 08' 11"N	117° 55' 26"W	187



Detailed Site Information

Local site name	Azusa			
AQS ID	060370002			
GPS coordinates (decimal degrees)	Latitude: 34° 08' 11" Longitude: 117° 55' 26"			
Street Address	803 N Loren Ave, Azusa, CA 91702			
County	Los Angeles			
Distance to roadways (meters)	14.5 – 18.5; 695			
Traffic count (AADT, year)	< 1000 / 2012; Route 210/Irwindale, 266,000, 2011			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 2	Ozone, 1	PM10, 2
Primary / QA Collocated / Other	N/A	N/A	N/A	Primary
Parameter code	42101	42602	44201	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	PAMS	PAMS	N/A
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	API/Teledyne 400E	Sierra Andersen 1200 SSI
Method code	158	074	87	063, 102
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Urban	Urban	Neighborhood
Monitoring start date (MM/DD/YYYY)	01/1957	01/1957	01/1957	01/01/1985
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	5.5	5.5	5.5	5.1
Distance from supporting structure (meters)	2	2	2	2
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	7.0	8.8	7.9	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	03/09/2016	03/09/2016	03/09/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/10/2016, 11/05/2016

Pollutant, POC	24 Hour PM2.5, 1	Metals Cr-6, Carbonyls, 4	VOCs 8x3, 1	VOCs 24 hour, 2
Primary / QA Collocated / Other	Primary	N/A	N/A	N/A

Parameter code	See Table 26	N/A	See Table 26	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	CA Air Toxics	PAMS	PAMS
Instrument manufacturer and model	Andersen RAAS PM2.5	Xontech 924	RM Env. 910/Xon Tech 912	Xon Tech 910
Method code	780, 120	N/A	See Table 26	See Table 26
FRM/FEM/ARM/ other	FRM	Other	Other	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	ARB Toxics	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	ARB	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Urban	Urban
Monitoring start date (MM/DD/YYYY)	01/04/1999	01/1989	06/01/1995	06/01/1995
Current sampling frequency (e.g. 1:3, continuous)	Daily	1:12	1:6 / 1:3	1:6 / 1:3
Calculated sampling frequency (e.g. 1:3/1:1)	1:3	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	07/01-09/30	01/01-12/31
Probe height (meters)	5.5	5.6	5.5	5.5
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	26	26	26	26
Distance between collocated monitors (meters)	N/A	N/A	4	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	Stainless steel	Stainless steel

Residence time for reactive gases (seconds)	N/A	N/A	2.5	2.4
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	Yes	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	Semi Annually	Semi Annually
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/10/2016, 11/05/2016	N/A	N/A	N/A

Pollutant, POC	VOCs, N/A			
Primary / QA Collocated / Other	N/A			
Parameter code	N/A			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			
Network Affiliation	CA Air Toxics			
Instrument manufacturer and model	RM Env. 910PC			
Method code	N/A			
FRM/FEM/ARM/ other	Other			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB Toxics			
Reporting Agency	ARB			

Spatial scale (e.g. micro, neighborhood)	Neighborhood			
Monitoring start date (MM/DD/YYYY)	01/1989			
Current sampling frequency (e.g. 1:3, continuous)	1:12			
Calculated sampling frequency (e.g. 1:3/1:1)	No CFR mandated sampling schedule.			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	5.5			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			
Distance from obstructions not on roof (meters)	NA			
Distance from trees (meters)	23			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon			
Residence time for reactive gases (seconds)	N/A			
Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A			
Frequency of flow rate verification for manual PM samplers	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A			

Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A			

**Azusa
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Azusa
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



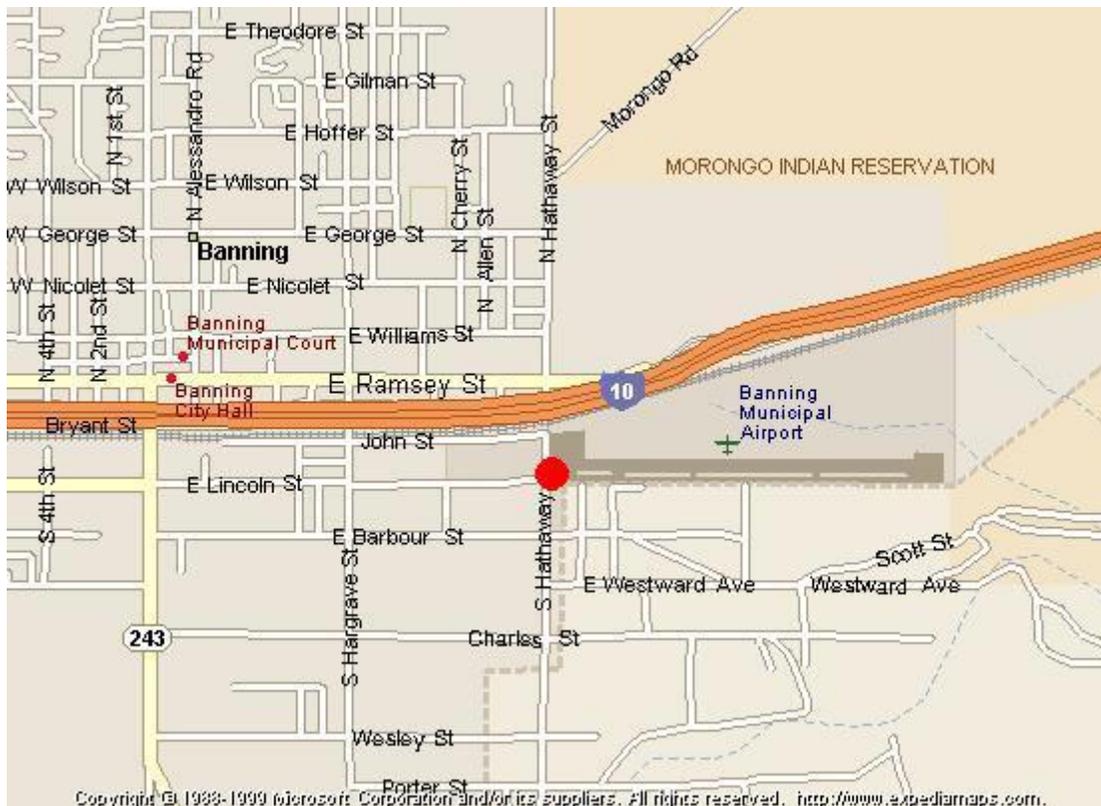
Looking at the probe from the South.



Looking at the probe from the West.

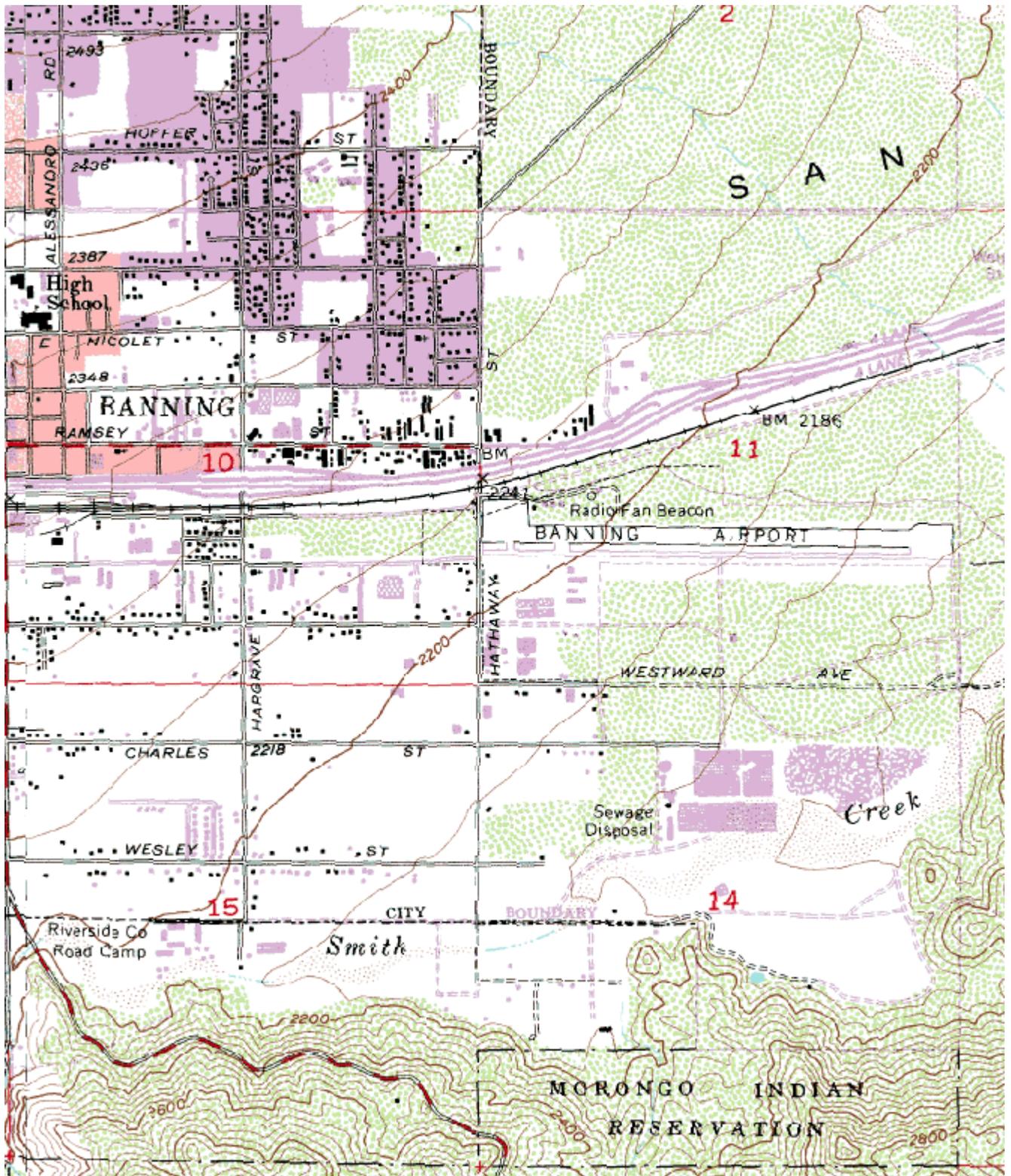
South Coast AQMD Site Survey Report for Banning-Airport

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060650012	33164	04/1997	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
200 S. Hathaway St Banning, CA 92220	Riverside	South Coast	33° 55' 14"N	116° 51' 30"W	671



Detailed Site Information

Local site name	Banning-Airport			
AQS ID	060650012			
GPS coordinates (decimal degrees)	Latitude: 33° 55' 14" Longitude: 116° 51' 30"			
Street Address	200 S Hathaway St, Banning, CA 92220			
County	Riverside			
Distance to roadways (meters)	80; 366			
Traffic count (AADT, year)	< 2,000 / 2012; I-10/Hargrave, 116,000, 2011			
Groundcover (e.g. asphalt, dirt, sand)	Gravel			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Nitrogen Dioxide, 1	Ozone, 1	PM10, 1	Continuous PM2.5, 3
Primary / QA Collocated / Other	N/A	N/A	Primary	Other
Parameter code	42602	44201	See Table 26	88502
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Thermo 42i	Thermo 49i	Sierra Andersen 1200 SSI	Met One BAM 1020
Method code	074	047	063, 102	731
FRM/FEM/ARM/ other	FRM	FEM	FRM	Non-FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	SCAQMD	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	04/01/1997	04/01/1997	04/01/1997	02/10/2006
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:6	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	1:6	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.05	4.05	3.5	4.75
Distance from supporting structure (meters)	2	2	2	2
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A
Residence time for reactive gases (seconds)	8.3	6.8	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	Monthly	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	09/07/2016	09/07/2016	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	04/13/2016, 11/01/2016	06/23/2016, 12/20/2016

**Banning-Airport
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Banning-Airport
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



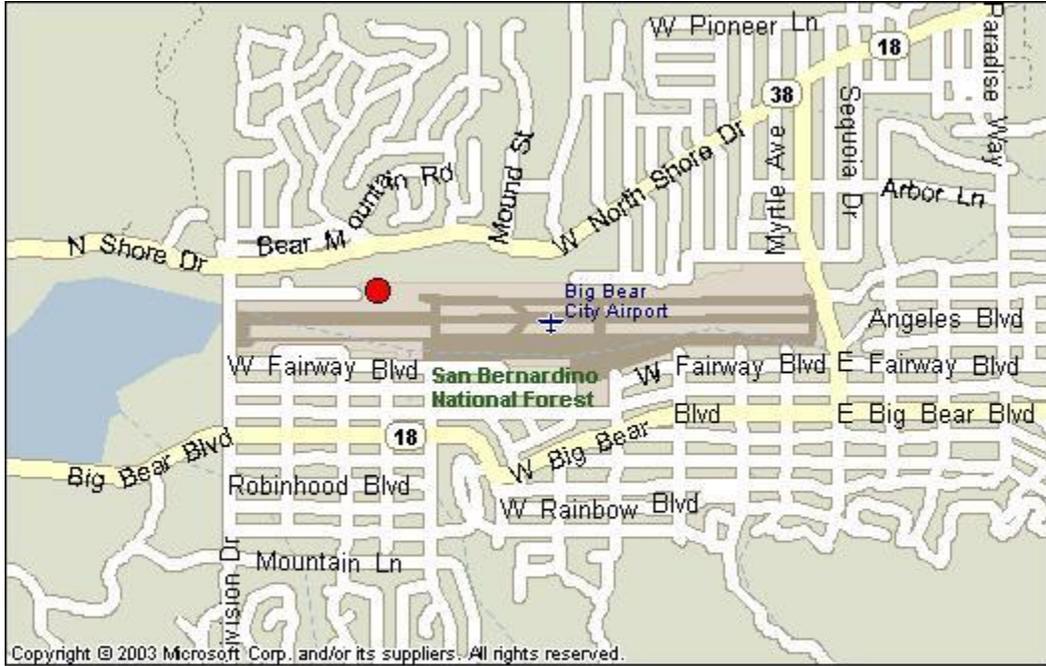
Looking at the probe from the South.



Looking at the probe from the West.

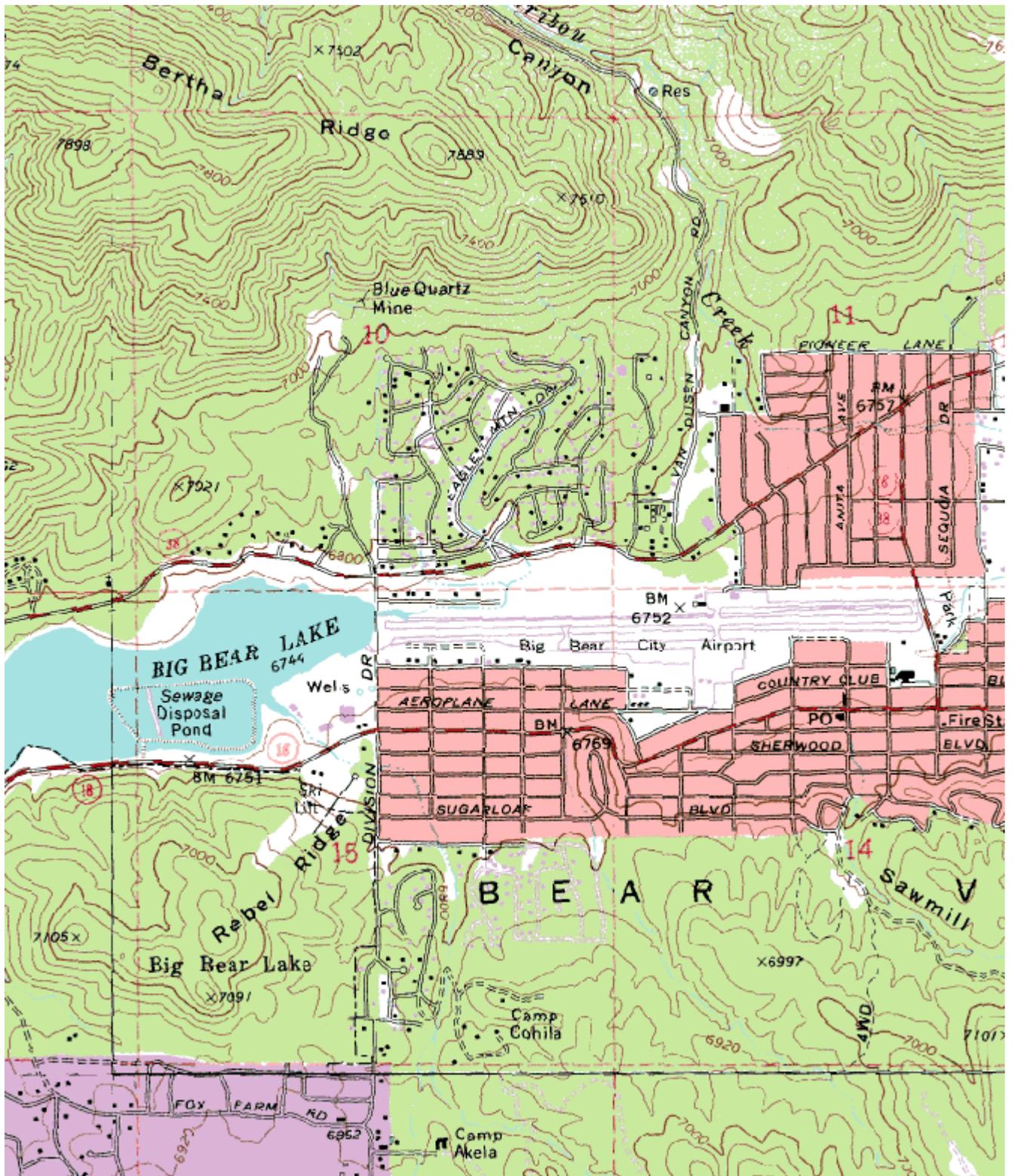
South Coast AQMD Site Survey Report for Big Bear

Last updated May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060718001	36001	02/1999	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
501 W. Valley Blvd Big Bear City, CA 92314	San Bernardino	South Coast	34° 15' 52"N	116° 51' 41"W	2059



Detailed Site Information

Local site name	Big Bear			
AQS ID	060718001			
GPS coordinates (decimal degrees)	Latitude: 34° 15' 52" Longitude: 116° 51' 41"			
Street Address	501 W. Valley Blvd, Big Bear, CA 92314			
County	San Bernardino			
Distance to roadways (meters)	114			
Traffic count (AADT, year)	2,876 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Grassland			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	24 Hour PM2.5, 1			
Primary / QA Collocated / Other	Primary			
Parameter code	See Table 26			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			
Network Affiliation	N/A			
Instrument manufacturer and model	Partisol 2000i			
Method code	780, 143			
FRM/FEM/ARM/ other	FRM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Neighborhood			
Monitoring start date (MM/DD/YYYY)	02/08/1999			
Current sampling frequency (e.g. 1:3, continuous)	1:6			
Calculated sampling frequency (e.g. 1:3/1:1)	1:6 Approved by regional administrator at inception.			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	3.5			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			
Distance from obstructions not on roof (meters)	N/A			

Distance from trees (meters)	36			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases (seconds)	N/A			
Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	Yes			
Frequency of flow rate verification for manual PM samplers	Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	04/29/2016 11/07/2016			

**Big Bear
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Big Bear
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



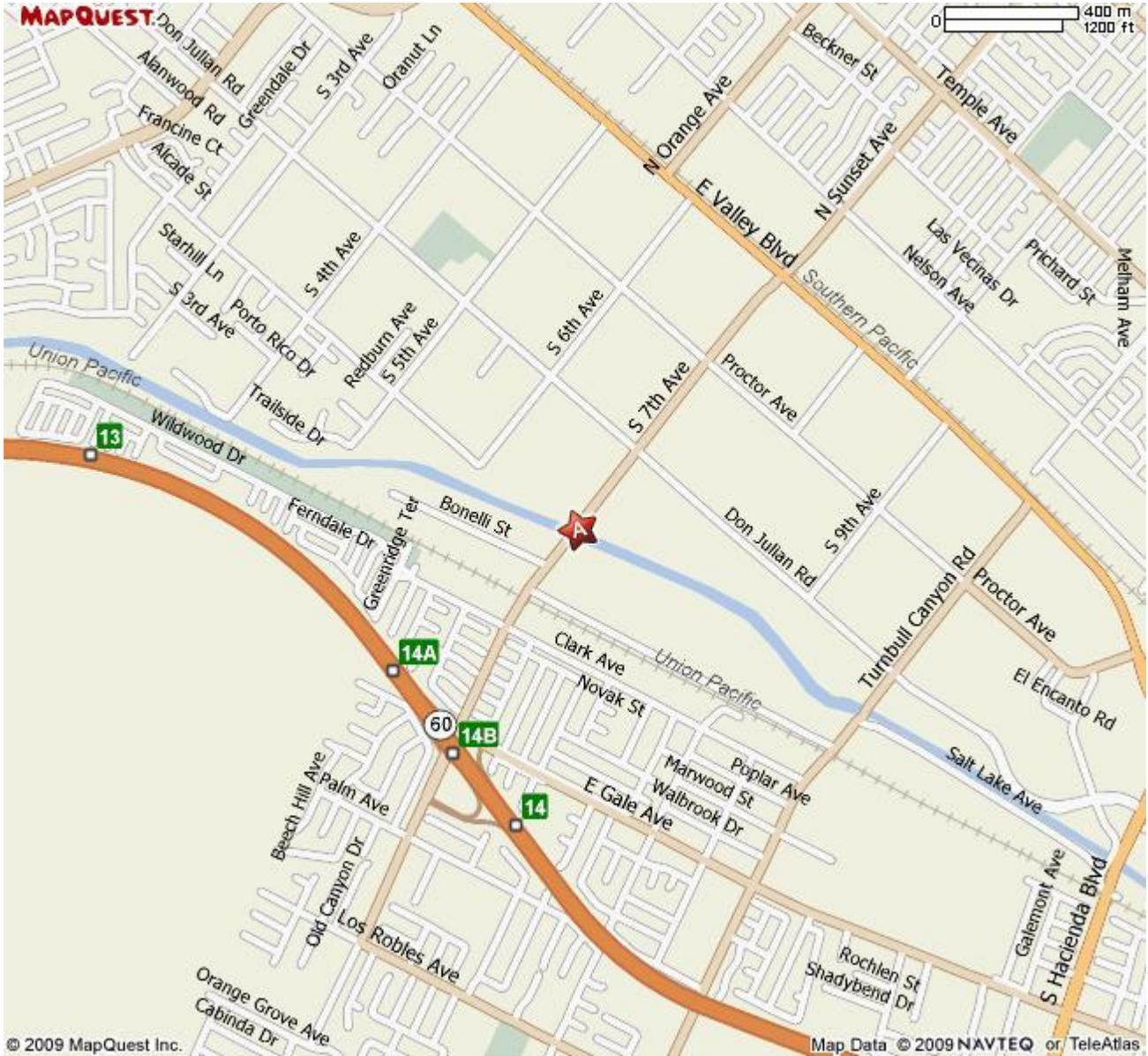
Looking at the probe from the South.



Looking at the probe from the West.

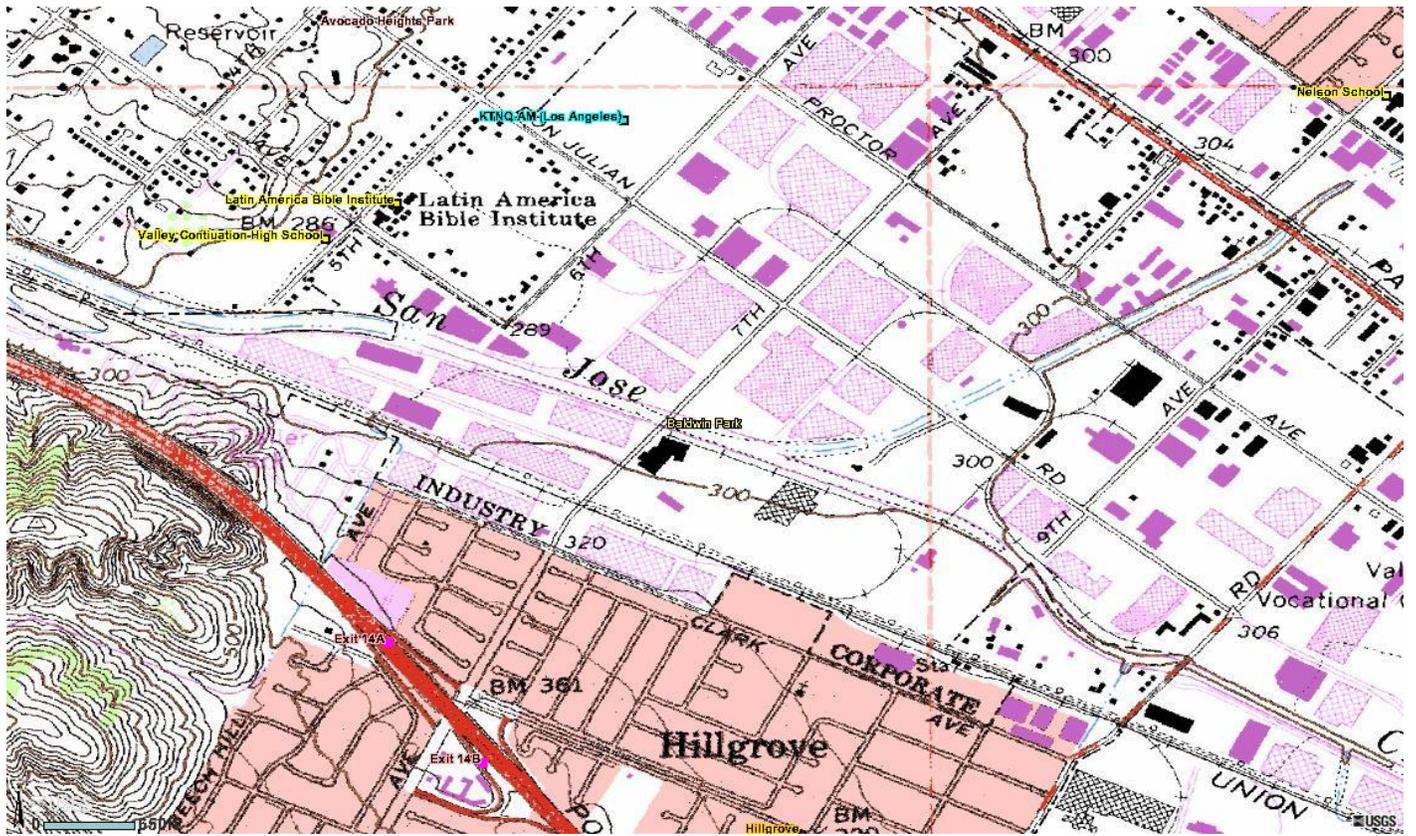
Quality Assurance Site Survey Report for Closet World (Quemetco)

Last updated May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371404	70043	10/03/2008	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
500 S. 7th Ave. City of Industry, CA 91746	Los Angeles	South Coast	34° 01' 34"N	117° 58' 54"W	89 m



Detailed Site Information

Local site name	Closet World (Quemetco)			
AQS ID	060371404			
GPS coordinates (decimal degrees)	Latitude: 34° 01' 34" Longitude: 117° 58' 54"			
Street Address	720 S 7th Ave. City of Industry, CA 91746			
County	Los Angeles			
Distance to roadways (meters)	30			
Traffic count (AADT, year)	20,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA			
Pollutant, POC	Lead, 1			
Primary / QA Collocated / Other	N/A			
Parameter code	14129			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Source Oriented			
Monitor (type)	SLAMS			
Network Affiliation	Microscale Pb			
Instrument manufacturer and model	GMW 1200 TSP			
Method code	110			
FRM/FEM/ARM/ other	FRM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Micro			
Monitoring start date (MM/DD/YYYY)	10/03/2008			
Current sampling frequency (e.g. 1:3, continuous)	1:6			
Calculated sampling frequency (e.g. 1:3/1:1)	1:6			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	2.6			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			
Distance from obstructions not on roof (meters)	N/A			

Distance from trees (meters)	N/A			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases (seconds)	N/A			
Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A			
Frequency of flow rate verification for manual PM samplers	Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/10/2016 11/18/2016			

**Quemetco – Closet World
Site Photos**



Looking North from the probe



Looking East from the probe.



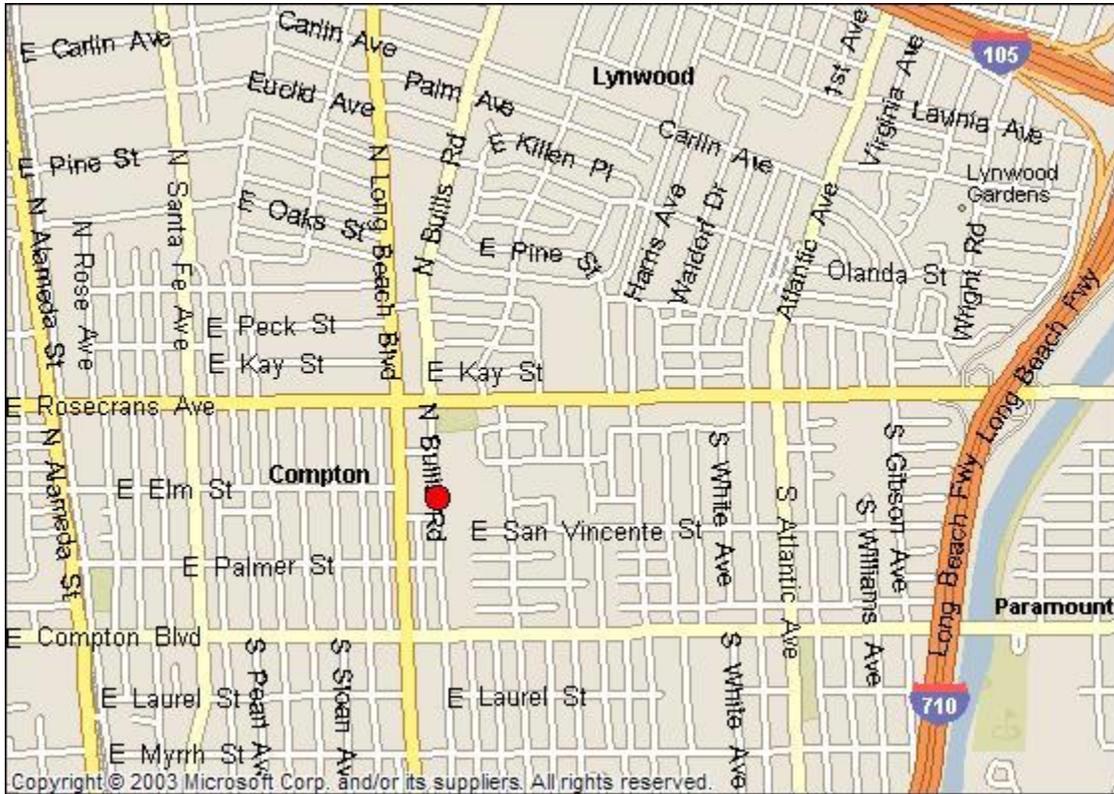
Looking South toward the probe.



Looking West from the probe

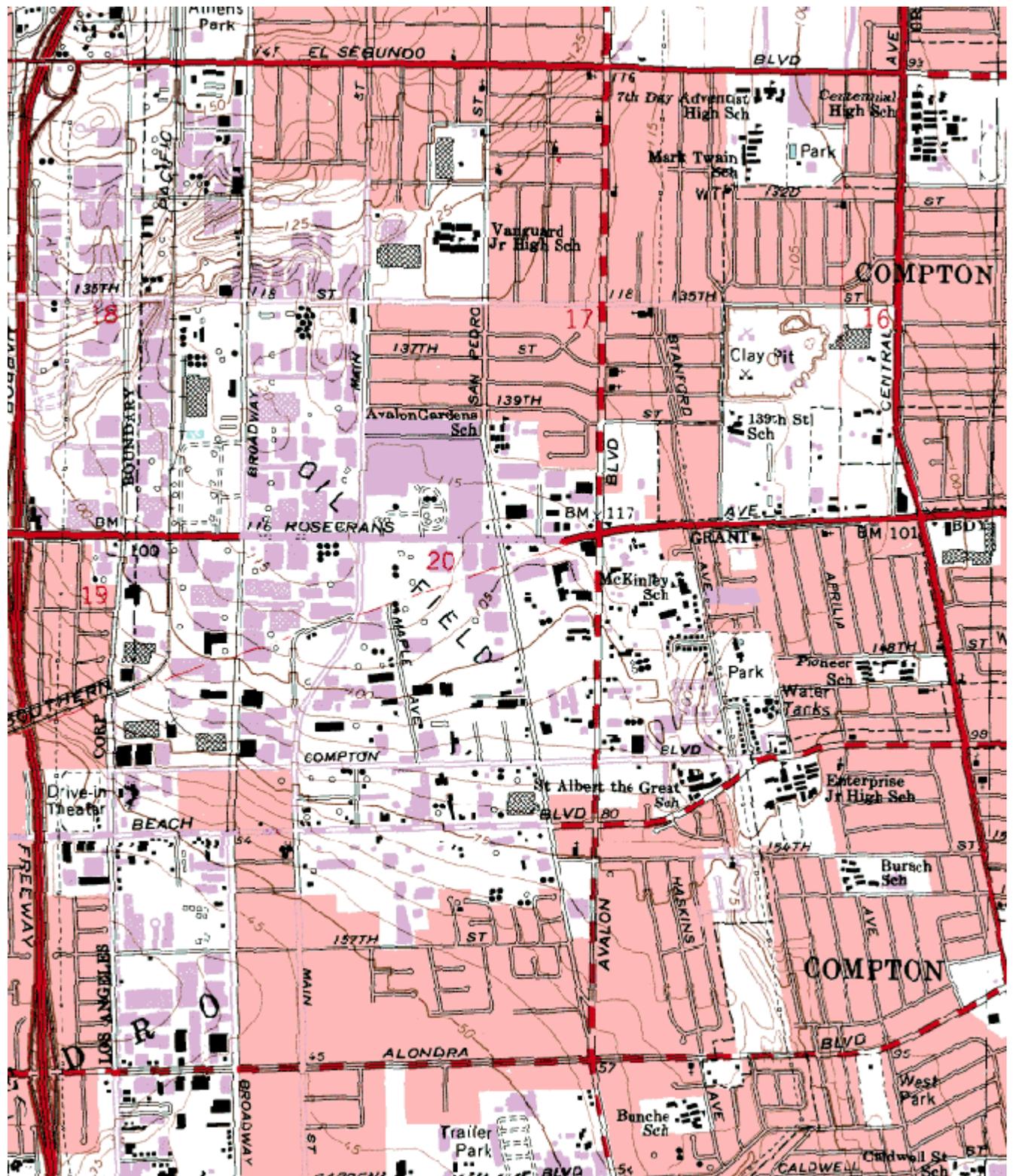
South Coast AQMD Site Survey Report for Compton

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371302	70112	01/2004	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
700 North Bullis Rd Compton, CA 90221	Los Angeles	South Coast	33° 54' 05"N	118° 12' 18"W	22



Detailed Site Information

Local site name	Compton			
AQS ID	060371302			
GPS coordinates (decimal degrees)	Latitude: 33° 54' 05" Longitude: 118° 12' 18"			
Street Address	700 N Bullis Rd, Compton, CA 90221			
County	Los Angeles			
Distance to roadways (meters)	13 – 17; 1680			
Traffic count (AADT, year)	1,000 / 2012; 710/105, 225,000, 2011			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone , 1	Lead, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	N/A
Parameter code	42101	42602	44201	14129
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Highest Concentration	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	Pb
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	Thermo 49i	GMW 1200 TSP, A Sampler
Method code	158	074	047	110
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Middle	Middle	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	01/2004	01/2004	01/2004	01/2004
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.0	4.0	4.0	3.0
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	16	16	16	13
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	5.2	6.5	5.4	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	6/4/2016	6/4/2016	6/4/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/19/2016, 11/19/2016

Pollutant, POC	24 Hour PM2.5, 1	Lead, 2		
Primary / QA Collocated / Other	Primary	N/A		
Parameter code	See Table 26	14129		

Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS	SLAMS/QA Collocated		
Network Affiliation	N/A	Pb		
Instrument manufacturer and model	Andersen RAAS PM2.5	GMW 1200 TSP, B Sampler		
Method code	780, 120	110		
FRM/FEM/ARM/ other	FRM	FRM		
Collecting Agency	SCAQMD	SCAQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD		
Reporting Agency	SCAQMD	SCAQMD		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	01/2004	05/2015		
Current sampling frequency (e.g. 1:3, continuous)	1:3	1:6		
Calculated sampling frequency (e.g. 1:3/1:1)	1:3	1;6		
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31		
Probe height (meters)	2.5	3.0		
Distance from supporting structure (meters)	2.0	2.0		
Distance from obstructions on roof (meters)	NA	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	17	13		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	2.0		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		

Residence time for reactive gases (seconds)	N/A	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	Yes	N/A		
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	N/A	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/19/2016, 11/19/2016	05/19/2016, 11/19/2016		

**Compton
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Compton
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



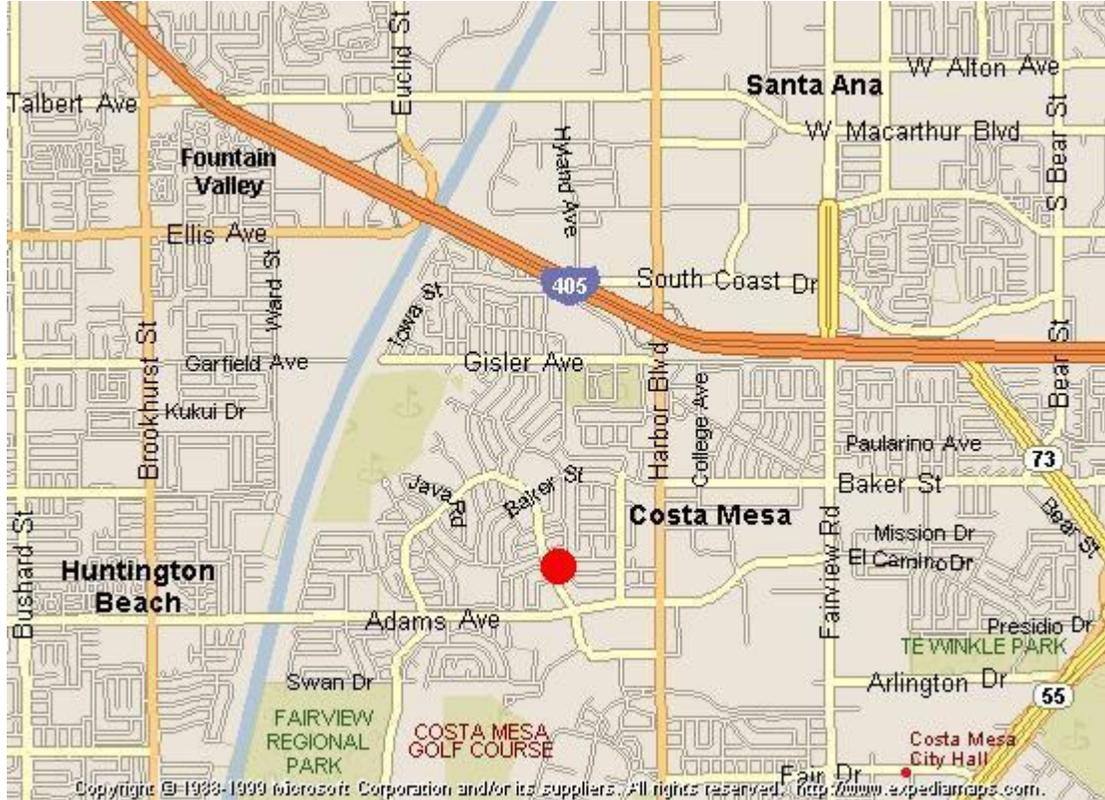
Looking at the probe from the South.



Looking at the probe from the West.

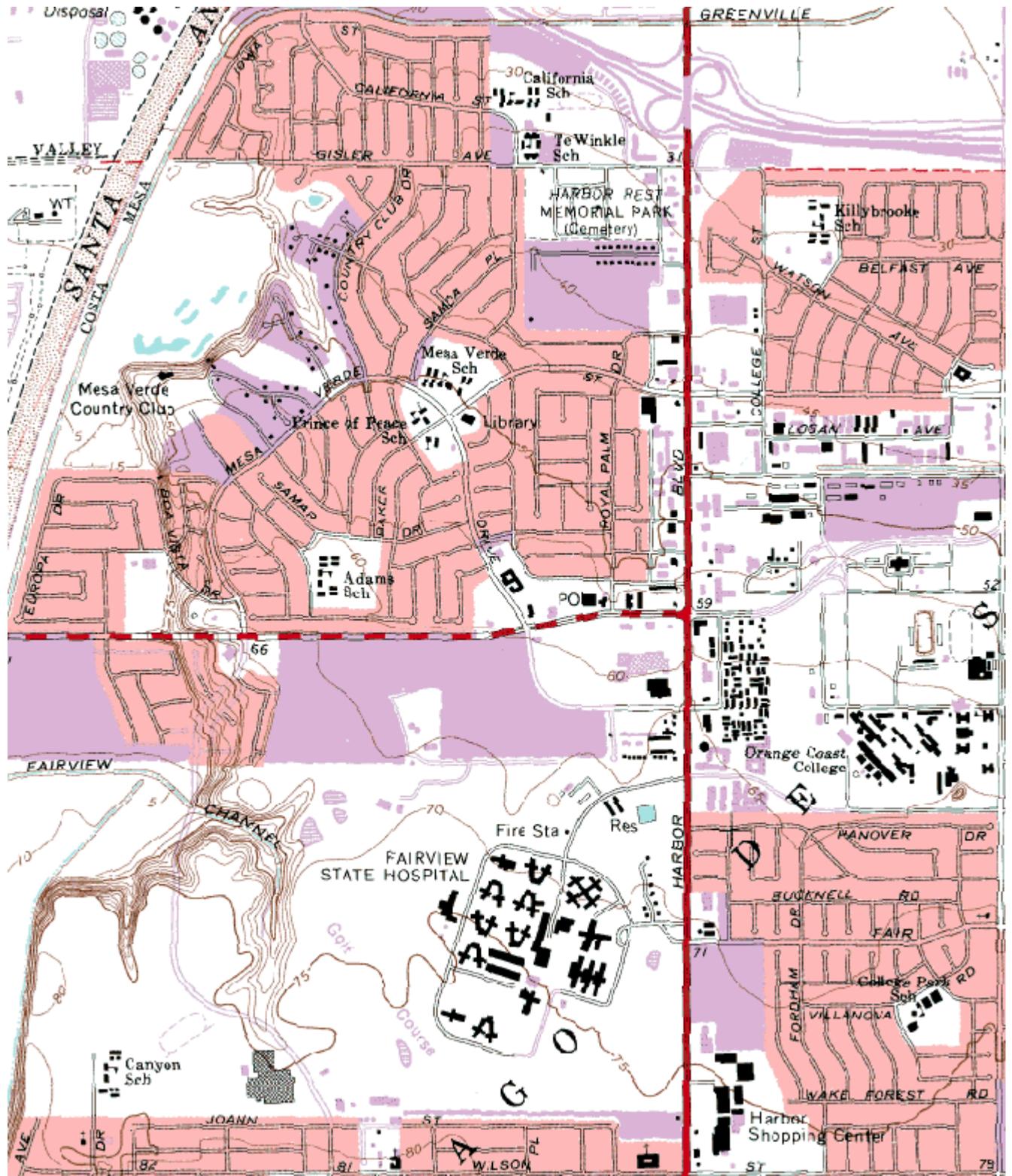
South Coast AQMD Site Survey Report for Costa Mesa-Mesa Verde Drive

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060591003	30195	11/1989	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
2850 Mesa Verde Dr East Costa Mesa, CA 92626	Orange	South Coast	33° 40' 28"N	117° 55' 33"W	17



Detailed Site Information

Local site name	Costa Mesa-Mesa Verde Drive			
AQS ID	060591003			
GPS coordinates (decimal degrees)	Latitude: 33° 40' 28" Longitude: 117° 55' 33"			
Street Address	2850 Mesa Verde Dr, East #116, Costa Mesa, CA 92626			
County	Orange			
Distance to roadways (meters)	34			
Traffic count (AADT, year)	< 2,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	Sulfur Dioxide, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	N/A
Parameter code	42101	42602	44201	42401
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 360	Thermo 42i	API/Teledyne 400E	Thermo 43i-TLE
Method code	106	074	087	560
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	11/01/1989	11/01/1989	11/01/1989	11/01/1989
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	8.0	8.0	8.0	8.0
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	18	18	18	18
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon
Residence time for reactive gases (seconds)	7.3	8.4	7.7	9.4
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	Nightly
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	05/27/2016	05/27/2016	05/27/2016	05/27/2016
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A

**Costa Mesa-Mesa Verde Drive
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Costa Mesa-Mesa Verde Drive
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

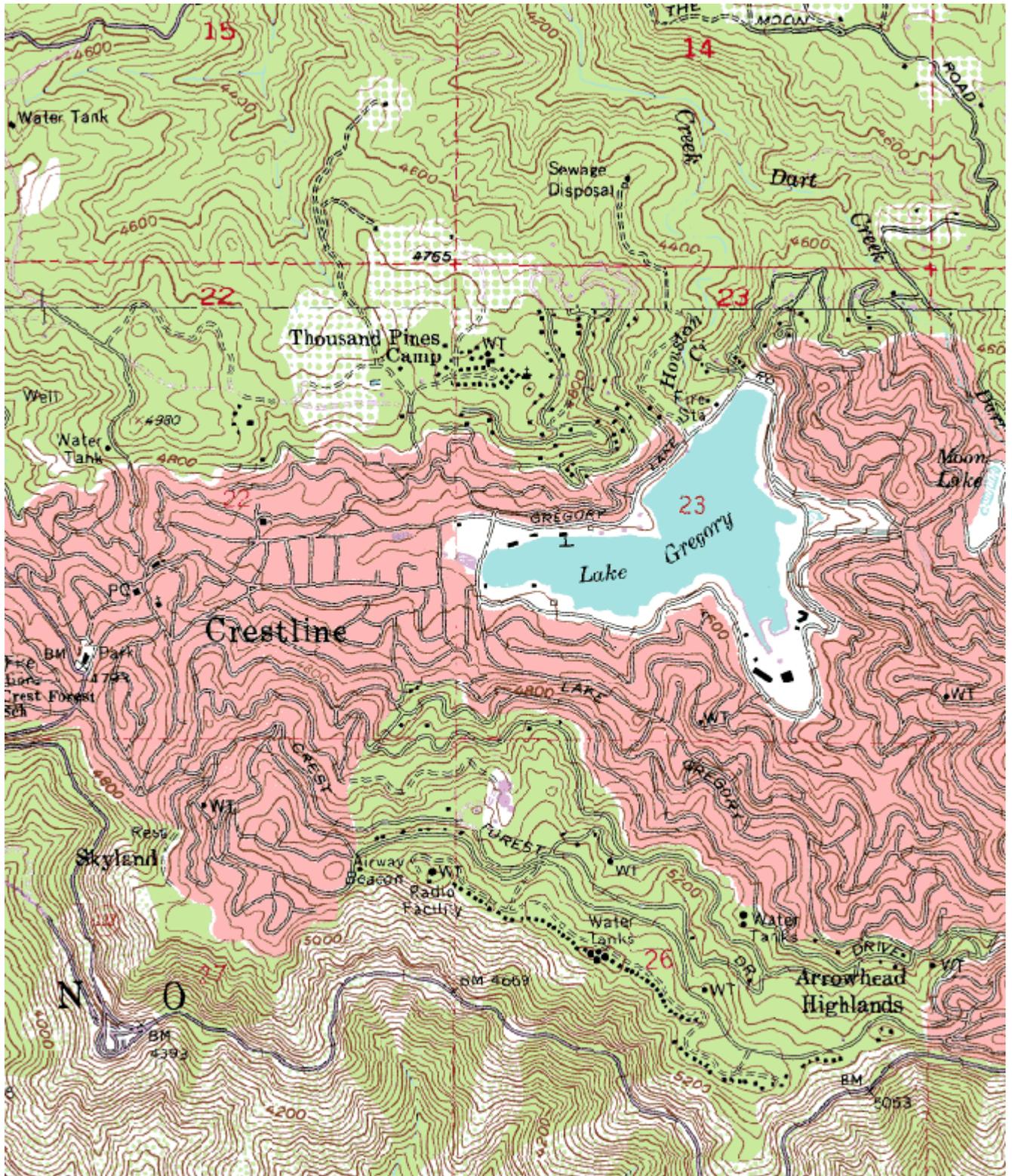
**South Coast AQMD
Site Survey Report for Crestline (Lake Gregory)**

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060710005	36181	10/1973	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
24171 Lake Dr Crestline, CA 92325	San Bernardino	South Coast	34° 14' 35"N	117° 16' 20"W	1387



Detailed Site Information

Local site name	Crestline (Lake Gregory)			
AQS ID	060710005			
GPS coordinates (decimal degrees)	Latitude: 34° 14' 35" Longitude: 117° 16' 20"			
Street Address	24171 Lake Dr, Crestline, CA 92325			
County	San Bernardino			
Distance to roadways (meters)	55			
Traffic count (AADT, year)	< 8,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Grass/Weeds			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Ozone, 1	PM10, 1	Continuous PM2.5, 3	
Primary / QA Collocated / Other	N/A	Primary	Other	
Parameter code	44201	See Table 26	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Highest Concentration	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network Affiliation	N/A	N/A	N/A	
Instrument manufacturer and model	Thermo 49i	Sierra Andersen 1200 SSI	Met One BAM 1020	
Method code	047	063, 102	731	
FRM/FEM/ARM/ other	FEM	FRM	Non-FEM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	10/01/1973	01/1985	07/24/2009	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:6	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:6	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	3.0	4.0	4.5	
Distance from supporting structure (meters)	2.0	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	10	10	10	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	225°	225°	225°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A	
Residence time for reactive gases (seconds)	11.3	N/A	N/A	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	N/A	Monthly	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	
Frequency of one-point QC check for gaseous instruments	Nightly	N/A	N/A	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	04/22/2016	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/29/2016, 11/07/2016	06/22/2016 12/19/2016	

**Crestline (Lake Gregory)
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Crestline (Lake Gregory)
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.

photo not available

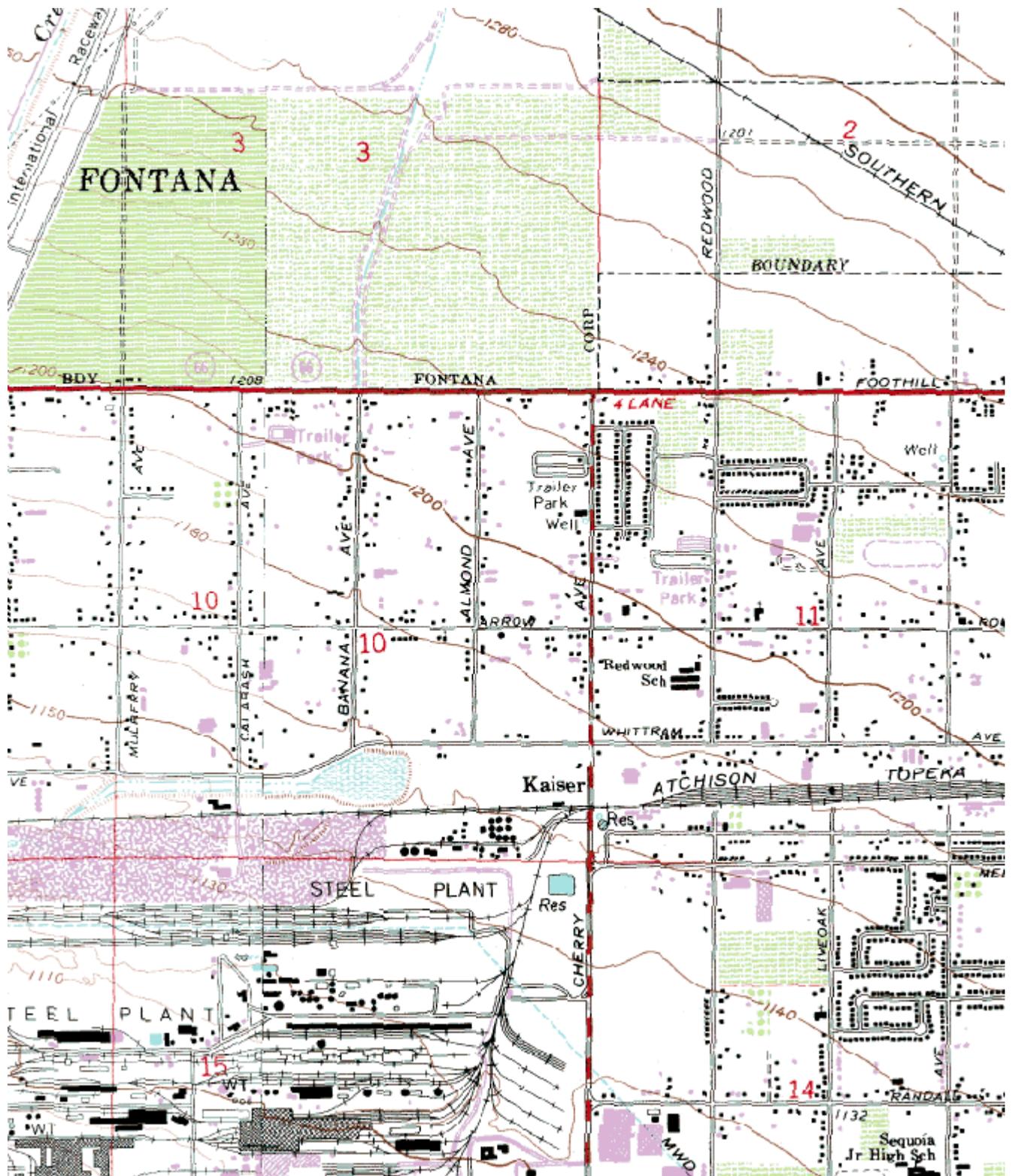
South Coast AQMD Site Survey Report for Fontana-Arrow Highway

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060712002	36197	08/1981	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
14360 Arrow Hwy Fontana, CA 92335	San Bernardino	South Coast	34° 06' 0"N	117° 29' 31"W	363



Detailed Site Information

Local site name	Fontana-Arrow Highway			
AQS ID	060712002			
GPS coordinates (decimal degrees)	Latitude: 34° 06' 0", Longitude: 117° 29' 31"			
Street Address	14360 Arrow Highway, Fontana, CA 92335			
County	San Bernardino			
Distance to roadways (meters)	86 – 92			
Traffic count (AADT, year)	12,500 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Gravel			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	Sulfur Dioxide, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	N/A
Primary / QA Collocated / Other	N/A	N/A	N/A	N/A
Parameter code	42101	42602	44201	42401
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 360	API Teledyne 200E	API/Teledyne 400E	Thermo 43i
Method code	106	099	087	560
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Urban	Urban	Neighborhood
Monitoring start date (MM/DD/YYYY)	08/1981	08/1981	08/1981	08/1981
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.02	4.02	4.02	4.02
Distance from supporting structure (meters)	1.52	1.52	1.52	1.52

Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon
Residence time for reactive gases (seconds)	5.1	6.0	5.5	6.5
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	Nightly
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	3/24/2016	3/24/2016	3/24/2016	3/24/2016
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A

Pollutant, POC	PM10, 2	PM2.5, 11	24 Hour PM2.5, 1	
Primary / QA Collocated / Other	Primary	Primary	Primary	

Parameter code	See Table 26	See Table 26	See Table 26	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Highest Concentration	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network Affiliation	N/A	N/A	N/A	
Instrument manufacturer and model	GMW 1200 SSI/ Hi-Q	Met One SASS	Andersen RAAS PM2.5	
Method code	063, 102	See Table 26	780, 120	
FRM/FEM/ARM/ other	FRM	Other	FRM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	08/1981	02/20/2004	01/1985	
Current sampling frequency (e.g. 1:3, continuous)	1:6	1:6	1:3	
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	No CFR mandated sampling schedule.	1:3	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	2.4	2.9	2.9	
Distance from supporting structure (meters)	1.5	1.9	1.9	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	

Residence time for reactive gases (seconds)	N/A	N/A	N/A	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	Yes	
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	Monthly	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/04/2016, 11/07/2016	05/04/2016, 11/07/2016	05/04/2016, 11/07/2016	

**Fontana-Arrow Highway
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Fontana-Arrow Highway
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

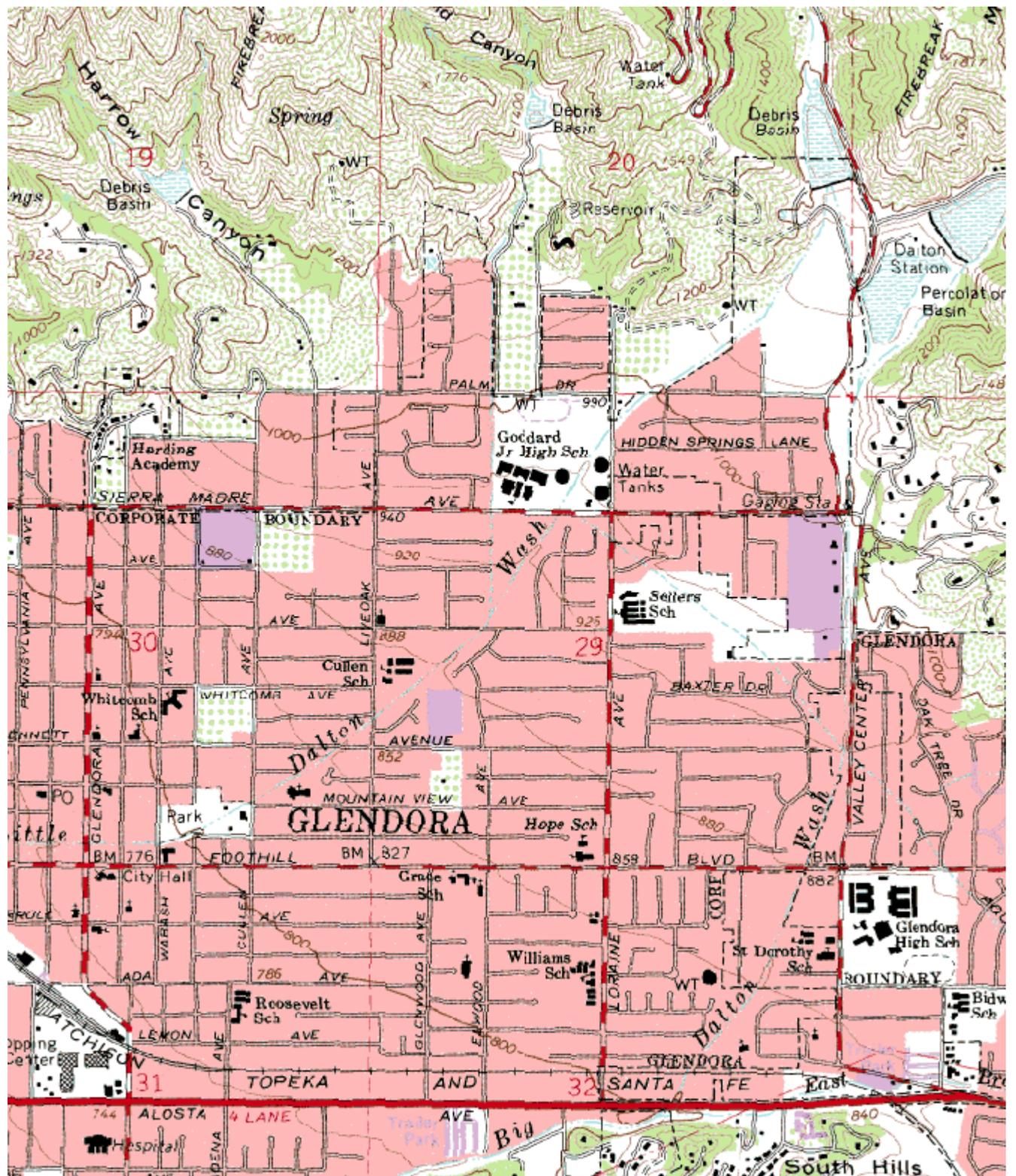
South Coast AQMD Site Survey Report for Glendora-Laurel

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060370016	70591	08/1980	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
840 Laurel Ave Glendora, CA 91741	Los Angeles	South Coast	34° 08' 39"N	117° 51' 01"W	278



Detailed Site Information

Local site name	Glendora-Laurel			
AQS ID	060370016			
GPS coordinates (decimal degrees)	Latitude: 34° 08' 39" Longitude: 117° 51' 01"			
Street Address	840 Laurel Avenue, Glendora, CA 91741			
County	Los Angeles			
Distance to roadways (meters)	121			
Traffic count (AADT, year)	1,834 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Dirt/weeds/gravel			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 2	Nitrogen Dioxide, 1	Ozone, 1	Continuous PM10, 3
Primary / QA Collocated / Other	N/A	N/A	N/A	Other
Parameter code	42101	42602	44201	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	Thermo 49i	Met One BAM 1020
Method code	158	074	087	122
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	08/1980	08/1980	08/1980	03/31/2010
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.2	4.2	4.2	4.95
Distance from supporting structure (meters)	1.1	1.1	1.1	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	16	16	16	16
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	7.0	7.8	7.6	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	09/28/2016	09/28/2016	09/28/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/24/2016, 12/11/2016

Pollutant, POC	Continuous PM2.5, 3			
Primary / QA Collocated / Other	Other			
Parameter code	88502			

Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			
Network Affiliation	N/A			
Instrument manufacturer and model	Met One BAM 1020			
Method code	731			
FRM/FEM/ARM/other	Non-FEM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Neighborhood			
Monitoring start date (MM/DD/YYYY)	01/05/2006			
Current sampling frequency (e.g. 1:3, continuous)	1:1			
Calculated sampling frequency (e.g. 1:3/1:1)	N/A			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	4.9			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			
Distance from obstructions not on roof (meters)	N/A			
Distance from trees (meters)	N/A			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases (seconds)	N/A			

Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A			
Frequency of flow rate verification for manual PM samplers	N/A			
Frequency of flow rate verification for automated PM analyzers	Monthly			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06/24/2016, 12/11/2016			

**Glendora-Laurel
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Glendora-Laurel
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

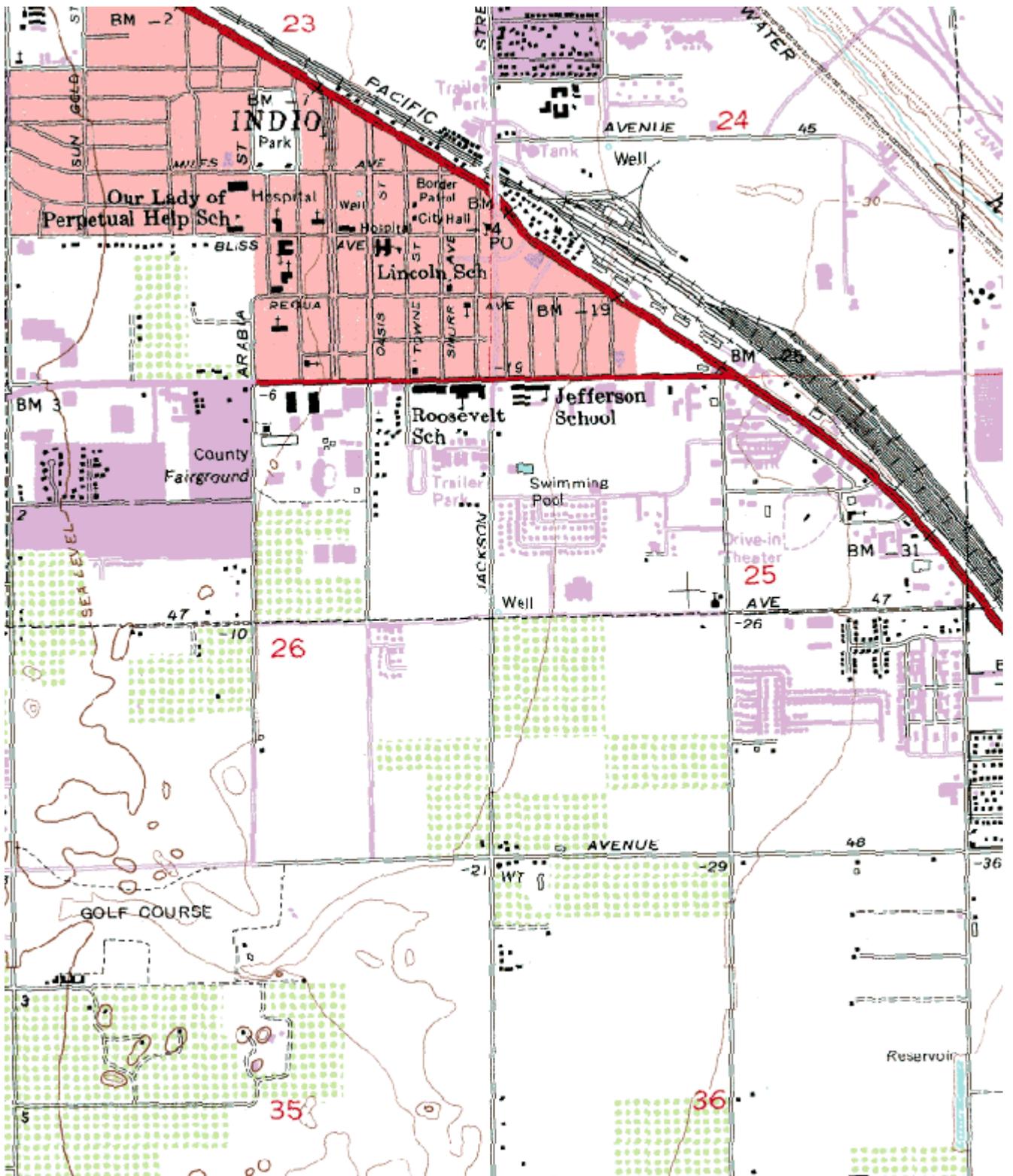
South Coast AQMD Site Survey Report for Indio-Jackson Street

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060652002	33157	01/1983	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
46990 Jackson St Indio, CA 92201	Riverside	Salton Sea	33° 42' 30"N	116° 12' 55"W	0



Detailed Site Information

Local site name	Indio-Jackson Street			
AQS ID	060652002			
GPS coordinates (decimal degrees)	Latitude: 33° 42' 30" Longitude: 116° 12' 55"			
Street Address	46990 Jackson Street, Indio, CA 92201			
County	Riverside			
Distance to roadways (meters)	88			
Traffic count (AADT, year)	16,258 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt/dirt			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Ozone, 1	PM10, 2	PM10, 4	PM10, 6
Primary / QA Collocated / Other	N/A	Primary	Primary	QA Collocated
Parameter code	44201	See Table 26	See Table 26	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS/QA Collocated
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	API/Teledyne 400E	Sierra Andersen 1200 SSI, A Sampler	Sierra Andersen 1200 SSI, B Sampler	Sierra Andersen 1200 SSI, C Sampler
Method code	087	063, 102	063, 102	063, 102
FRM/FEM/ARM/ other	FEM	FRM	FRM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	01/1983	01/1983	03/2003	03/2003
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:3	1:6	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:6	1:6	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	9.0	3.5	3.5	3.5
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0

Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	2.0	2.0	2.0
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A	N/A
Residence time for reactive gases (seconds)	12.1	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	Yes	Yes	Yes	Yes
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	Monthly	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	11/17/2016	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/13/2016, 11/01/2016	04/13/2016, 11/01/2016	04/13/2016, 11/01/2016

Pollutant, POC	Continuous PM10, 3	24 Hour PM2.5, 1		
Primary / QA Collocated / Other	Other	Primary		
Parameter code	81102	See Table 26		

Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Population Exposure		
Monitor (type)	SLAMS	SLAMS		
Network Affiliation	N/A	N/A		
Instrument manufacturer and model	Thermo Electron 1400A TEOM	Andersen RAAS PM2.5, Sampler		
Method code	079	780, 120		
FRM/FEM/ARM/ other	FEM	FRM		
Collecting Agency	SCAQMD	SCAQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD		
Reporting Agency	SCAQMD	SCAQMD		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	02/09/2009	02/04/1999		
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:3		
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A		
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31		
Probe height (meters)	7.0	4.8		
Distance from supporting structure (meters)	2.0	2.0		
Distance from obstructions on roof (meters)	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	4.0	2.0		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		
Residence time for	N/A	N/A		

reactive gases (seconds)				
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Yes		
Frequency of flow rate verification for manual PM samplers	N/A	Monthly		
Frequency of flow rate verification for automated PM analyzers	Monthly	N/A		
Frequency of one-point QC check for gaseous instruments	N/A	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06/23/2016, 12/20/2016	04/13/2016, 11/01/2016		

**Indio-Jackson Street
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Indio-Jackson Street
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



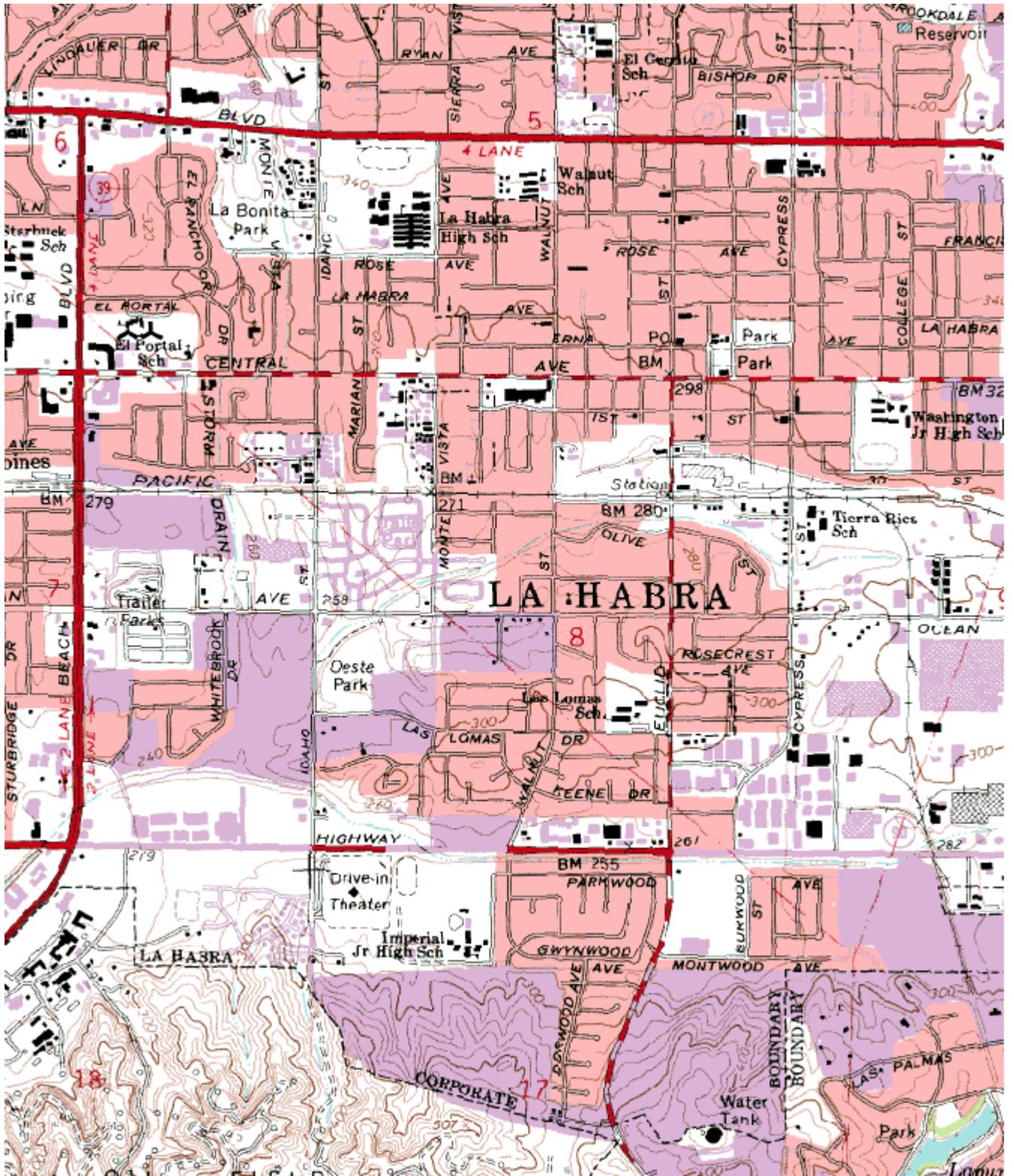
Looking at the probe from the West.

South Coast AQMD Site Survey Report for La Habra

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code			
060595001	30177	08/1960	South Coast AQMD (061)			
Site Address		County	Air Basin	Latitude	Longitude	Elevation
621 W Lambert Rd La Habra, CA 90631		Orange	South Coast	33° 55' 30"N	117° 57' 09"W	82



Detailed Site Information

Local site name	La Habra			
AQS ID	060595001			
GPS coordinates (decimal degrees)	Latitude: 33° 55' 30" Longitude: 117° 57' 09"			
Street Address	621 W Lambert Rd, La Habra, CA 90631			
County	Orange			
Distance to roadways (meters)	40			
Traffic count (AADT, year)	66,200 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 2	Ozone, 1	
Primary / QA Collocated / Other	N/A	N/A	N/A	
Parameter code	42101	42602	44201	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network Affiliation	N/A	N/A	N/A	
Instrument manufacturer and model	Horiba APMA 360	Thermo 42i	Thermo 49i	
Method code	106	074	047	
FRM/FEM/ARM/ other	FRM	FRM	FEM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Urban	Neighborhood	
Monitoring start date (MM/DD/YYYY)	08/1960	08/1960	08/1960	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	5.3	5.3	5.3	
Distance from supporting structure (meters)	2.0	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	

Distance from trees (meters)	5	5	5	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	
Residence time for reactive gases (seconds)	1.1	10.0	10.0	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/08/2016	06/08/2016	06/08/2016	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

**La Habra
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**La Habra
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



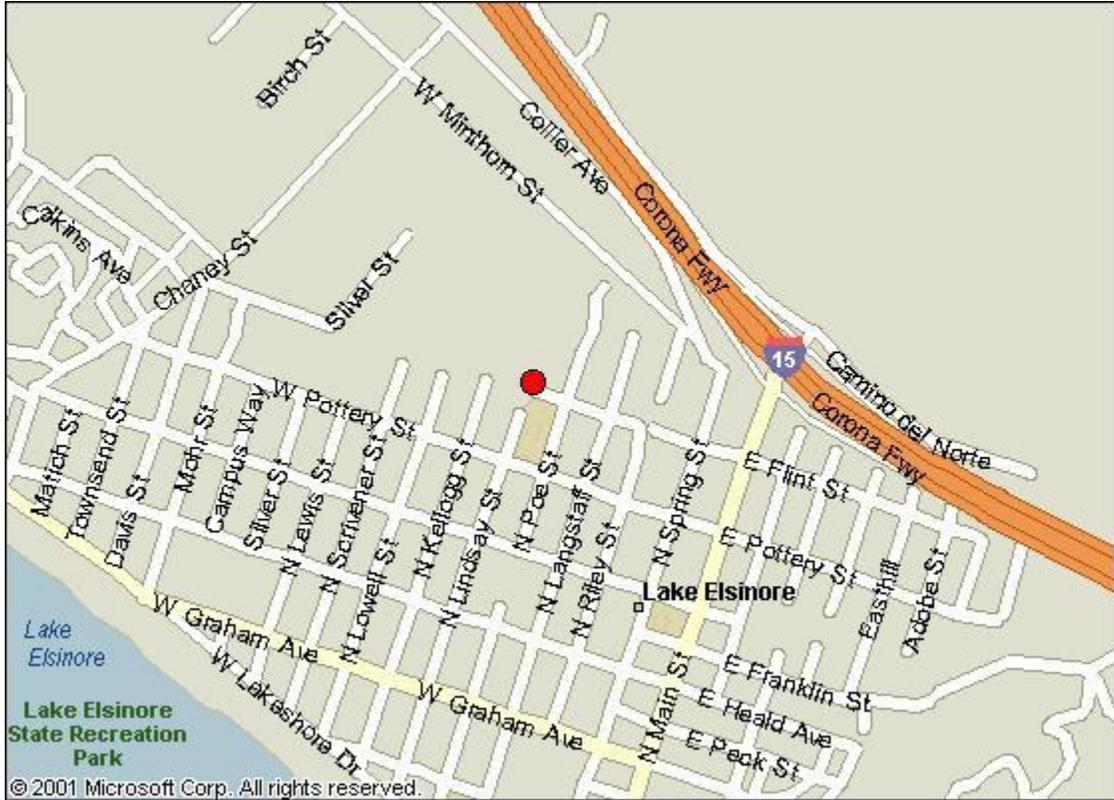
Looking at the probe from the South.



Looking at the probe from the West.

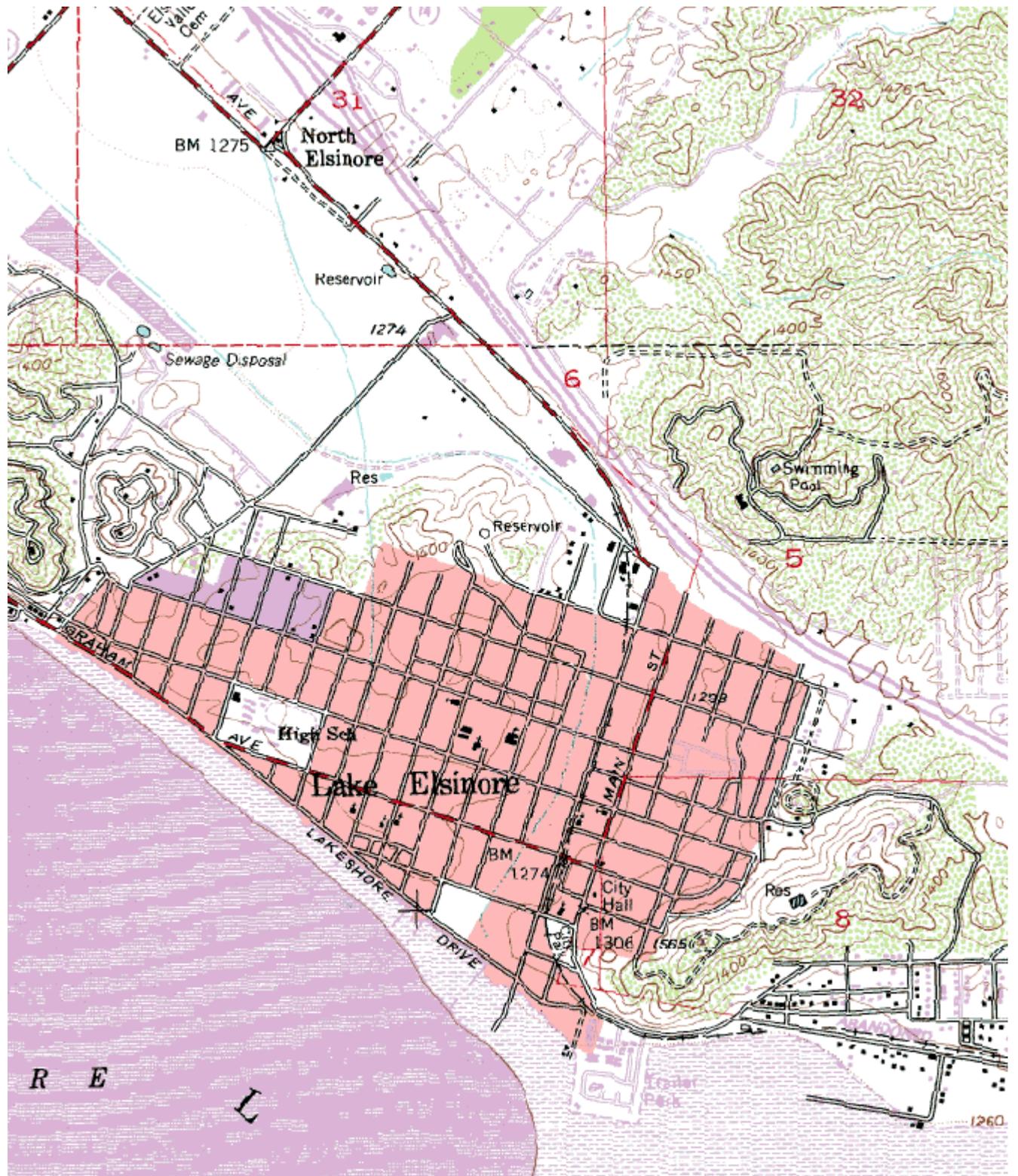
South Coast AQMD Site Survey Report for Lake Elsinore-W Flint Street

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060659001	33158	06/1987	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
506 W Flint St Lake Elsinore, CA 92530	Riverside	South Coast	33° 40' 35"N	117° 19' 51"W	410



Detailed Site Information

Local site name	Lake Elsinore-W Flint Street			
AQS ID	060659001			
GPS coordinates (decimal degrees)	Latitude: 33° 40' 35" Longitude: 117° 19' 51"			
Street Address	506 W Flint St, Lake Elsinore, CA 92530			
County	Riverside			
Distance to roadways (meters)	50			
Traffic count (AADT, year)	< 2,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	Continuous PM10, 3
Primary / QA Collocated / Other	N/A	N/A	N/A	Other
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 360	Thermo 42i	Thermo 49i	R&P 1400A TEOM
Method code	106	074	047	079
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	06/1987	06/1987	06/1987	01/10/1994
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.1	4.1	4.1	4.35
Distance from supporting structure (meters)	1.8	1.8	1.8	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A

Distance from trees (meters)	17	17	17	10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	5.1	5.7	5.1	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/14/2016	06/14/2016	06/14/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/14/2016, 12/21/2016

Pollutant, POC	Continuous PM2.5, 3			
Primary / QA Collocated / Other	Other			
Parameter code	88502			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			
Network Affiliation	N/A			

Instrument manufacturer and model	Met One BAM 1020			
Method code	731			
FRM/FEM/ARM/other	Non-FEM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Neighborhood			
Monitoring start date (MM/DD/YYYY)	01/17/2006			
Current sampling frequency (e.g. 1:3, continuous)	1:1			
Calculated sampling frequency (e.g. 1:3/1:1)	N/A			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	2.6			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			
Distance from obstructions not on roof (meters)	N/A			
Distance from trees (meters)	10			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases (seconds)	N/A			
Will there be changes within the next 18 months? (Y/N)	No			

Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A			
Frequency of flow rate verification for manual PM samplers	N/A			
Frequency of flow rate verification for automated PM analyzers	Monthly			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06/14/2016, 12/21/2016			

**Lake Elsinore-W Flint Street
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Lake Elsinore-W Flint Street
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



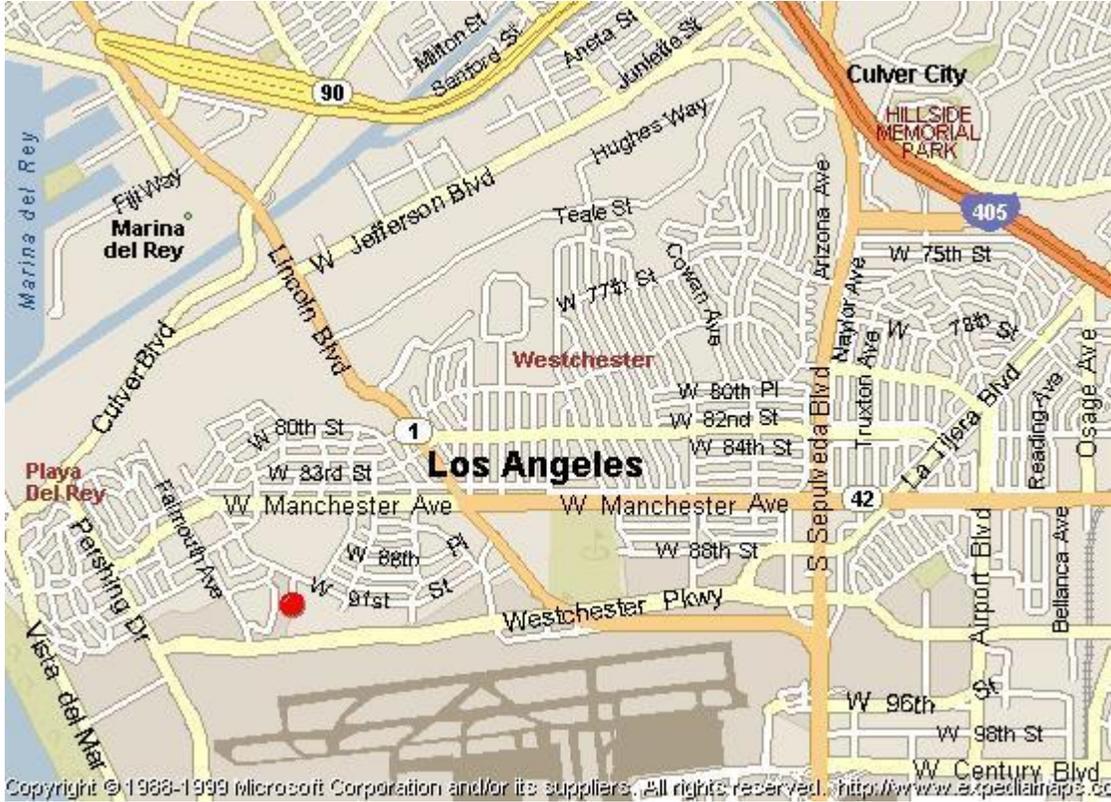
Looking at the probe from the South.



Looking at the probe from the West.

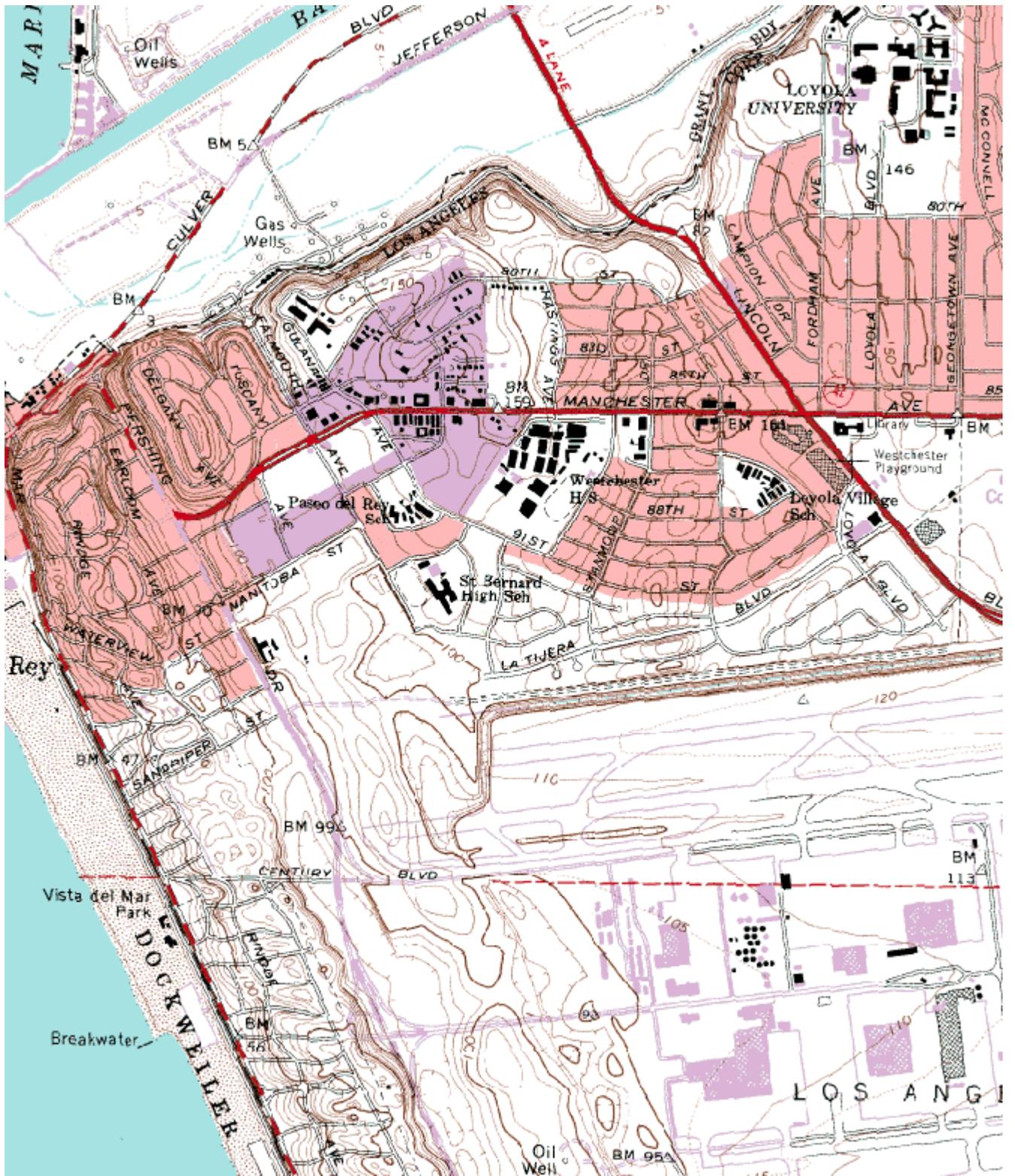
Quality Assurance Site Survey Report for LAX - Hastings

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060375005	70111	04/2004	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
7201 W Westchester Pkwy Los Angeles, CA 90045	Los Angeles	South Coast	33° 57' 18"N	118° 25' 49"W	37



Detailed Site Information

Local site name	LAX - Hastings			
AQS ID	060375005			
GPS coordinates (decimal degrees)	Latitude: 33° 57' 18" Longitude: 118° 25' 49"			
Street Address	7201 W Westchester Pkwy, Los Angeles, CA 90045			
County	Los Angeles			
Distance to roadways (meters)	85 - 92			
Traffic count (AADT, year)	2,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	Sulfur Dioxide, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	N/A
Parameter code	42101	42602	44201	42401
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure, Background	Population Exposure, Background	Population Exposure, Background	Population Exposure, Background
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	PAMS	PAMS	N/A
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	API/Teledyne 400E	Thermo 43i-TLE
Method code	158	074	087	560
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Middle	Middle	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	04/12/2004	04/12/2004	04/12/2004	04/12/2004
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.2	4.2	4.2	4.2
Distance from supporting structure (meters)	1.8	1.8	1.8	1.8
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on	N/A	N/A	N/A	N/A

roof (meters)				
Distance from trees (meters)	20	20	20	20
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon
Residence time for reactive gases (seconds)	4.9	6.0	6.0	6.2
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	Nightly
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	09/21/2016	09/21/2016	09/21/2016	09/21/2016
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A

Pollutant, POC	Lead, 1	24 Hour VOCs (Type 1), 1	3 Hour VOCs (Type 1), 1	PM10,1
Primary / QA Collocated / Other	N/A	N/A	N/A	Primary
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure/ Background	Population Exposure/Background	Population Exposure/Background	Population Exposure/ Background
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS

Network Affiliation	Pb	PAMS	PAMS	N/A
Instrument manufacturer and model	Tisch Env. TE 6070 TSP	Xontech 910A	RM Environmental Systems 910A	GMW 1200 SSI
Method code	110	See Table 26	See Table 26	063, 102
FRM/FEM/ARM/ other	FRM	Other	Other	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Reporting Agency				
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	04/12/2004	04/12/2004	04/12/2004	04/12/2004
Current sampling frequency (e.g. 1:3, continuous)	1:6	1:6	1:3	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	7/1 to 9/30	01/01-12/31
Probe height (meters)	2.0	3.8	3.8	2.0
Distance from supporting structure (meters)	1.1	1.4	1.4	1.1
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	16	16	16	16
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	Stainless steel	Stainless steel	N/A
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No

Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	Annually	Annually	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/19/2016 11/16/2016	N/A	N/A	05/19/2016 11/16/2016

**LAX - Hastings
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**LAX - Hastings
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



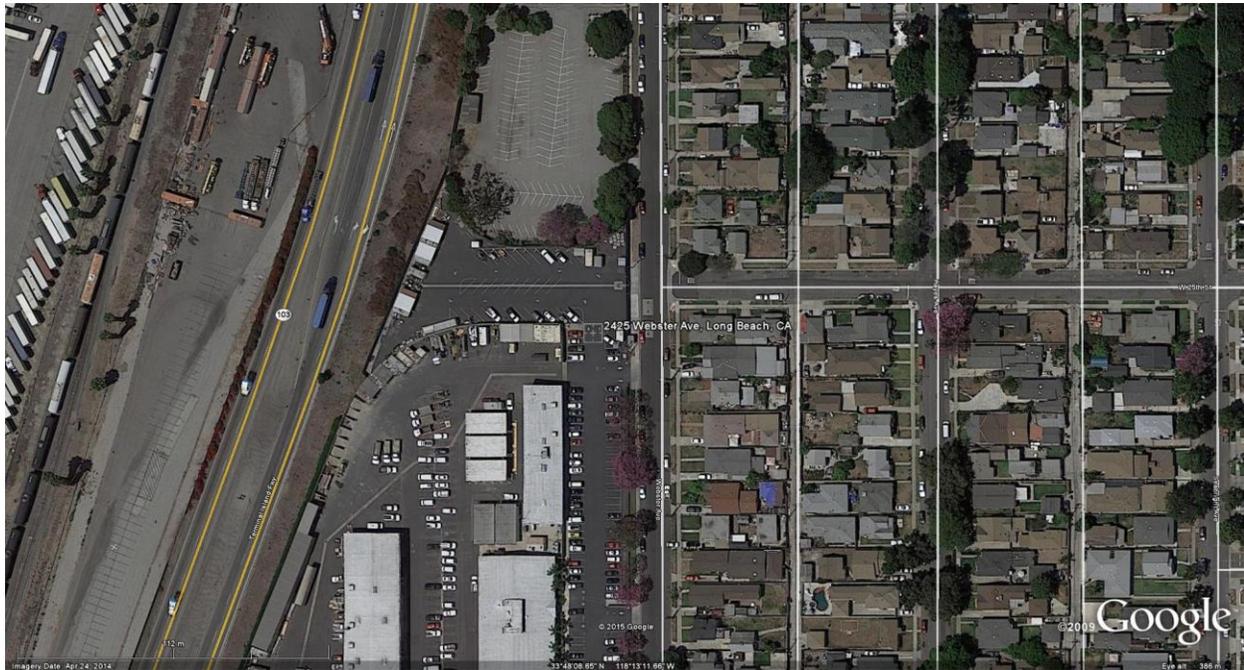
Looking at the probe from the South.



Looking at the probe from the West.

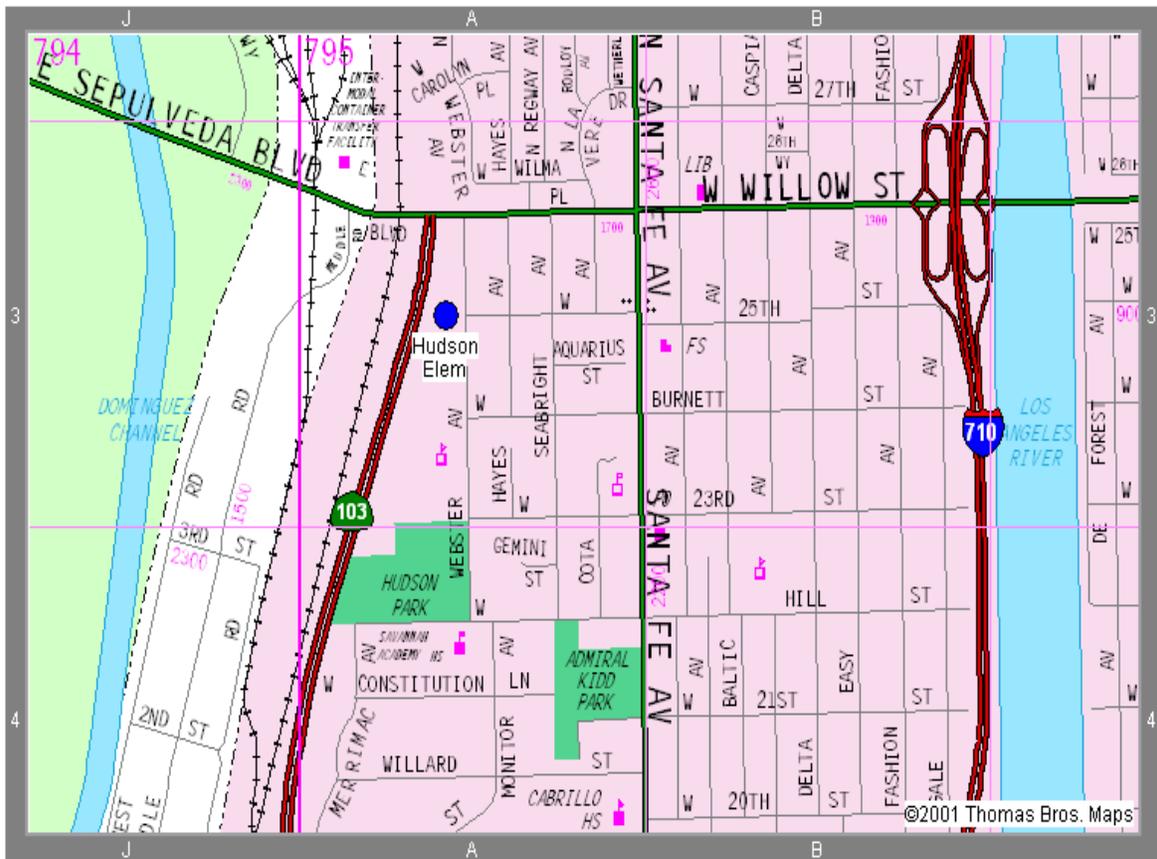
South Coast AQMD Site Survey Report for Long Beach (Hudson)

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060374006	70033	01/2010	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
2425 Webster St. Long Beach, CA 90810	Los Angeles	South Coast	33° 48' 08" N	118° 13' 11" W	10



Detailed Site Information

Local site name	Long Beach (Hudson)			
AQS ID	060374006			
GPS coordinates (decimal degrees)	Latitude: 33° 48' 08" N Longitude: 118° 13' 11" W			
Street Address	2425 Webster St. Long Beach, CA 90810			
County	Los Angeles			
Distance to roadways (meters)	5			
Traffic count (AADT, year)	unavailable			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles, Long Beach-Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	Sulfur Dioxide, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	N/A
Parameter code	42101	42602	44201	42401
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Highest Concentration	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba 370	Thermo 42i	Thermo 49i	Thermo 43i
Method code	158	074	087	560
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	1/10	1/10	1/10	1/10
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4	4	4	4
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon
Residence time for reactive gases (seconds)	.8	1.2	1.7	3.1
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	Nightly
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	04/09/2016	04/09/2016	04/09/2016	04/09/2016
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A

Pollutant, POC	PM10, 2			
Primary / QA Collocated / Other	Primary			
Parameter code	See Table 26			

Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			
Network Affiliation	N/A			
Instrument manufacturer and model	GMW 1200 SSI, A Sampler			
Method code	063,102			
FRM/FEM/ARM/ other	FRM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Neighborhood			
Monitoring start date (MM/DD/YYYY)	01/10			
Current sampling frequency (e.g. 1:3, continuous)	1:6			
Calculated sampling frequency (e.g. 1:3/1:1)	1:6			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	11.7			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			
Distance from obstructions not on roof (meters)	N/A			
Distance from trees (meters)	N/A			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases	N/A			

(seconds)				
Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A			
Frequency of flow rate verification for manual PM samplers	Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/19/2016, 11/19/2016			

**Hudson (Long Beach)
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Hudson (Long Beach)
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



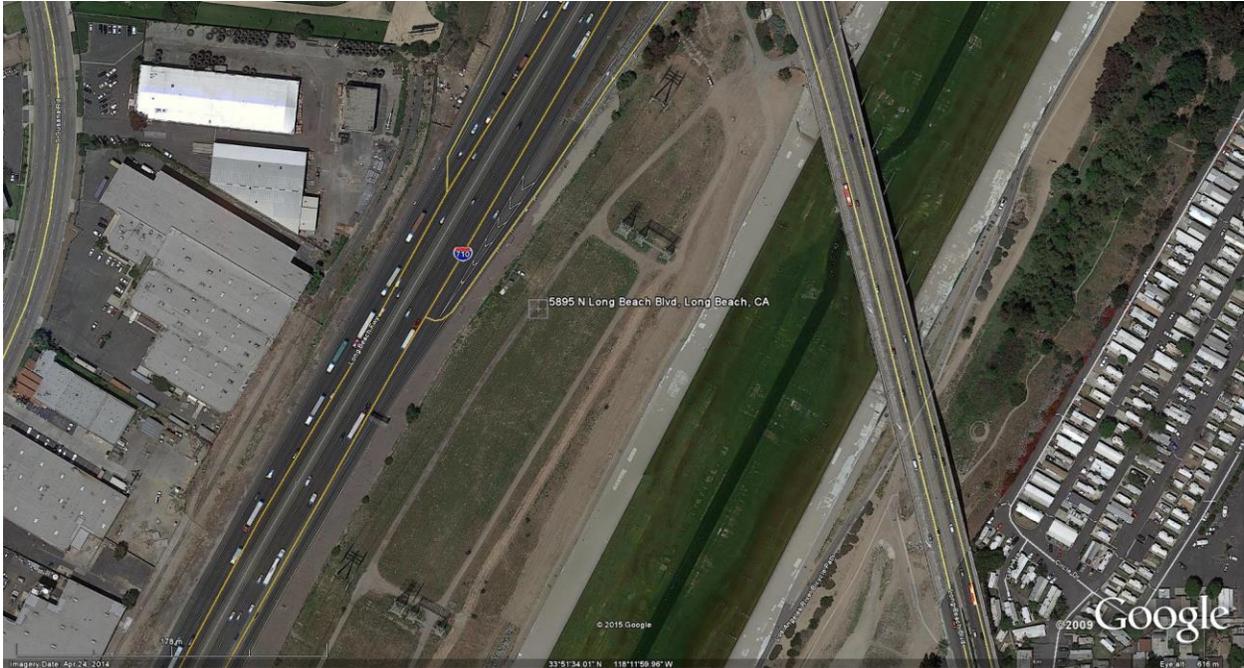
Looking at the probe from the South.



Looking at the probe from the West.

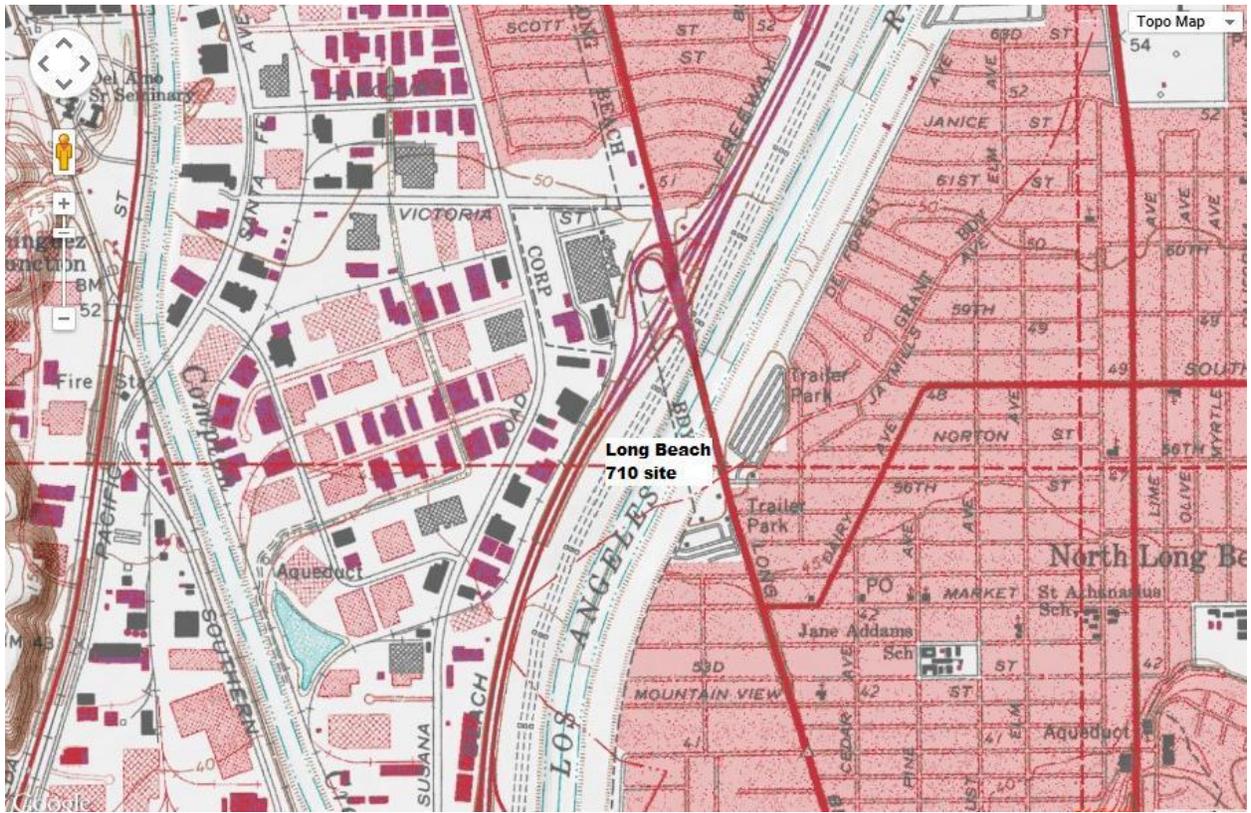
Quality Assurance Site Survey Report for Long Beach Route 710 Near Road

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060374008	70032	1/1/2015	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
5895 Long Beach Blvd	Los Angeles	South Coast	33° 51' 34"N	118° 12' 01"W	12 m



Detailed Site Information

Local site name	710 Near Road			
AQS ID	060374008			
GPS coordinates (decimal degrees)	Latitude: 33° 51' 34"N Longitude: 118° 12' 01"W			
Street Address	5895 Long Beach Blvd., Long Beach, CA 90806			
County	Los Angeles			
Distance to roadways (meters)	20			
Traffic count (AADT, year)	192,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Concrete/dry vegetation			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	Nitrogen Dioxide, 1	24 Hour PM2.5, 1	Continuous PM2.5, 3	
Primary / QA Collocated / Other	N/A	Primary	Other	
Parameter code	42602	See Table 26	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SPM	
Network Affiliation	Near Road	Near Road	Near Road	
Instrument manufacturer and model	Thermo 42i	Thermo 2025i	Thermo 5014i	
Method code	074	118,145	183	
FRM/FEM/ARM/ other	FRM	FRM	FEM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Micro	Micro	Micro	
Monitoring start date (MM/DD/YYYY)	01/2015	1/2015	1/2016	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:1	1:1	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	4.5	4.5	4.5	
Distance from supporting structure (meters)	2.0	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	NA	NA	
Residence time for reactive gases (seconds)	6.8	NA	NA	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Yes	Yes	
Frequency of flow rate verification for manual PM samplers	N/A	Monthly	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	
Frequency of one-point QC check for gaseous instruments	Nightly	N/A	N/A	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	05/19/2016 11/19/2016	07/27/2016 12/28/2016	

**Long Beach Route 710 Near Road
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

Long Beach Route 710 Near Road

Site Photos (Cont.)



Looking at the probe from the North.



Looking at the probe from the East.



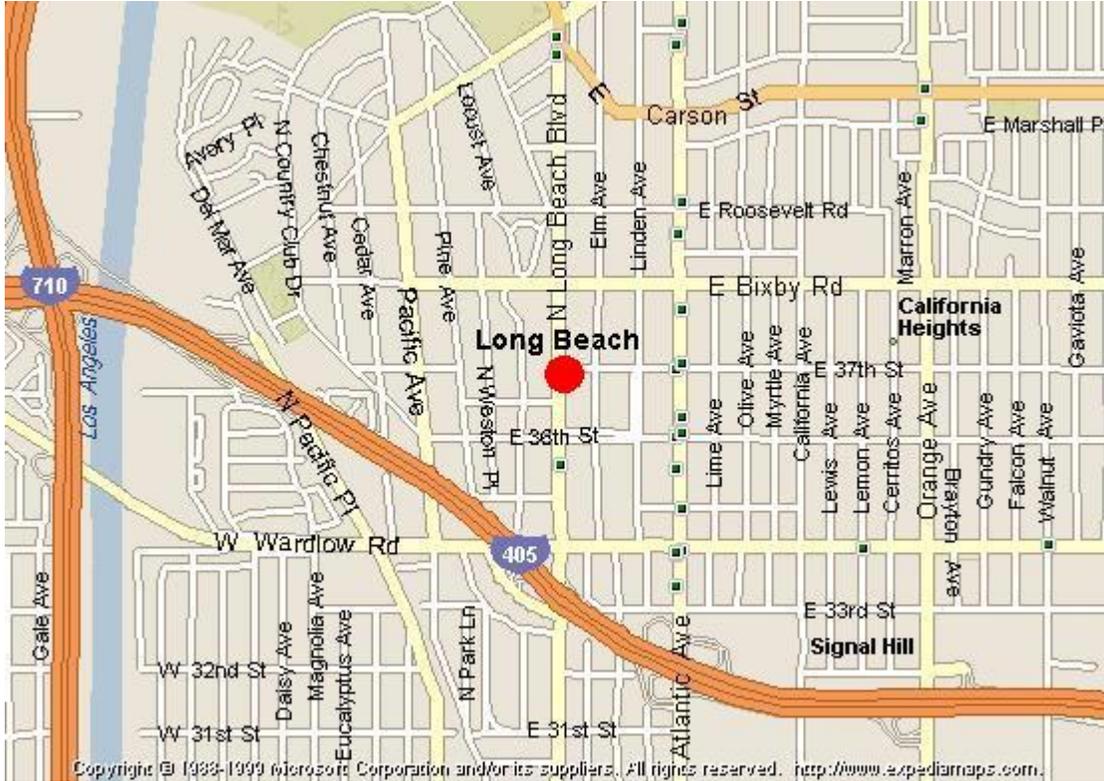
Looking at the probe from the South.



Looking at the probe from the West.

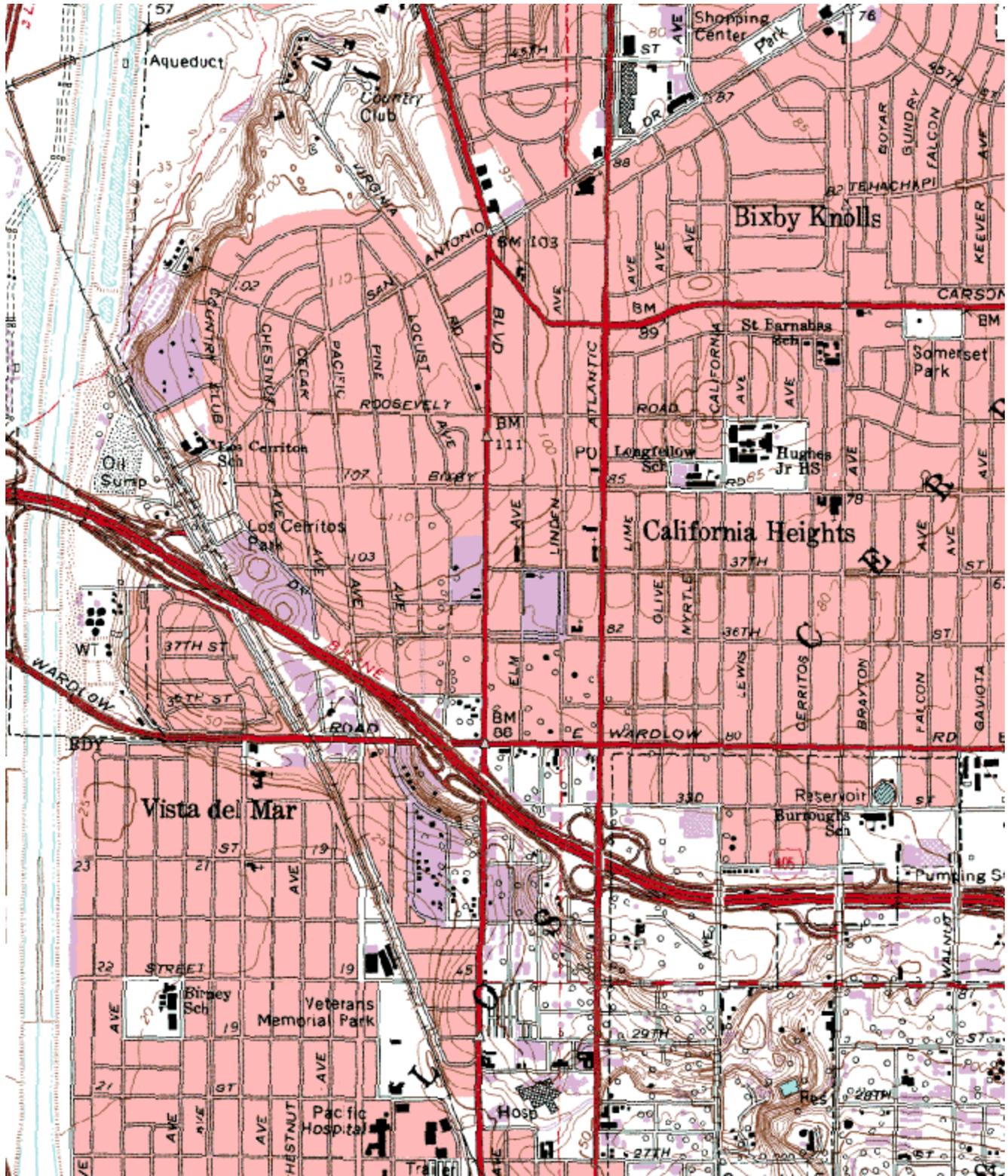
**South Coast AQMD
Site Survey Report for Long Beach (North)**

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060374002	70072	10/1962	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
3648 N Long Beach Blvd Long Beach, CA 90807	Los Angeles	South Coast	33° 49' 25"N	118° 11' 20"W	29



Detailed Site Information

Local site name	Long Beach (North)			
AQS ID	060374002			
GPS coordinates (decimal degrees)	Latitude: 33° 49' 25" Longitude: 118° 11' 20"			
Street Address	3648 N Long Beach Blvd, Long Beach, CA 90807			
County	Los Angeles			
Distance to roadways (meters)	497			
Traffic count (AADT, year)	19,900 / 2012; 405/Long Beach Blvd., 280,000, 2011			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	24 Hour PM2.5, 1			
Primary / QA Collocated / Other	Primary			
Parameter code	See Table 26			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Highest Concentration			
Monitor (type)	SLAMS			
Network Affiliation	N/A			
Instrument manufacturer and model	Andersen RAAS PM2.5			
Method code	780, 120			
FRM/FEM/ARM/ other	FRM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Neighborhood			
Monitoring start date (MM/DD/YYYY)	01/03/99			
Current sampling frequency (e.g. 1:3, continuous)	1:1			
Calculated sampling frequency (e.g. 1:3/1:1)	1:3			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	2.8			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			

Distance from obstructions not on roof (meters)	N/A			
Distance from trees (meters)	20			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases (seconds)	N/A			
Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	Yes			
Frequency of flow rate verification for manual PM samplers	Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/19/2016, 11/19/2016			

**Long Beach (North)
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.

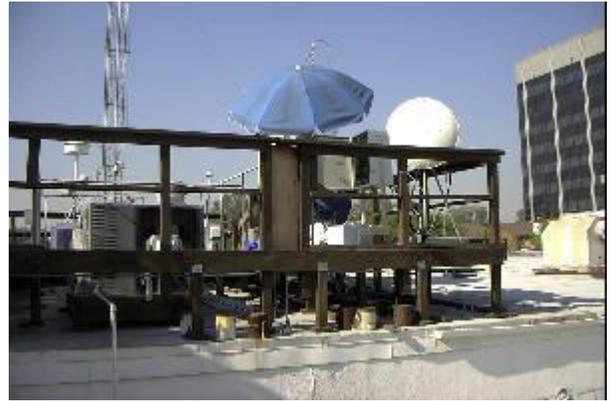


Looking West from the probe.

**Long Beach (North)
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

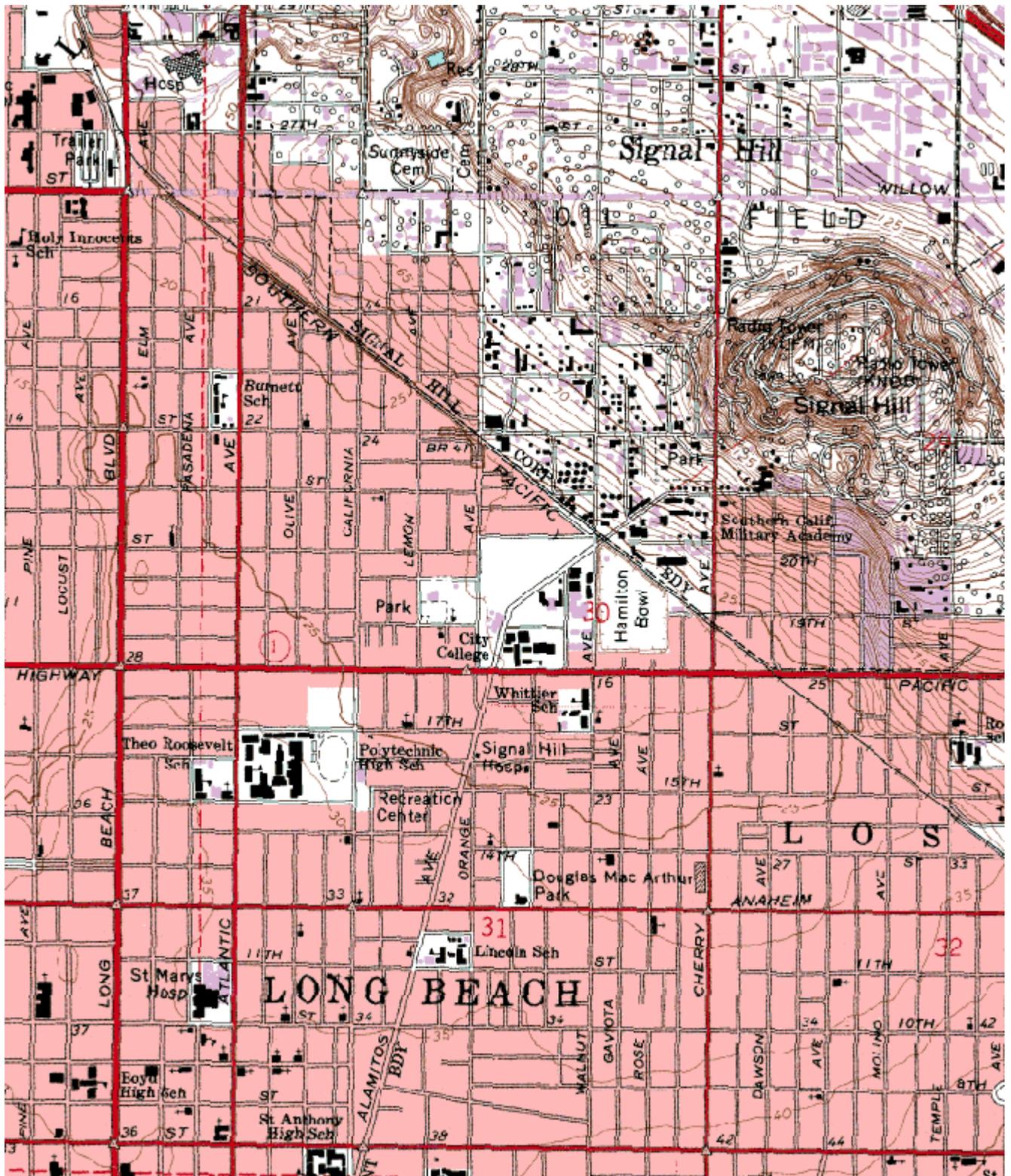
Quality Assurance Site Survey Report for South Long Beach

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060374004	70110	06/2003	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1305 E. Pacific Coast Hwy Long Beach, CA 90806	Los Angeles	South Coast	33° 47' 32"N	118° 10' 31"W	6



Detailed Site Information

Local site name	South Long Beach			
AQS ID	060374004			
GPS coordinates (decimal degrees)	Latitude: 33° 47' 32" Longitude: 118° 10' 31"			
Street Address	1305 E Pacific Coast Hwy, Long Beach, CA 90806			
County	Los Angeles			
Distance to roadways (meters)	86			
Traffic count (AADT, year)	10,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	PM10, 2	Lead, 2	Continuous PM2.5, 3	24 Hour PM2.5, 1
Primary / QA Collocated / Other	Primary	N/A	Other	Primary
Parameter code	See Table 26	14129	88502	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Sierra Andersen 1200 SSI	Tisch TE 300-310 TSP	Met One BAM 1020	Andersen RAAS PM2.5
Method code	063, 102	110	170	780, 120
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	06/20/2003	06/20/2003	06/20/2003	06/20/2003
Current sampling frequency (e.g. 1:3, continuous)	1:6	1:6	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	1:6	N/A	1:3
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	3.0	3.0	3.0	3.0
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	1.5 (Flow <200 lpm)	1.5 (Flow <200 lpm)
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	No, unless the manual sampler has missing data.	Yes
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/19/2016, 11/19/2016	05/19/2016, 11/19/2016	06/21/2016, 12/15/2016	05/19/2016, 11/19/2016

**South Long Beach
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**South Long Beach
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

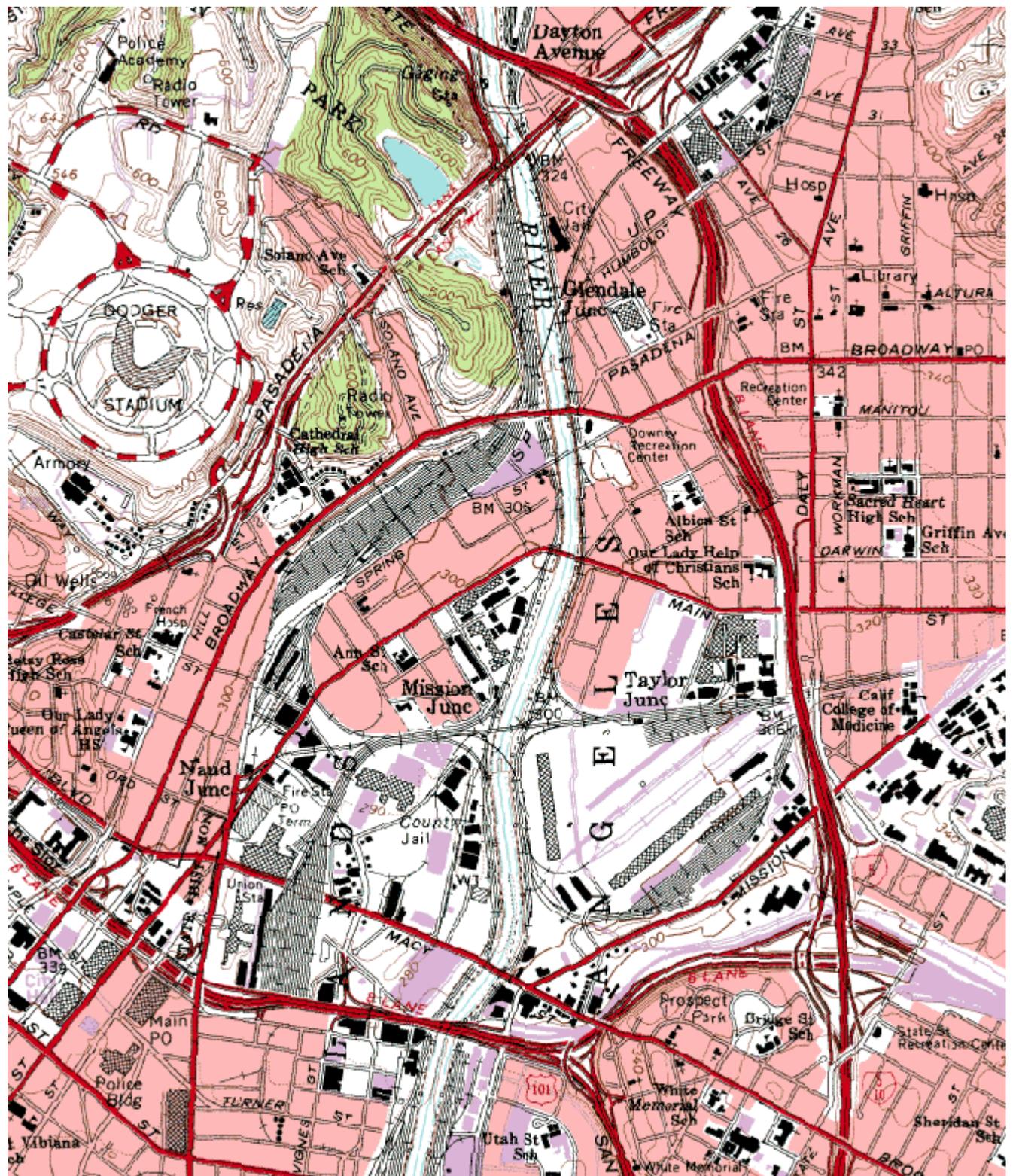
South Coast AQMD
Site Survey Report for Los Angeles (Central)-North Main Street

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371103	70087	09/1979	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1630 North Main Street Los Angeles, CA 90012	Los Angeles	South Coast	34° 03' 59"N	118° 13' 36"W	89



Detailed Site Information

Local site name	Los Angeles-North Main Street			
AQS ID	060371103			
GPS coordinates (decimal degrees)	Latitude: 34° 03' 59" Longitude: 118° 13' 36"			
Street Address	1630 North Main Street, Los Angeles, CA 90012			
County	Los Angeles			
Distance to roadways (meters)	51 - 71			
Traffic count (AADT, year)	15,276 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles, Long Beach-Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	Sulfur Dioxide, 9
Primary / QA Collocated / Other	N/A	N/A	N/A	N/A
Parameter code	42101	42602	44201	42401
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Highest Concentration	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	PAMS\NCore	PAMS\NCore	PAMS\NCore	PAMS\NCore
Instrument manufacturer and model	Horiba 370	Thermo 42i	API/Teledyne 400E	Thermo 43i-TLE
Method code	158	074	087	560
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	09/1979	09/1979	09/1979	09/1979
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	12.3	12.3	12.3	12.3
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	45	45	45	45
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon
Residence time for reactive gases (seconds)	.8	1.2	1.7	3.1
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	Nightly
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/10/2016	06/10/2016	06/10/2016	12/02/2016
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A

Pollutant, POC	PM10, 2	PM10, 4	Lead, 3	Lead, 2
Primary / QA Collocated / Other	Primary	QA Collocated	QA Collocated	N/A
Parameter code	See Table 26	See Table 26	14129	14129

Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS/NATTS/ NCore/QA Collocated	SLAMS/Pb/QA Collocated	SLAMS
Network Affiliation	NATTS/NCore	NATTS/NCore/QA Collocated	Pb/QA Collocated	Pb
Instrument manufacturer and model	GMW 1200 SSI, A Sampler	GMW 1200 SSI, B Sampler	GMW 1200 TSP, B Sampler	GMW 1200 TSP, A Sampler
Method code	063, 102	063, 102	110	110
FRM/FEM/ARM/ other	FRM	FRM	FRM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	01/1985	01/2007	09/1979	09/1979
Current sampling frequency (e.g. 1:3, continuous)	1:6	6 per Year	1:6	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	6 per Year	1:12	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	11.7	11.7	11.3	11.3
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	27	27	27	27
Distance between collocated monitors (meters)	2	2	2	2
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A

Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/10/2016, 11/05/2016	05/10/2016, 11/05/2016	05/11/2016, 11/16/2016	05/11/2016, 11/16/2016

Pollutant, POC	Continuous PM10, PM Coarse, 9	Continuous PM2.5, PM Coarse, 9	Speciated PM2.5, 11	Speciated PM2.5, 12
Primary / QA Collocated / Other	Other	Other	Primary	QA Collocated
Parameter code	85101	88502	See Table 26	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS/NCORE	SLAMS	SLAMS	SLAMS
Network Affiliation	NCORE	NCORE	N/A	N/A
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	Met One SASS, A Sampler	Met One SASS, B Sampler
Method code	122	170	See Table 26	See Table 26
FRM/FEM/ARM/ other	FEM	FEM	Other	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD

Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	11/04/2010	03/08/2011	03/2001	03/2001
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:6	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	12.0	12.8	12.0	12.0
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	51	51	51	51
Distance between collocated monitors (meters)	4	4	2	2
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	No, unless the manual sampler has missing data.	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	Monthly	Monthly	N/A	N/A

Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/20/2015, 11/18/2015	05/20/2015, 11/18/2015	05/20/2015, 11/18/2015	05/20/2015, 11/18/2015

Pollutant, POC	24 Hour PM2.5, 1	24 Hour PM2.5, 2	24 Hour VOCs, 2	3 Hour VOCs, 1
Primary / QA Collocated / Other	Primary	QA Collocated	N/A	N/A
Parameter code	See Table 26	See Table 26	See Table 26	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	Research Support	Research Support
Network Affiliation	N/A	N/A	NATTS	PAMS
Instrument manufacturer and model	Thermo 2025i PM2.5, A Sampler	Thermo 2025i PM2.5, B Sampler	Xontech 910A, A Sampler	Xontech 910A, B Sampler
Method code	118, 145	118, 145	See Table 26	See Table 26
FRM/FEM/ARM/ other	FRM	FRM	Other	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	01/1999	01/1999	01/2007	01/2007
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:6	1:6	1:1 during Intensive PAMS Season
Calculated sampling frequency (e.g. 1:3/1:1)	1:3	1:6	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	07/01-09/30
Probe height (meters)	12.1	12.1	12.6	12.6
Distance from supporting structure (meters)	2.0	2.0	1.0	1.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	52	52	52	52
Distance between collocated monitors (meters)	2	2	2	2
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	Stainless steel	Stainless steel
Residence time for reactive gases (seconds)	N/A	N/A	0.1	0.1
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	Yes	Yes	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	Semi Annually	Semi Annually
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	10/15/15	10/15/15
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/20/2015, 11/18/2015	05/20/2015, 11/18/2015	N/A	N/A

Pollutant, POC	Metals, Cr6, Carbonyls, 4	Metals, Cr6, Carbonyls, 5	Polycyclic Aromatic Hydrocarbons, 1	
Primary / QA Collocated / Other	Primary	QA Collocated	Primary	
Parameter code	See Table 26	See Table 26	See Table 26	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	

Site type(s)	Population Exposure	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network Affiliation	NATTS	NATTS	NATTS	
Instrument manufacturer and model	RM Env. 924,A Sampler	RM Env. 924, B Sampler	Tisch PUF	
Method code	See Table 26	See Table 26	See Table 26	
FRM/FEM/ARM/ other	Other	Other	Other	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	
Reporting Agency	SCAQMD	SCAQMD	ERG North Carolina	
Spatial scale (e.g. micro, neighborhood)	Urban	Urban	Urban	
Monitoring start date (MM/DD/YYYY)	01/2007	01/2007	01/2007	
Current sampling frequency (e.g. 1:3, continuous)	See Table 26	See Table 26	See Table 26	
Calculated sampling frequency (e.g. 1:3/1:1)	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	12.18	12.18	12.18	
Distance from supporting structure (meters)	1.9	1.9	1.9	
Distance from obstructions on roof (meters)	N/A	N/A	Yes	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	52	52	52	
Distance between collocated monitors (meters)	2	2	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	
Residence time for reactive gases (seconds)	N/A	N/A	N/A	

Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

Pollutant, POC	Metals, Cr6, Carbonyls, N/A	VOCs, N/A	Carbonyls, 2	
Primary / QA Collocated / Other	N/A	N/A	N/A	
Parameter code	N/A	N/A	See Table 26	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network Affiliation	CA Air Toxics	CA Air Toxics	PAMS	
Instrument manufacturer and model	RM Env. 924	RM Env. 910PC	Atec 8000	
Method code	N/A	N/A	See Table 26	
FRM/FEM/ARM/ other	Other	Other	Other	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB Toxics	ARB Toxics	SCAQMD	
Reporting Agency	ARB	ARB	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	01/1989	01/1989	06/01/2009	

(MM/DD/YYYY)				
Current sampling frequency (e.g.1:3, continuous)	1:12	1:12	1:6 or 1:1 Intensive PAMS	
Calculated sampling frequency (e.g. 1:3/1:1)	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	12.18	12.6	12.3	
Distance from supporting structure (meters)	1.9	2.3	2	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	52	52	52	
Distance between collocated monitors (meters)	2	2	N/A	
Unrestricted airflow (degrees)	360	360	360	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	Stainless steel	Stainless steel	
Residence time for reactive gases (seconds)	N/A	N/A	5.0	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	

Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

Pollutant, POC	PM2.5 Carbon, N/A	PM2.5 Carbon, N/A	Speciated PM2.5, N/A	Speciated PM2.5, N/A
Primary / QA Collocated / Other	Primary	QA Collocated	Primary	QA Collocated
Parameter code	N/A	N/A	N/A	N/A
Basic monitoring objective(s)	NAAQS, Research Support	NAAQS, Research Support	NAAQS, Research Support	NAAQS, Research Support
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	STN	STN /QA Collocated	STN	STN /QA Collocated
Instrument manufacturer and model	URG 3000, A Sampler	URG 3000, B Sampler	Met One SASS, A Sampler	Met One SASS, B Sampler
Method code	N/A	N/A	N/A	N/A
FRM/FEM/ARM/ other	Other	Other	Other	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	EPA STN	EPA STN	EPA STN	EPA STN
Reporting Agency	EPA	EPA	EPA	EPA
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	03/07/2007	03/07/2007	03/2001	03/2001
Current sampling frequency (e.g. 1:3, continuous)	1:3	1:6	1:3	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	1:3	1:3	1:3	1:3
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	12.3	12.3	12.0	12.0
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A

Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	52	52	52	52
Distance between collocated monitors (meters)	2	2	2	2
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A

Pollutant, POC	Carbon Monoxide, 9	NOy, 9		
Primary / QA Collocated / Other	N/A	N/A		
Parameter code	42101	42612		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Highest Concentration		
Monitor (type)	SLAMS	SLAMS		

Network Affiliation	NCore	NCore		
Instrument manufacturer and model	Teledyne 300EU	Thermo 42i-Y		
Method code	593	574		
FRM/FEM/ARM/other	FRM	N/A		
Collecting Agency	SCAQMD	SCAQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A		
Reporting Agency	SCAQMD	SCAQMD		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	01/01/2011	01/01/2011		
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1		
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A		
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31		
Probe height (meters)	12.3	12.3		
Distance from supporting structure (meters)	2.0	2.0		
Distance from obstructions on roof (meters)	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	45	45		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon		
Residence time for reactive gases (seconds)	N/A	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		

Is it suitable for comparison against the annual PM2.5? (Y/N)	No	No		
Frequency of flow rate verification for manual PM samplers	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	09/17/2015	09/17/2015		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A		

**Los Angeles-North Main Street
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Los Angeles-North Main Street
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

**Los Angeles-North Main Street
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Los Angeles-North Main Street
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

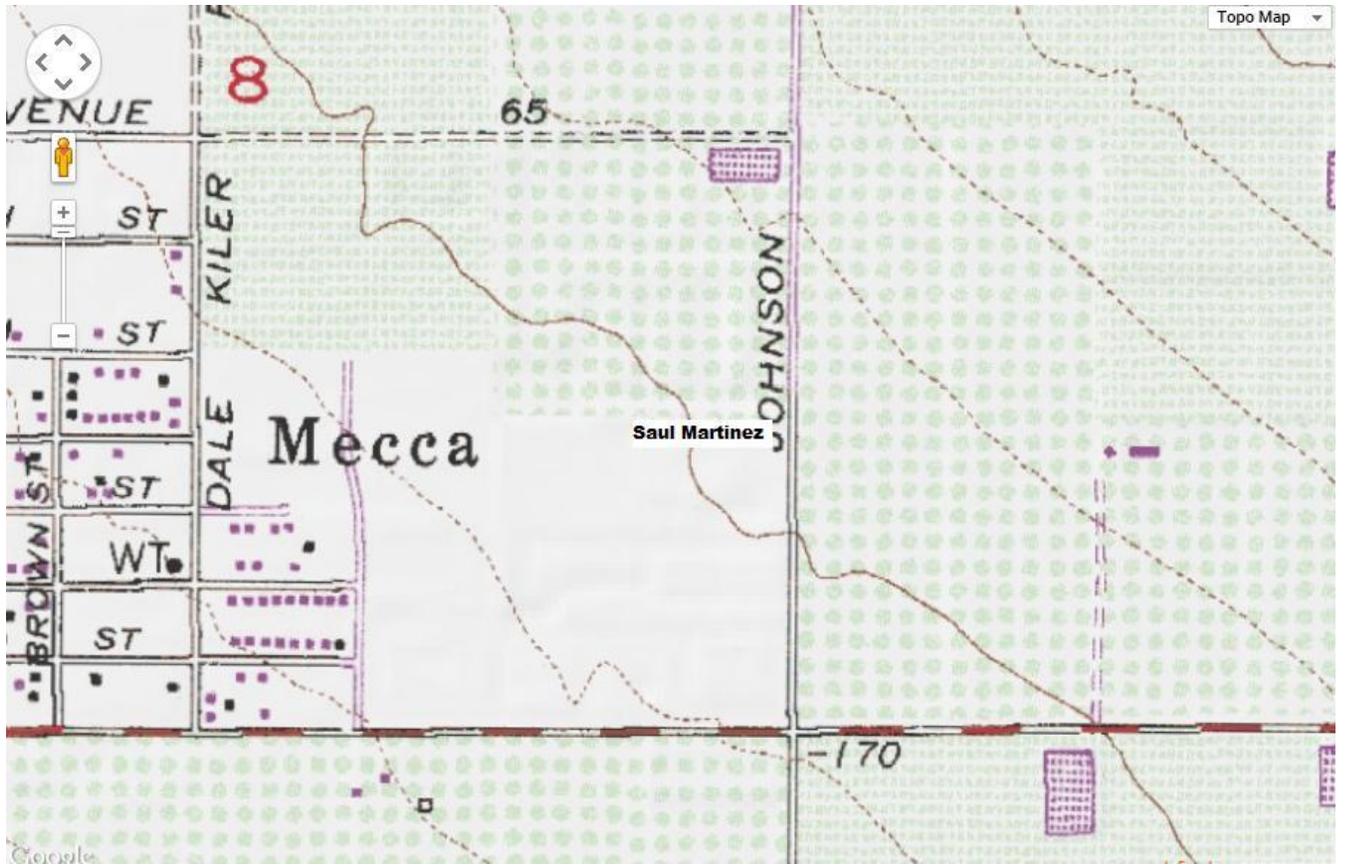
Quality Assurance Site Survey Report for Mecca (Saul Martinez)

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060652005	33033	1/2011	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
65705 Johnson St, Mecca, CA 92254	Riverside	South Coast	33° 34' 19"N	116° 03' 49"W	0



Detailed Site Information

Local site name	Saul Martinez (Mecca)		
AQS ID	060652005		
GPS coordinates (decimal degrees)	Latitude: 33° 34' 19"N Longitude: 116° 03' 49"W		
Street Address	65705 Johnson St, Mecca, CA 92254		
County	Riverside		
Distance to roadways (meters)	25		
Traffic count (AADT, year)	< 500 / 2012		
Groundcover (e.g. asphalt, dirt, sand)	Weeds		
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA		
Pollutant, POC	PM10, 1	Continuous PM10, 3	
Primary / QA Collocated / Other	Primary	Other	
Parameter code	See Table 26	81102	
Basic monitoring objective(s)	NAAQS	NAAQS	
Site type(s)	Highest Concentration	Highest Concentration	
Monitor (type)	SLAMS	SLAMS	
Network Affiliation	N/A	N/A	
Instrument manufacturer and model	Sierra Andersen 1200 SSI	R&P 1400A TEOM	
Method code	063, 102	079	
FRM/FEM/ARM/ other	FRM	FEM	
Collecting Agency	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	N/A	
Reporting Agency	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	01/2011	09/01/2011	
Current sampling frequency (e.g. 1:3, continuous)	1:6	1;1	
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	
Probe height (meters)	2.6	3.4	
Distance from supporting structure (meters)	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	2.6		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		
Residence time for reactive gases (seconds)	N/A	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	Monthly	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	N/A	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/02/2017	04/13/2016 11/01/2016		

**Mecca-Saul Martinez
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Mecca-Saul Martinez
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



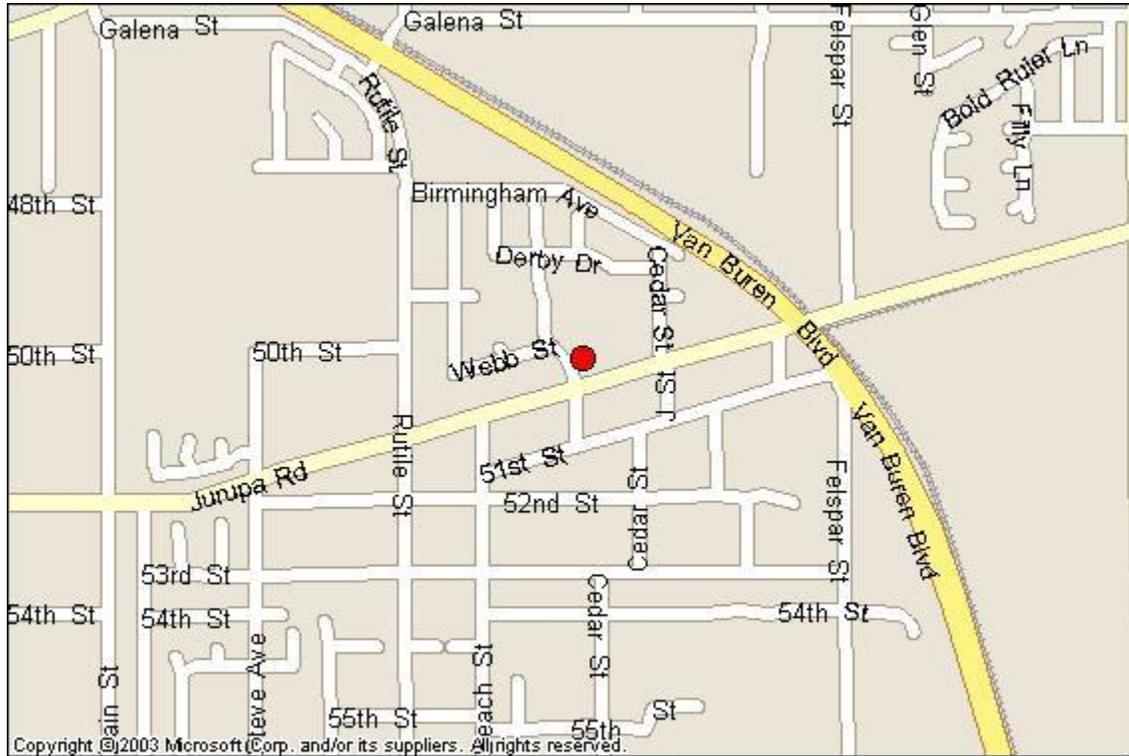
Looking at the probe from the South.



Looking at the probe from the West.

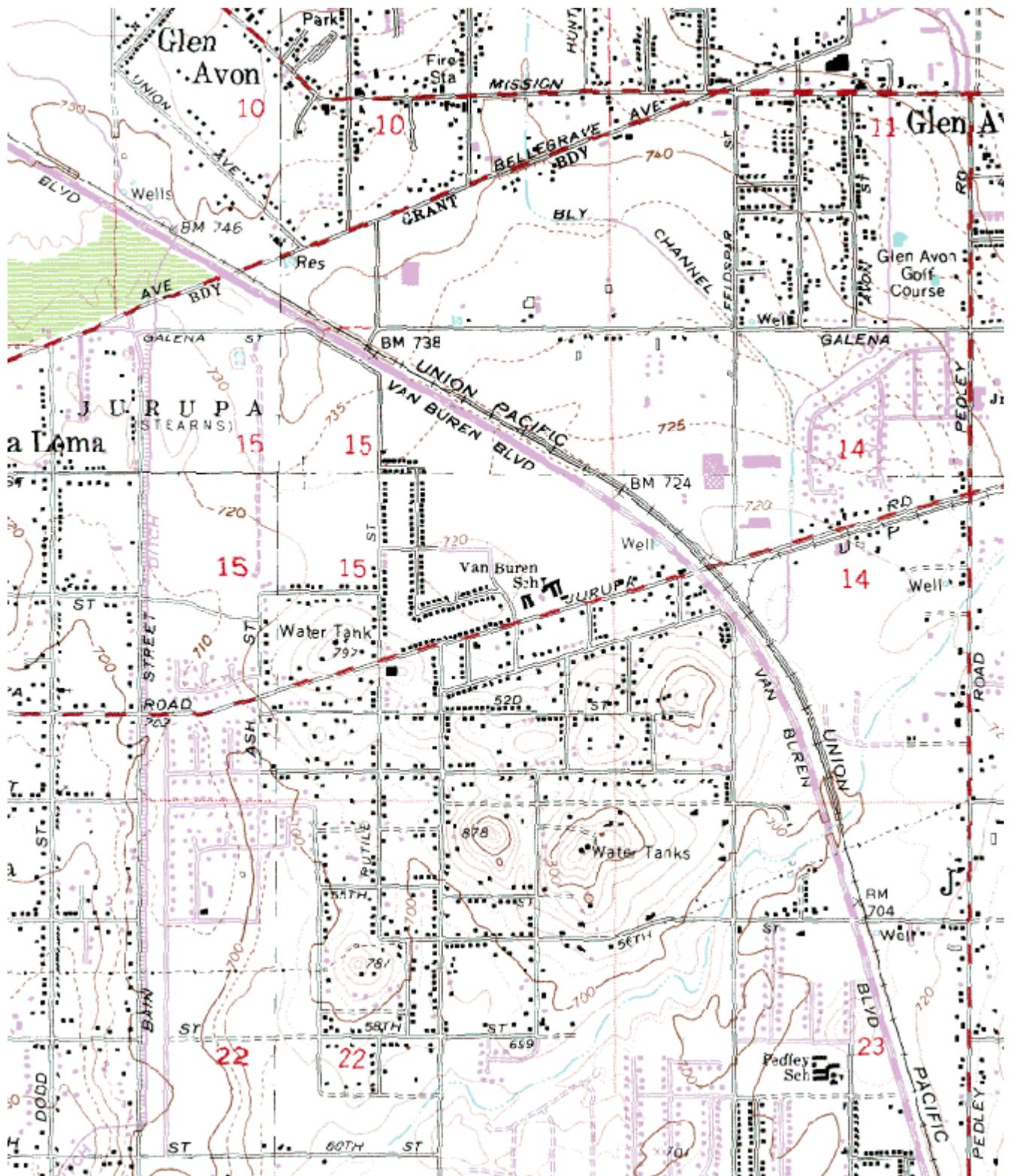
Quality Assurance Site Survey Report for Mira Loma (Van Buren)

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060658005	33165	11/2005	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
5130 Poinsettia Pl Riverside, CA 92509	Riverside	South Coast	33° 59' 46"N	117° 29' 32"W	220



Detailed Site Information

Local site name	Mira Loma (Van Buren)			
AQS ID	060658005			
GPS coordinates (decimal degrees)	Latitude: 33° 59' 46" Longitude: 117° 29' 32"			
Street Address	5130 Poinsettia Place, Riverside CA			
County	Riverside			
Distance to roadways (meters)	14 – 15			
Traffic count (AADT, year)	< 1,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Gravel			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside, San Bernardino-Ontario, CA MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	PM10, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	Primary
Parameter code	42101	42602	44201	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 360	Thermo 42i	API/Teledyne 400E	GMW 1200 SSI
Method code	106	074	087	063, 102
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	11/09/2005	11/09/2005	11/09/2005	11/09/2005
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.4	4.4	4.4	2.6
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	36	36	36	36
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	2
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	5.6	6.1	6.4	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	11/02/2016	11/02/2016	11/02/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/04/2016, 11/04/2016

Pollutant, POC	Continuous PM2.5, 3	24 Hour PM2.5, 1	Continuous PM10, 3	24 Hour PM2.5, 2
Primary / QA Collocated / Other	Other	Primary	Other	QA Collocated
Parameter code	88101	See Table 26	81102	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS

Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS/QA Collocated
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Met One BAM 1020	Thermo 2025i PM2.5 A Sampler	Met One BAM 1020	Thermo 2025i PM2.5 B Sampler
Method code	170	118, 145	122	118, 145
FRM/FEM/ARM/ other	FEM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	11/09/2005	12/07/2005	03/08/2010	03/01/2012
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:3	N/A	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.5	2.9	4.5	2.9
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	2	2	2	2
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A

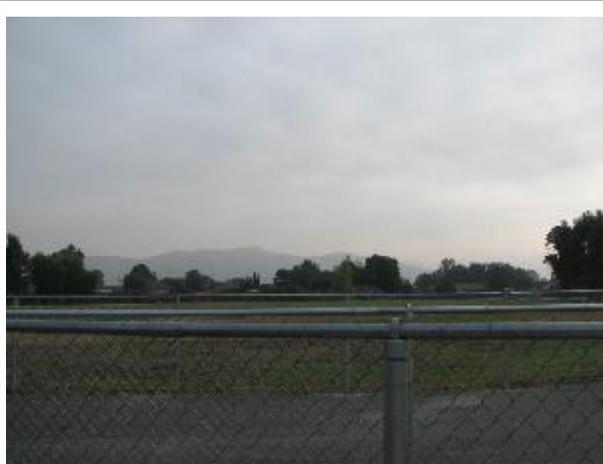
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	No, unless the manual sampler has missing data.	Yes	No	Yes
Frequency of flow rate verification for manual PM samplers	N/A	Bi-Weekly	N/A	Bi-Weekly
Frequency of flow rate verification for automated PM analyzers	Monthly	N/A	Monthly	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06/19/2016, 12/15/2016	05/04/2016, 11/04/2016	06/19/2016, 12/15/2016	05/04/2016, 11/04/2016

Pollutant, POC	PM10, 2	PM10, 4		
Primary / QA Collocated / Other	Primary	QA Collocated		
Parameter code	See Table 26	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Highest Concentration		
Monitor (type)	SLAMS	SLAMS		
Network Affiliation	N/A	N/A		
Instrument manufacturer and model	GMW 1200 SSI	GMW 1200 SSI		
Method code	063, 102	063, 102		
FRM/FEM/ARM/ other	FRM	FRM		
Collecting Agency	SCAQMD	SCAQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD		
Reporting Agency	SCAQMD	SCAQMD		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	11/09/2005	07/01/2014		

Current sampling frequency (e.g.1:3)	1:6	1:6		
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	1:6		
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31		
Probe height (meters)	2.6	2.6		
Distance from supporting structure (meters)	2.0	2.0		
Distance from obstructions on roof (meters)	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	36	36		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	2	2		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		
Residence time for reactive gases (seconds)	N/A	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM _{2.5} ?	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	N/A	N/A		
Last Annual Performance Evaluation for gaseous parameters	N/A	N/A		

Last two semi-annual flow rate audits for PM monitors	05/19/2015, 11/13/2015	05/19/2015, 11/13/2015		
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**Mira Loma (Van Buren)
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

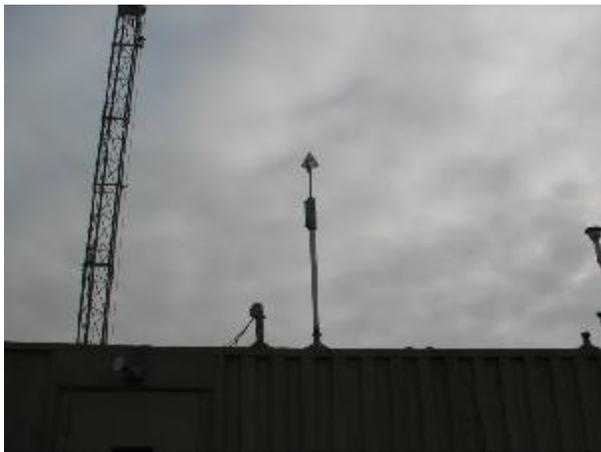
**Mira Loma (Van Buren)
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



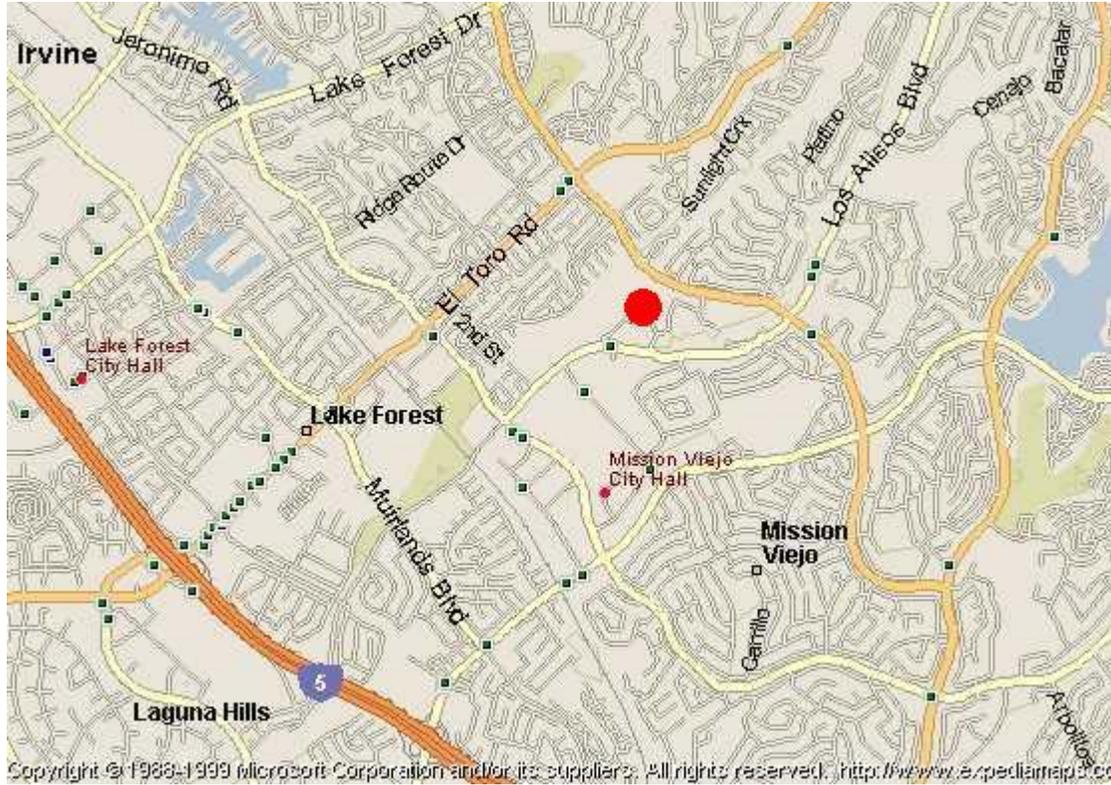
Looking at the probe from the South.



Looking at the probe from the West.

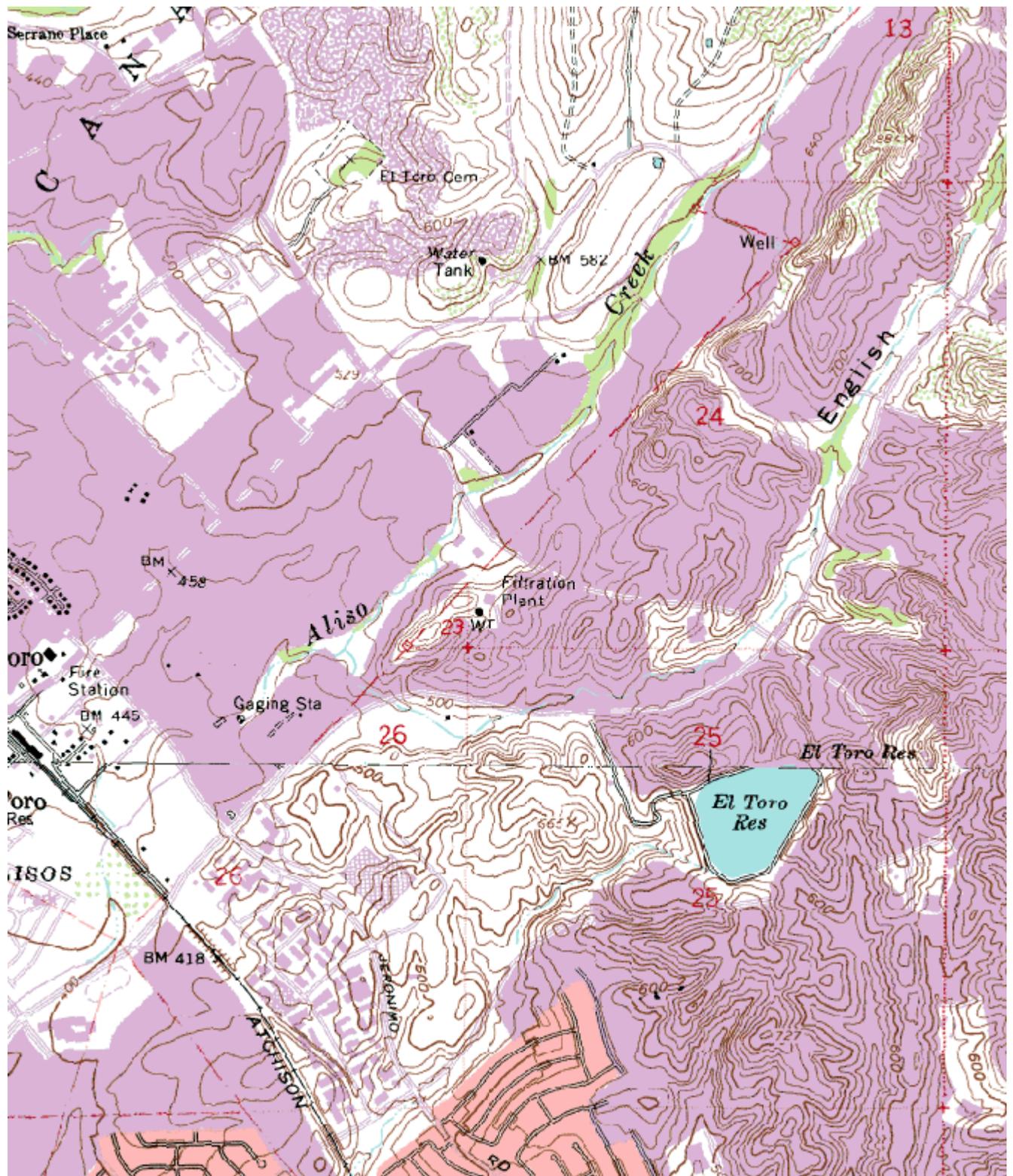
Quality Assurance Site Survey Report for Mission Viejo

Last updated: May 15, 2016



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060592022	30002	06/1999	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
26081 Via Pera Mission Viejo, CA 92691	Orange	South Coast	33° 37' 48"N	117° 40' 32"W	168



Detailed Site Information

Local site name	Mission Viejo			
AQS ID	060592022			
GPS coordinates (decimal degrees)	Latitude: 33° 37' 48" Longitude: 117° 40' 32"			
Street Address	26081 Via Pera, Mission Viejo, CA 92691			
County	Orange			
Distance to roadways (meters)	138 - 175			
Traffic count (AADT, year)	< 2,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Ozone, 1	PM10, 1	24 Hour PM2.5, 1
Primary / QA Collocated / Other	N/A	N/A	Primary	Primary
Parameter code	42101	44201	See Table 26	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 360	API/Teledyne 400E	Sierra Andersen 1200 SSI	Andersen RAAS PM2.5
Method code	106	087	063, 102	780, 120
FRM/FEM/ARM/ other	FRM	FEM	FRM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	06/15/1999	06/15/1999	06/15/1999	06/15/1999
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:6	1:3
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	SCAQMD	SCAQMD
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	6.7	6.7	3.4	3.8
Distance from supporting structure (meters)	2.4	2.4	2.4	2.9
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	4.8	4.8
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	270°	270°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A
Residence time for reactive gases (seconds)	11.1	11.4	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers	N/A	N/A	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	04/05/2016	04/05/2016	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	04/21/2016 11/10/2016	04/21/2016 11/10/2016

**Mission Viejo
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Mission Viejo
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



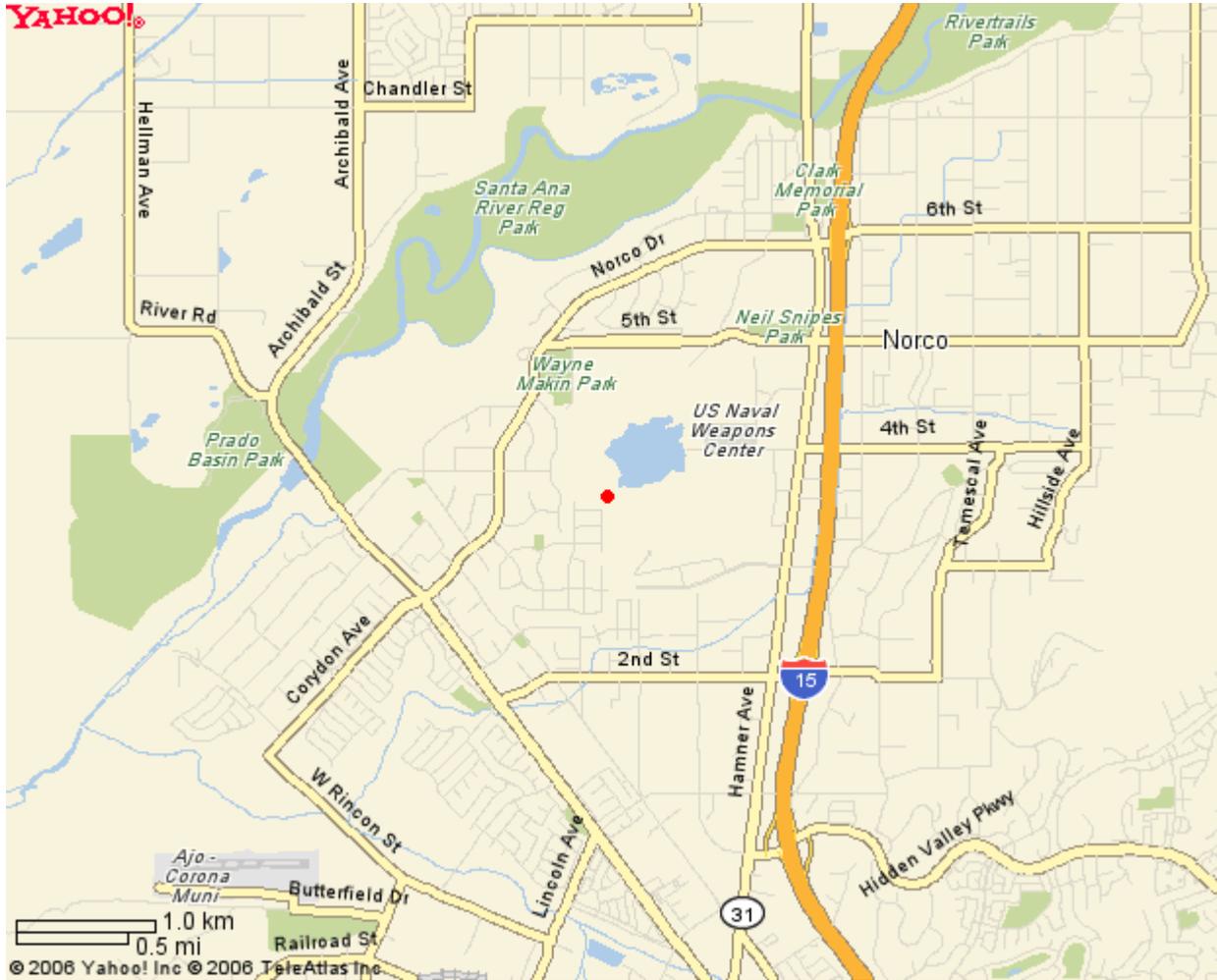
Looking at the probe from the South.



Looking at the probe from the West.

Quality Assurance Site Survey Report for Norco

Last updated: May 15, 2016



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060650003	33155	12/1980	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
USNSWC Corona Division Norco, CA 92860	Riverside	South Coast	33° 55' 17"N	117° 34' 21"W	197

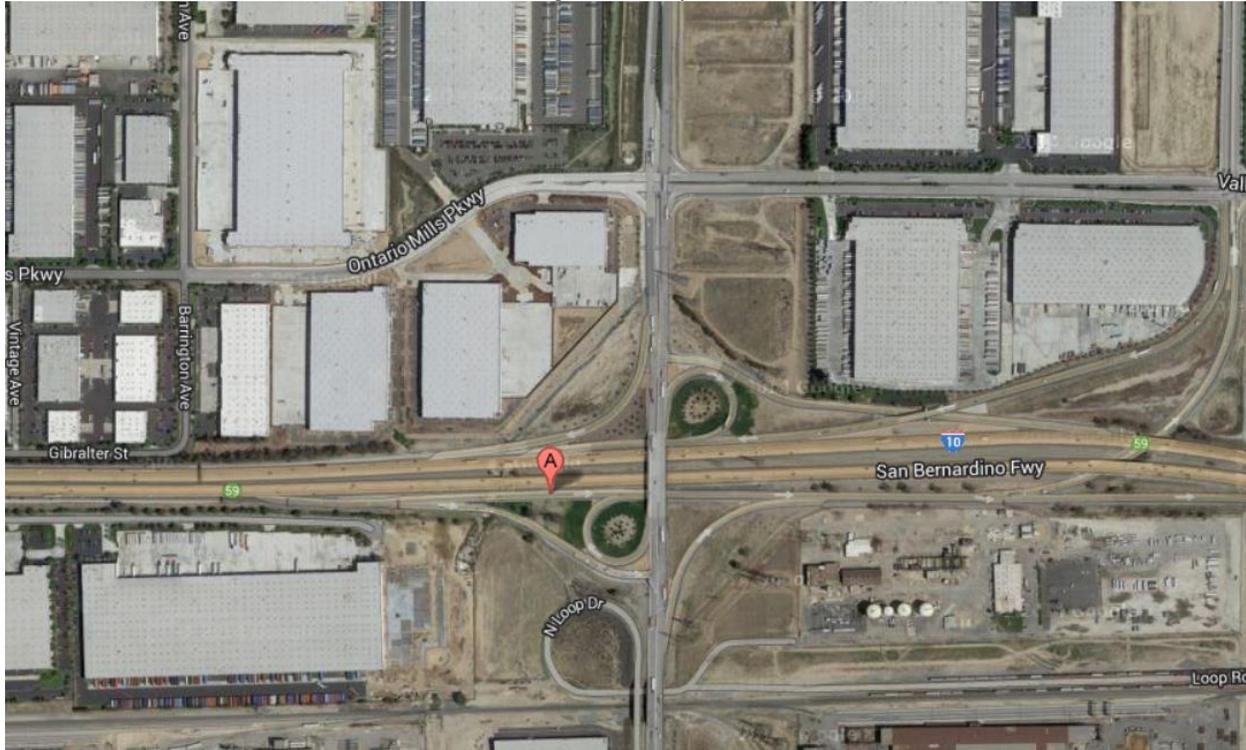
Detailed Site Information

Local site name	Norco			
AQS ID	06065003			
GPS coordinates (decimal degrees)	Latitude: 33° 55' 17" Longitude: 117° 34' 21"			
Street Address	USNSWC Corona Division, Norco, CA 92860			
County	Riverside			
Distance to roadways (meters)	25			
Traffic count (AADT, year)	< 500 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Weeds			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	PM10, 1			
Primary / QA Collocated / Other	Primary			
Parameter code	See Table 26			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			
Network Affiliation	N/A			
Instrument manufacturer and model	Sierra Andersen 1200 SSI			
Method code	063, 102			
FRM/FEM/ARM/ other	FRM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Neighborhood			
Monitoring start date (MM/DD/YYYY)	12/1980			
Current sampling frequency (e.g. 1:3, continuous)	1:6			
Calculated sampling frequency (e.g. 1:3/1:1)	1:6			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	3.0			
Distance from supporting structure (meters)	2.0			
Distance from obstructions on roof (meters)	N/A			

Distance from obstructions not on roof (meters)	N/A			
Distance from trees (meters)	N/A			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	N/A			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases (seconds)	N/A			
Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A			
Frequency of flow rate verification for manual PM samplers	Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	04/21/2016, 11/10/2016			

**South Coast AQMD
Site Survey Report for Ontario Etiwanda-Near Road**

Last updated: May, 2017



Site Address		County	Air Basin	Latitude	Longitude	Elevation
NW Corner Interstate 10 & Etiwanda Ontario, CA		San Bernardino	South Coast	34° 04' 04"N	117° 31' 33"W	300m
AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code			
060710026	36035	07/14	South Coast AQMD (061)			



Detailed Site Information

Local site name	Ontario Etiwanda – Near Road		
AQS ID	060710026		
GPS coordinates (decimal degrees)	Latitude: 34° 04' 04"N Longitude: 117° 31' 33"W		
Street Address	NW CORNER INTERSTATE 10 & ETIWANDA Ontario, CA		
County	San Bernardino		
Distance to roadways (meters)	49.0 meters		
Traffic count (AADT, year)	646804 (FEAADT)		
Groundcover (e.g. asphalt, dirt, sand)	Gravel, sand		
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, MSA		
Pollutant, POC	Nitrogen Dioxide, 5	Carbon Monoxide, 1	
Primary / QA Collocated / Other	N/A	N/A	
Parameter code	42603	42101	
Basic monitoring objective(s)	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	
Network Affiliation	Near Road	Near Road	
Instrument manufacturer and model	Thermo 42i	Thermo 48i-TLE	
Method code	074	554	
FRM/FEM/ARM/ other	FRM	FRM	
Collecting Agency	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Microscale	Microscale	
Monitoring start date (MM/DD/YYYY)	07/2014	12/2014	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	
Probe height (meters)	4.2	4.5	
Distance from supporting structure (meters)	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon		
Residence time for reactive gases (seconds)	6.8	6.8		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	11/09/2016	11/09/2016		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A		

**Ontario Etiwanda-Near Road
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Ontario Etiwanda-Near Road
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



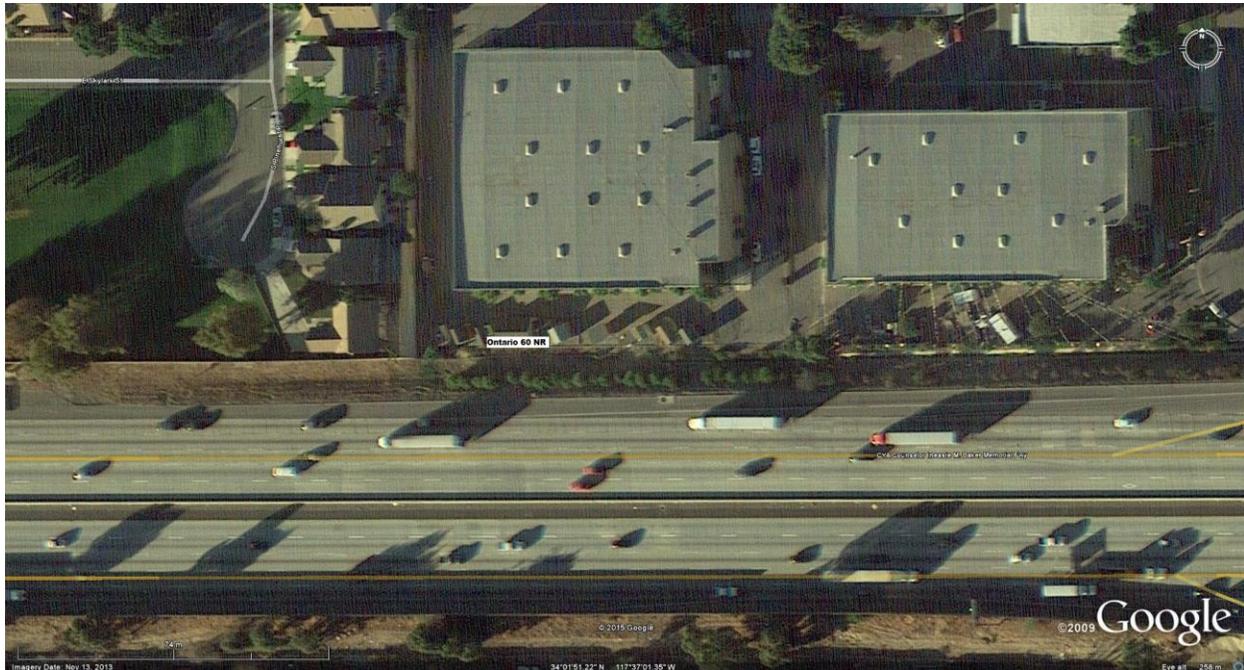
Looking at the probe from the South.



Looking at the probe from the West.

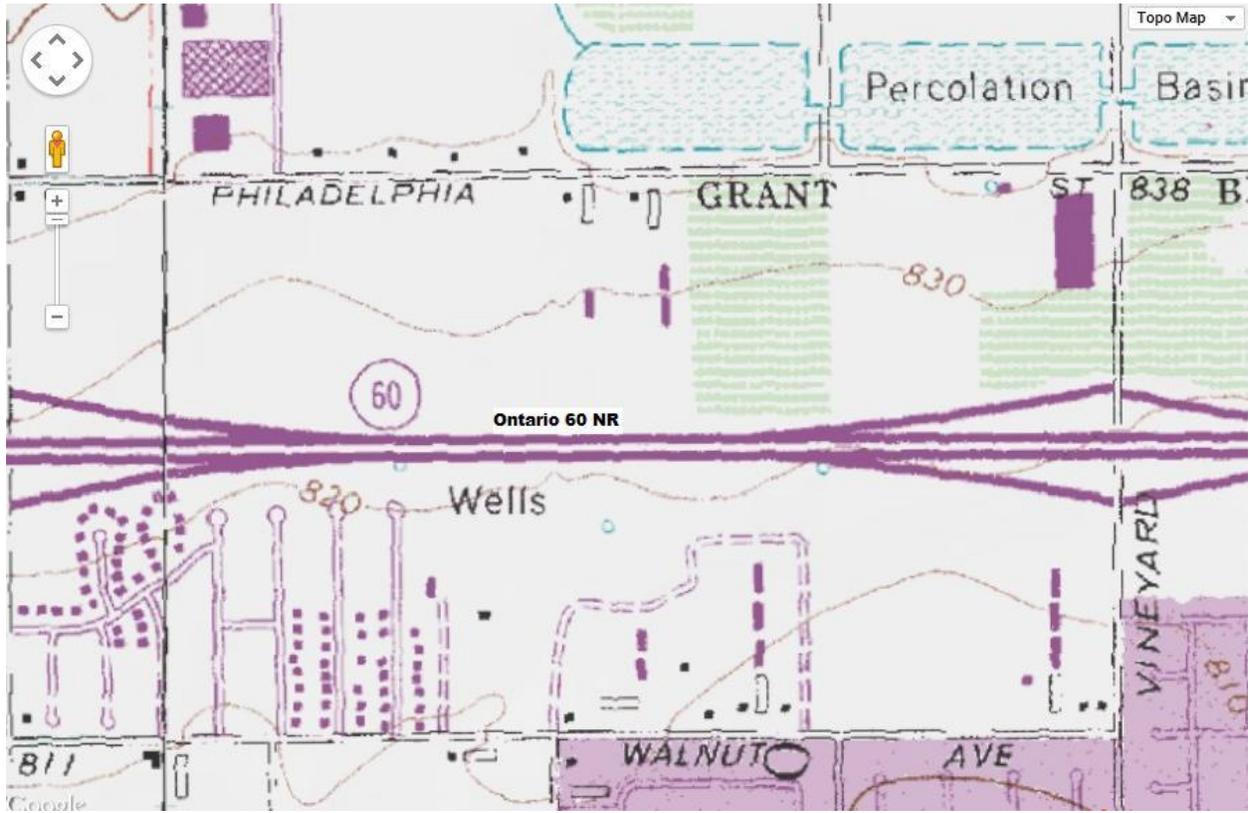
Quality Assurance Site Survey Report for Ontario-Route 60 Near Road

Last updated, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060710027	36036	1/1/2015	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
2330 S. Castle Harbour	San Bernardino	South Coast	34° 01' 51" N	117° 37' 02" N	258m



Detailed Site Information

Local site name	Ontario-Route 60 Near Road			
AQS ID	060710027			
GPS coordinates (decimal degrees)	Latitude: 34° 01' 51" N Longitude: 117° 37' 02" N			
Street Address	2330 S. Castle Harbour Ontario, CA 91761			
County	San Bernardino			
Distance to roadways (meters)	10 m			
Traffic count (AADT, year)	215,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Gravel/Grass			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Nitrogen Dioxide, 1	24 Hour PM2.5, 1	Continuous PM2.5, 3	
Primary / QA Collocated / Other	N/A	Primary	Other	
Parameter code	42602	See Table 26	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SPM	
Network Affiliation	Near Road	Near Road	Near Road	
Instrument manufacturer and model	Thermo 42i	Thermo 2025i	Thermo 5014i	
Method code	074	118,145	183	
FRM/FEM/ARM/ other	FRM	FRM	FEM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Micro	Micro	Micro	
Monitoring start date (MM/DD/YYYY)	01/2015	1/2015	1/2015	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:1	1:1	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	4.5	4.5	4.5	
Distance from supporting structure (meters)	2.0	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	NA	NA	
Residence time for reactive gases (seconds)	6.8	NA	NA	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Yes	Yes	
Frequency of flow rate verification for manual PM samplers	N/A	Monthly	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	
Frequency of one-point QC check for gaseous instruments	Nightly	N/A	N/A	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	11/04/2016	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/21/2016 11/10/2016	07/26/2016 12/28/2016	

**Ontario-Route 60 Near Road
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Ontario-Route 60 Near Road
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

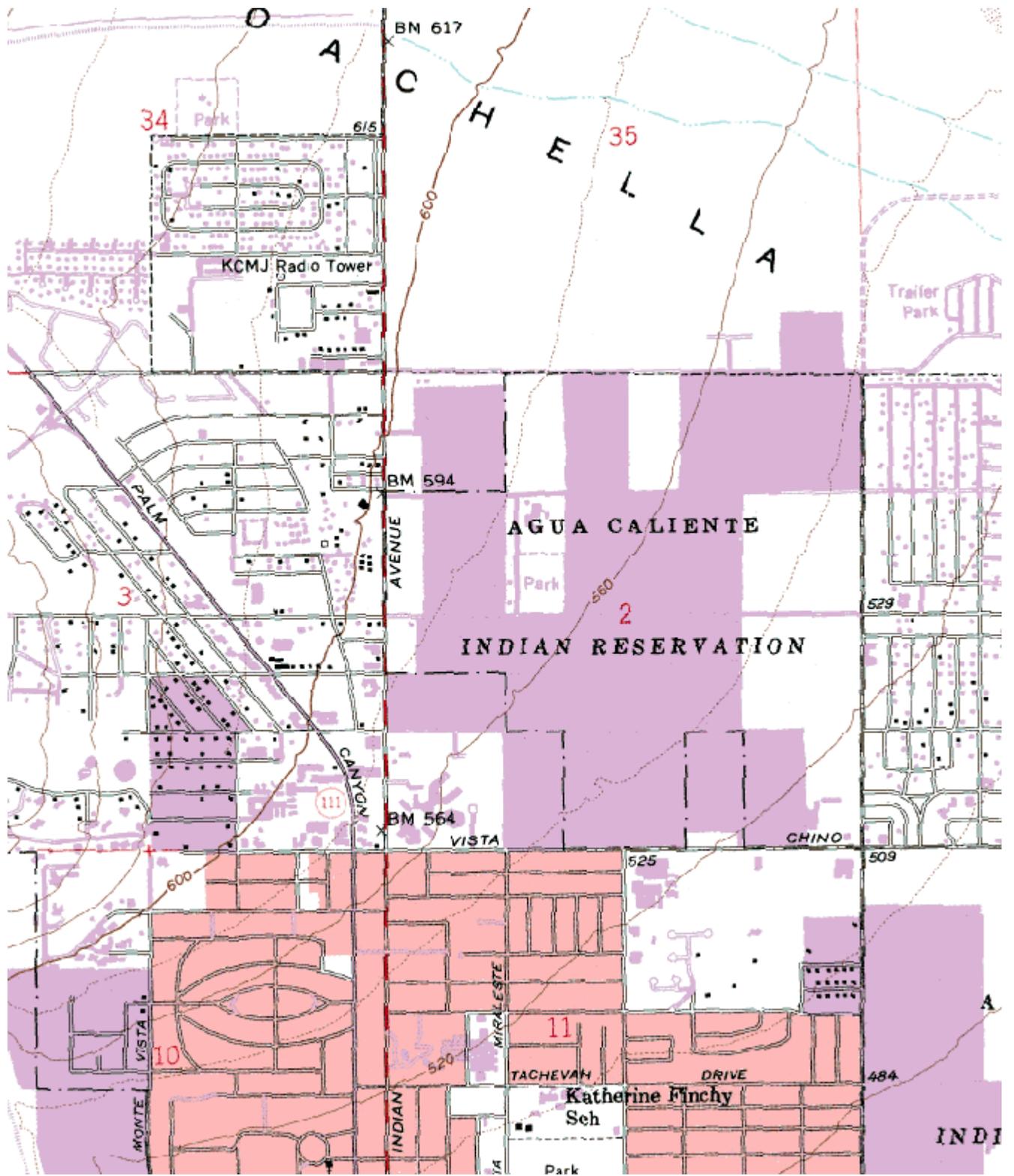
Quality Assurance Site Survey Report for Palm Springs-Fire Station

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060655001	33137	04/1971	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
590 E Racquet Club Ave Palm Springs, CA 92262	Riverside	Salton Sea	33° 51' 09"N	116° 32' 27"W	172 m



Detailed Site Information

Local site name	Palm Springs-Fire Station			
AQS ID	060655001			
GPS coordinates (decimal degrees)	Latitude: 33° 51' 09" Longitude: 116° 32' 27"			
Street Address	590 East Racquet Club Ave., Palm Springs, CA 92262			
County	Riverside			
Distance to roadways (meters)	13 - 17			
Traffic count (AADT, year)	5,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Concrete			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 2	Ozone, 1	PM10, 2
Primary / QA Collocated / Other	N/A	N/A	N/A	Primary
Parameter code	42101	42602	44201	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 360	Thermo 42i	API/Teledyne 400E	Sierra Andersen 1200 SSI
Method code	106	074	087	063,102
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	04/1971	04/1971	04/1971	01/1985
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	5.0	5.0	5.0	3.46
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	22	22	22	19
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	2.1
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	8.3	9.5	9.3	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	11/18/2016	11/22/2016	11/22/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	04/13/2016, 11/01/2016

Pollutant, POC	Continuous PM10, 3	24 Hour PM2.5, 1		
Primary / QA Collocated / Other	Other	Primary		

Parameter code	81102	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS	SLAMS		
Network affiliation	N/A	N/A		
Instrument manufacturer and model	Thermo Electron 1400A TEOM	Andersen RAAS PM2.5		
Method code	079	780, 120		
FRM/FEM/ARM/other	FEM	FRM		
Collecting Agency	SCAQMD	SCAQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD		
Reporting Agency	SCAQMD	SCAQMD		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	06/02/2009	12/26/1999		
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:3		
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:3		
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31		
Probe height (meters)	4.7	2.9		
Distance from supporting structure (meters)	1.7	1.9		
Distance from obstructions on roof (meters)	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	19	19		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	2.1	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		

Residence time for reactive gases (seconds)	N/A	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Yes		
Frequency of flow rate verification for manual PM samplers	N/A	Monthly		
Frequency of flow rate verification for automated PM analyzers	Monthly	N/A		
Frequency of one-point QC check for gaseous instruments	N/A	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06/23/2016, 12/20/2016	05/20/2016, 11/01/2016		

**Palm Springs-Fire Station
Site Photos**



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.



Looking North from the probe.

**Palm Springs-Fire Station
Site Photos (Cont.)**



Looking at the probe from the East.



Looking at the probe from the South.



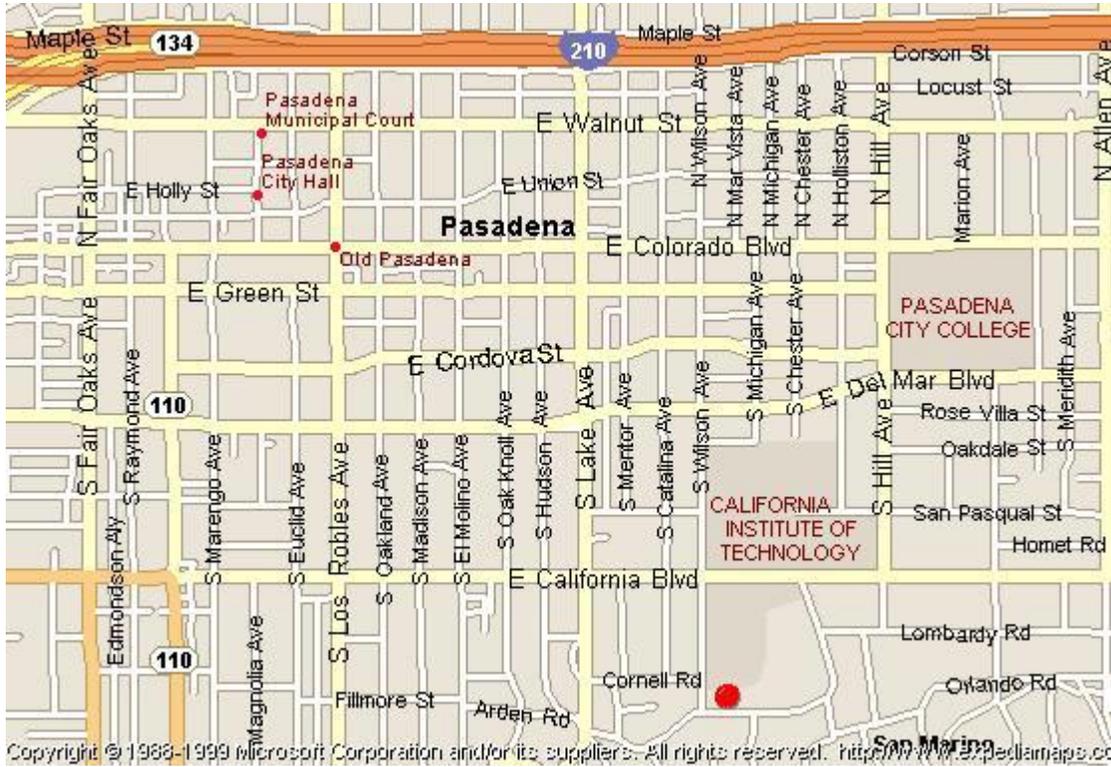
Looking at the probe from the West.



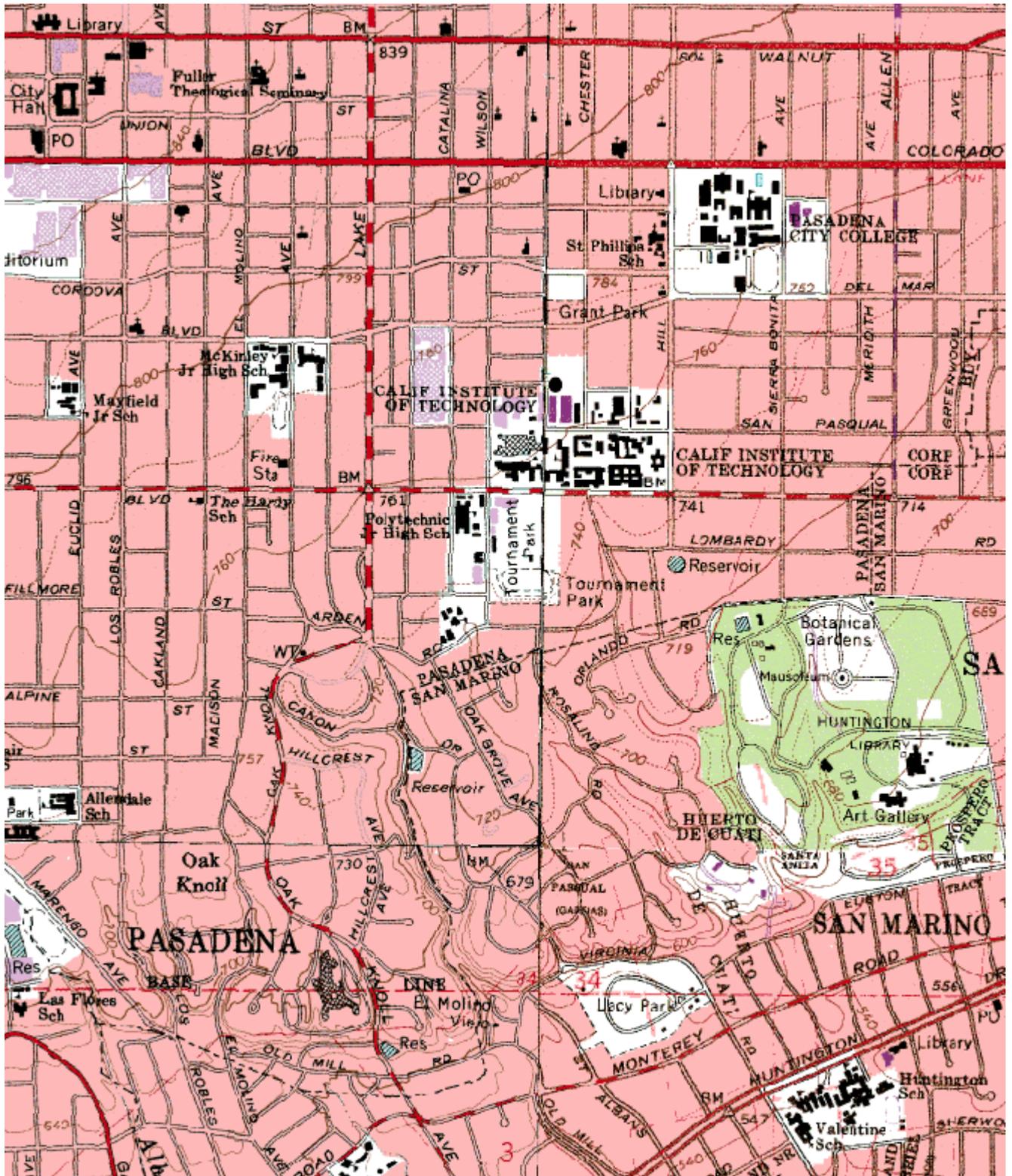
Looking at the probe from the North.

Quality Assurance Site Survey Report for Pasadena

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code		
060372005	70088	04/1982	South Coast AQMD (061)		
Site Address	County	Air Basin	Latitude	Longitude	Elevation
752 S Wilson Ave Pasadena, CA 91702	Los Angeles	South Coast	34° 07' 57"N	118° 07' 37"W	226



Detailed Site Information

Local site name	Pasadena			
AQS ID	060372005			
GPS coordinates (decimal degrees)	Latitude: 34° 07' 57" Longitude: 118° 07' 37"			
Street Address	752 S Wilson Ave, Pasadena, CA 91702			
County	Los Angeles			
Distance to roadways (meters)	66			
Traffic count (AADT, year)	< 5,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Grass			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	24 Hour PM2.5, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	Primary
Parameter code	42101	42602	44201	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Highest Concentration	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	Teledyne 400E	Andersen RAAS PM2.5
Method code	158	074	087	780, 120
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Middle	Middle	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	04/1982	04/1982	04/1982	04/1982
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:3
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	1:3
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	5.0	5.0	5.0	2.8
Distance from supporting structure (meters)	2.1	2.1	2.1	1.9
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	13	13	13	13
Distance from trees (meters)	6	6	6	6
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	5.2	5.7	6.1	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	09/09/2016	09/09/2016	09/09/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/10/2016, 11/05/2016

**Pasadena
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Pasadena
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



Looking at the probe from the South.



Looking at the probe from the West.

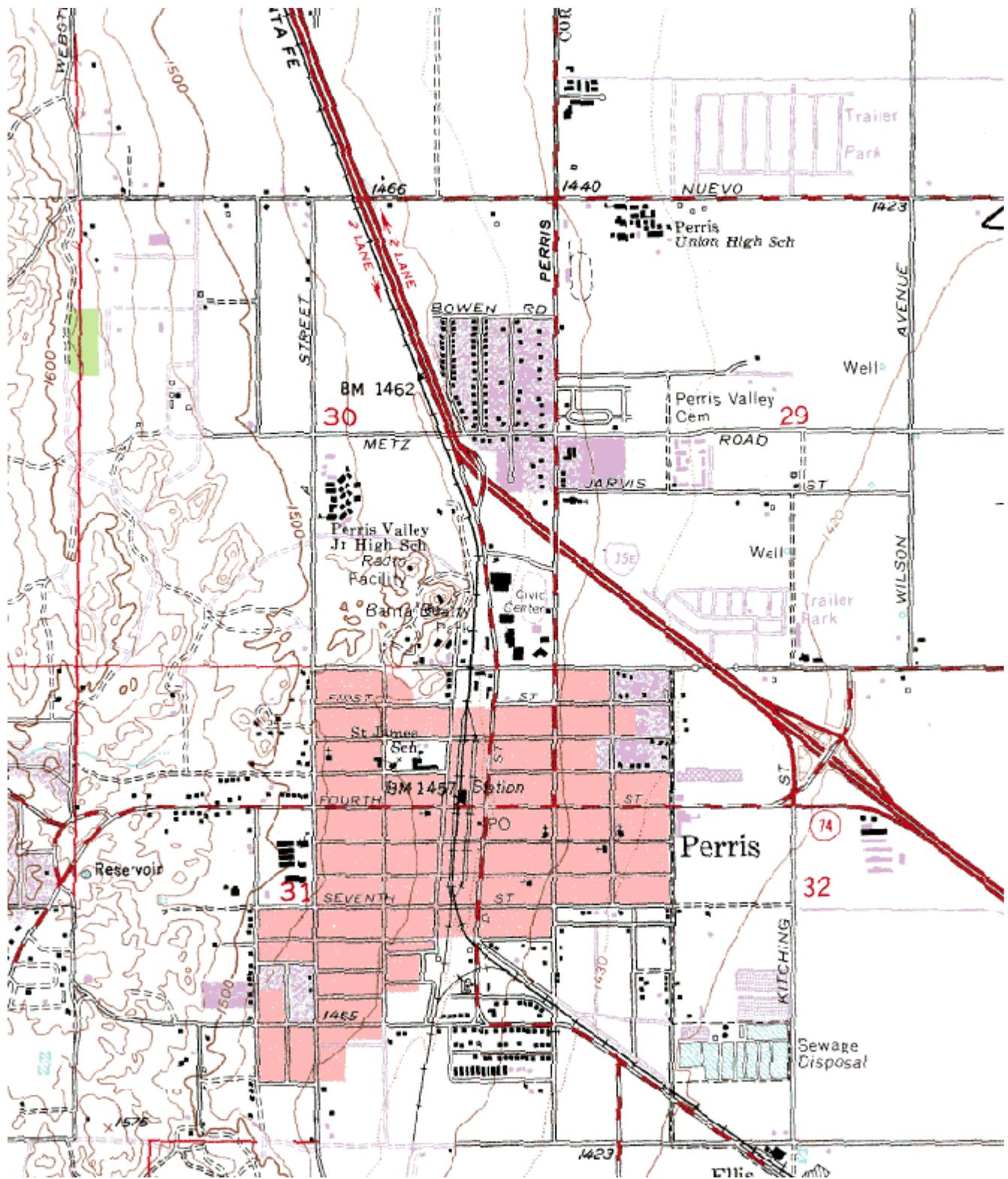
Quality Assurance Site Survey Report for Perris

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060656001	33149	05/1973	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
237 1/2 N D St Perris, CA 92570	Riverside	South Coast	33° 47' 20"N	117° 13' 40"W	442 m



Detailed Site Information

Local site name	Perris		
AQS ID	060656001		
GPS coordinates (decimal degrees)	Latitude: 33° 47' 20" Longitude: 117° 13' 40"		
Street Address	237 ½ N D St, Perris, CA 92570		
County	Riverside		
Distance to roadways (meters)	74; 173m		
Traffic count (AADT, year)	39,500 / 2012; 215/D St., 99,000 / 2011		
Groundcover (e.g. asphalt, dirt, sand)	Asphalt		
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA		
Pollutant, POC	Ozone, 1	PM10, 1	
Primary / QA Collocated / Other	N/A	Primary	
Parameter code	44201	See Table 26	
Basic monitoring objective(s)	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	
Network affiliation	N/A	N/A	
Instrument manufacturer and model	Thermo 49i	Sierra Andersen 1200 SSI	
Method code	047	063, 102	
FRM/FEM/ARM/ other	FEM	FRM	
Collecting Agency	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD	
Reporting Agency	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	05/01/1973	05/01/1973	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:6	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:6	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	
Probe height (meters)	3.5	3.5	
Distance from supporting structure (meters)	1.8	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A		
Residence time for reactive gases (seconds)	6.9	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	N/A	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Nightly	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	09/02/2016	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/21/2016, 11/10/2016		

**Perris
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Perris
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



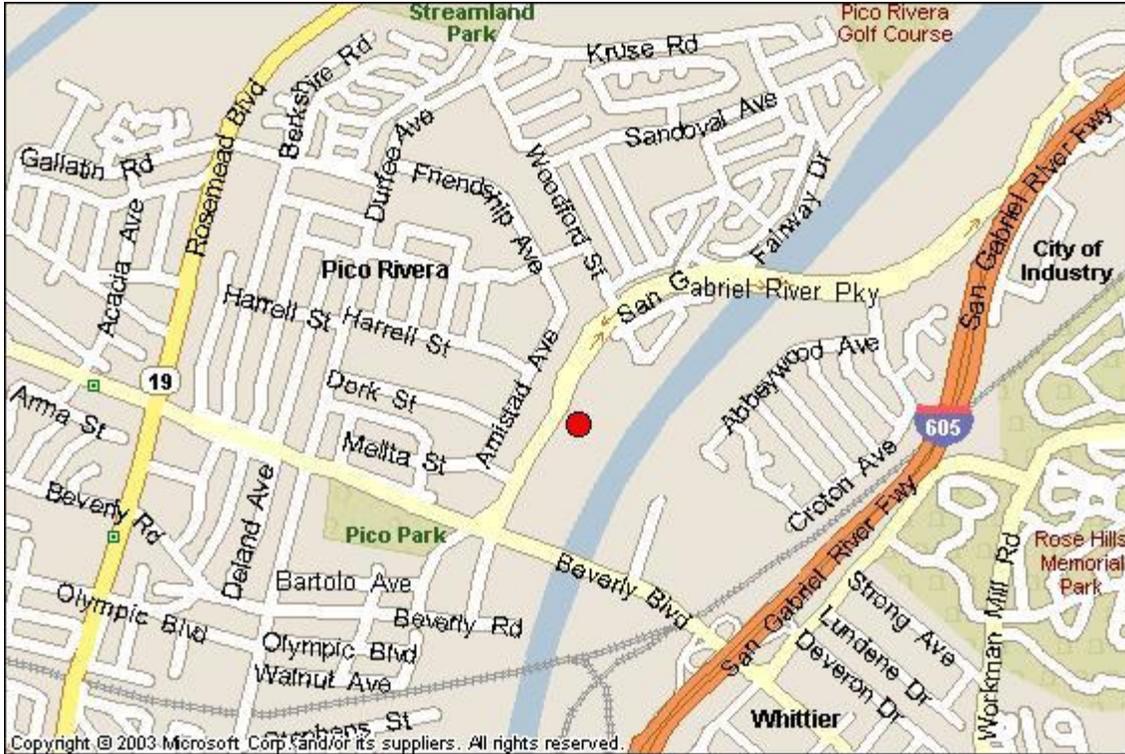
Looking at the probe from the South.



Looking at the probe from the West.

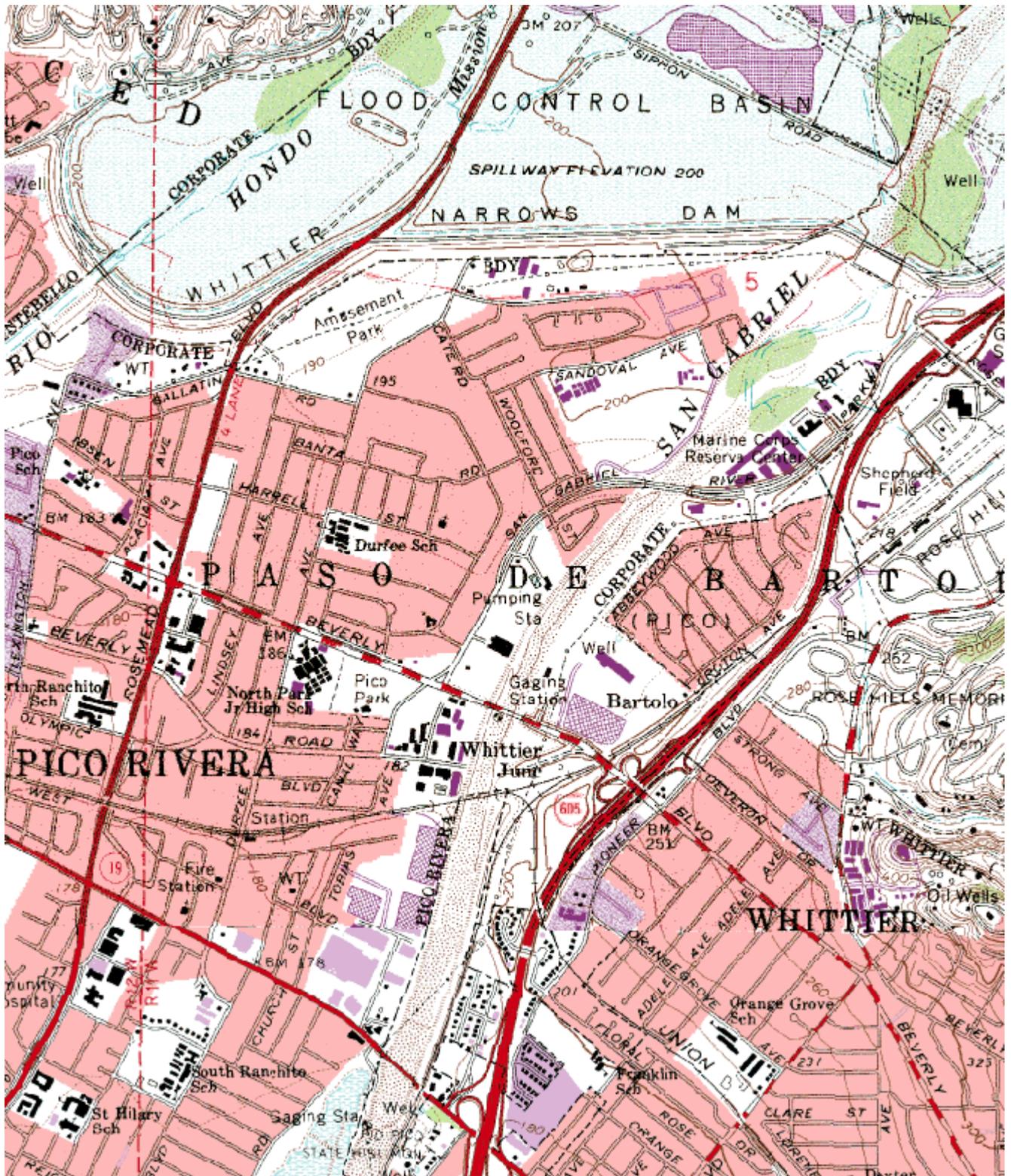
Quality Assurance Site Survey Report for Pico Rivera #2

Last updated: May 15, 2016



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371602	70185	09/2005	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
4144 San Gabriel River Pkwy Pico Rivera, CA 90660	Los Angeles	South Coast	34° 0' 37"N	118° 04' 07"W	58 m



Detailed Site Information

Local site name	Pico Rivera #2			
AQS ID	060371602			
GPS coordinates (decimal degrees)	Latitude: 34° 0' 37" Longitude: 118° 04' 07"			
Street Address	4144 San Gabriel River Pkwy, Pico Rivera, CA			
County	Los Angeles			
Distance to roadways (meters)	35 – 41; 765			
Traffic count (AADT, year)	20,000 / 2012; 605/Beverly, 255,000 2011			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles, Long Beach-Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	Lead, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	N/A
Parameter code	42101	42602	44201	14129
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Highest Concentration	Highest Concentration	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	N/A	PAMS	PAMS	N/A
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	Thermo 49i	GMW TSP 1200
Method code	158	074	087	110
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	9/2005	9/2005	09/2005	09/2005
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.5	4.5	4.5	3.11
Distance from supporting structure (meters)	1.8	1.8	1.8	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	9	9	9	4
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	5.7	7.0	6.4	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	05/24/2016	05/24/2016	05/24/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/10/2016, 11/18/2018

Pollutant, POC	24 Hour PM2.5, 1	VOCs 24 hour, 2	VOCs 3 hour, 1	Carbonyls, 2
Primary / QA Collocated / Other	Primary	N/A	N/A	N/A
Parameter code	See Table 26	See Table 26	See Table 26	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS

Site type(s)	Population Exposure	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	N/A	PAMS	PAMS	PAMS
Instrument manufacturer and model	Andersen RAAS PM2.5	Xontech 910A, A Sampler	Xontech 910A, Sampler	ATEC 8000
Method code	780, 120	See Table 26	See Table 26	See Table 26
FRM/FEM/ARM/ other	FRM	Other	Other	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	09/2005	09/2005	09/2005	09/2005
Current sampling frequency (e.g. 1:3, continuous)	1:3	1:6	1:1	1:6 or intensive PAMS
Calculated sampling frequency (e.g. 1:3/1:1)	1:3	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	07/01-09/30	01/01-12/31
Probe height (meters)	2.84	4.5	4.5	4.5
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	4	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	Stainless steel	Stainless steel	Stainless steel
Residence time for reactive gases (seconds)	N/A	1.1	0.8	1.5

Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	Yes	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	Semi Annually	Semi Annually	Semi Annually
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	05/11/2016 11/16/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/10/2016, 11/18/2016	N/A	N/A	N/A

**Pico Rivera #2
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Pico Rivera #2
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



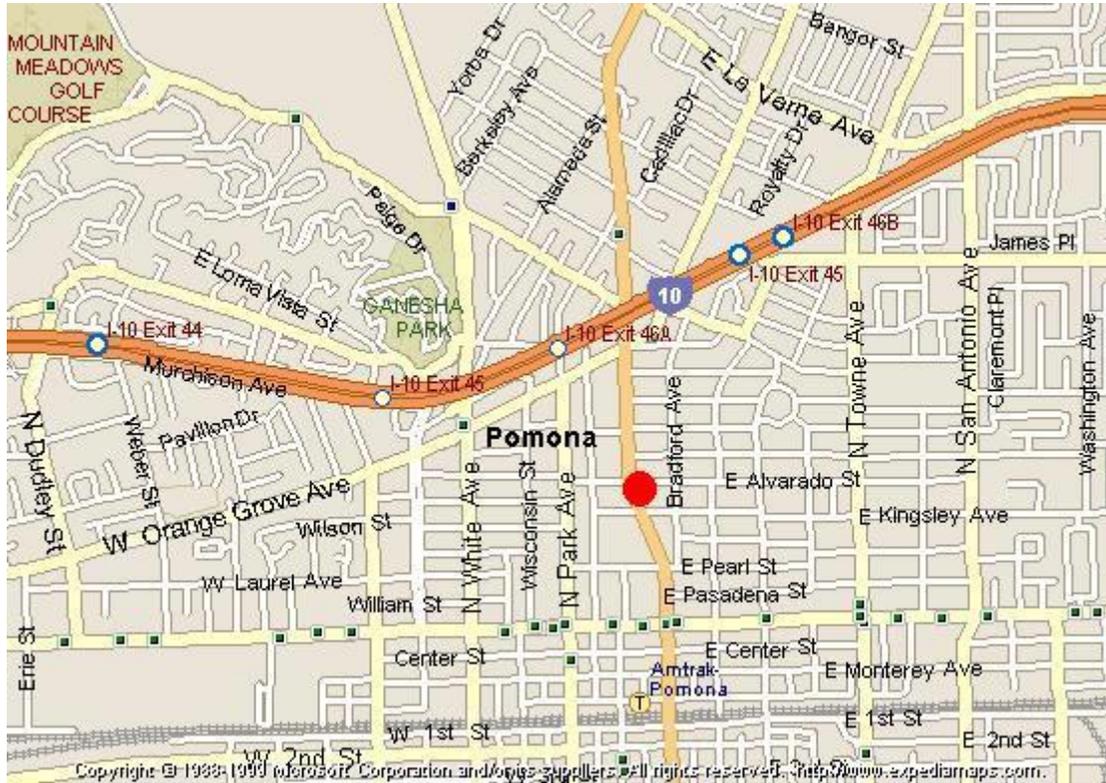
Looking at the probe from the South.



Looking at the probe from the West.

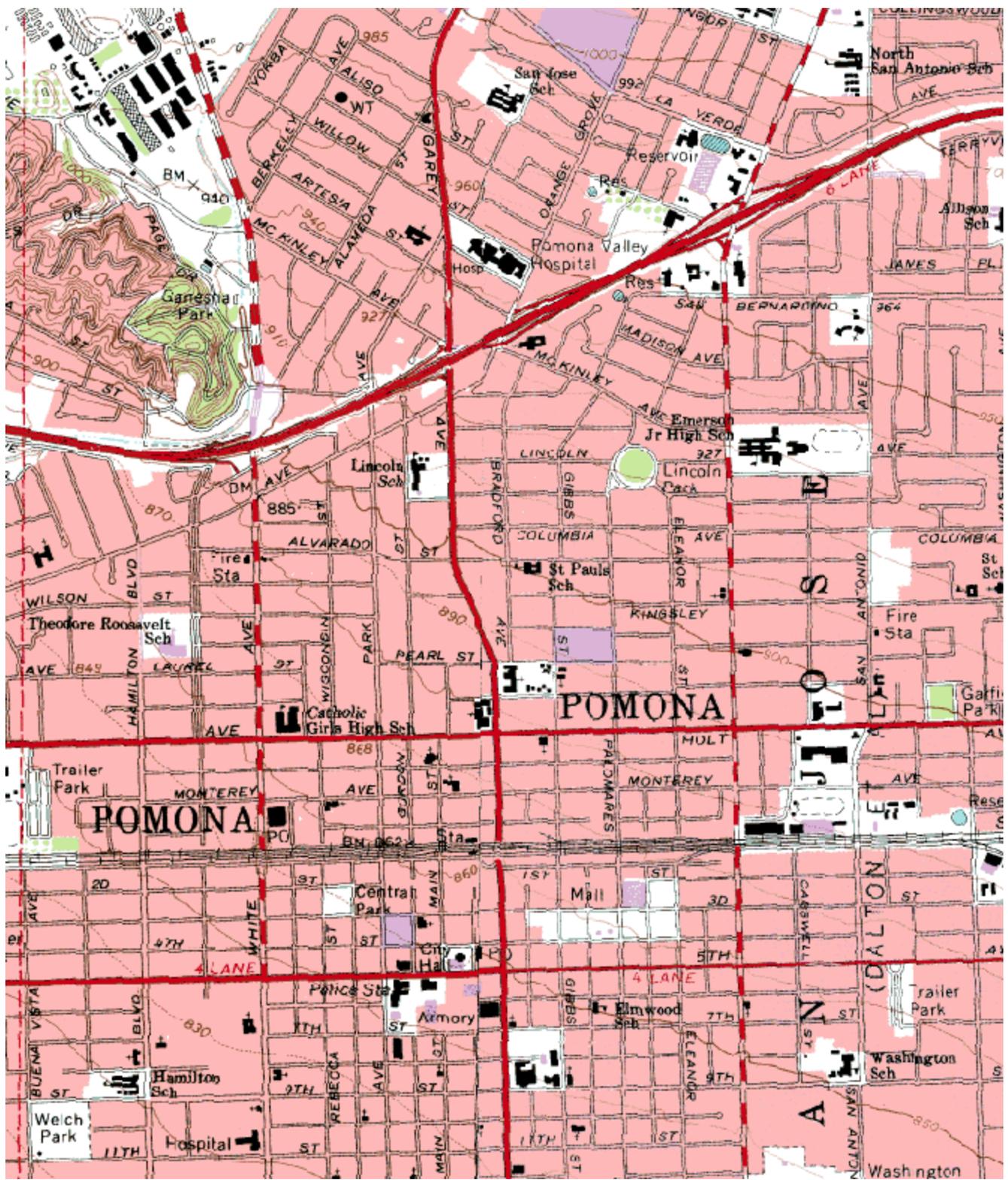
Quality Assurance Site Survey Report for Pomona

Last updated; May, 2016



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371701	70075	06/1965	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
924 N. Garey Ave Pomona, CA 91767	Los Angeles	South Coast	34° 04' 01"N	117° 45' 05"W	279 m



Detailed Site Information

Local site name	Pomona			
AQS ID	060371701			
GPS coordinates (decimal degrees)	Latitude: 34° 04' 01" Longitude: 117° 45' 05"			
Street Address	924 N. Garey Ave, Pomona, CA 91767			
County	Los Angeles			
Distance to roadways (meters)	7			
Traffic count (AADT, year)	25,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 2	Ozone, 1	
Primary / QA Collocated / Other	N/A	N/A	N/A	
Parameter code	42101	42602	44201	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network affiliation	N/A	N/A	N/A	
Instrument manufacturer and model	Horiba APMA 360	API/Teledyne 200E	API/Teledyne 400E	
Method code	106	099	087	
FRM/FEM/ARM/ other	FRM	FRM	FEM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Micro	Middle	Neighborhood	
Monitoring start date (MM/DD/YYYY)	06/1965	06/1965	06/1965	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	7.0	8.2	7.4	
Distance from supporting structure (meters)	2.4	2.4	2.4	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	
Residence time for reactive gases (seconds)	6.8	7.9	7.2	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	03/11/2016	03/11/2016	03/11/2016	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

**Pomona
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Pomona
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



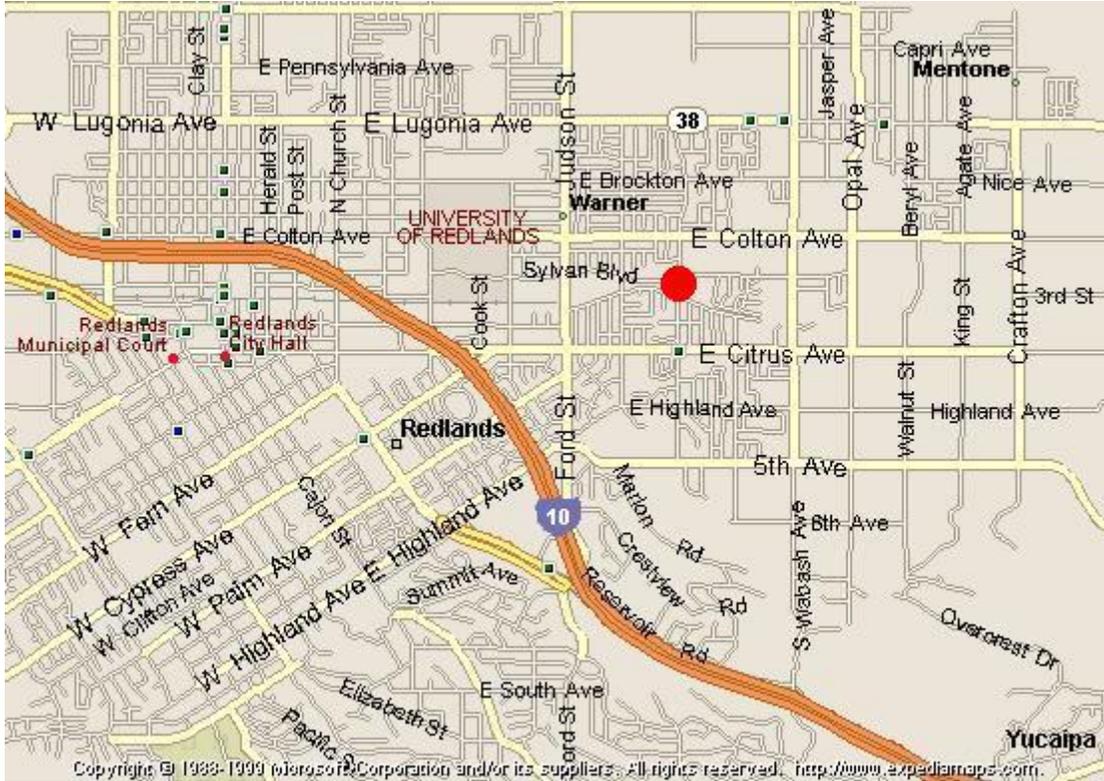
Looking at the probe from the South.



Looking at the probe from the West.

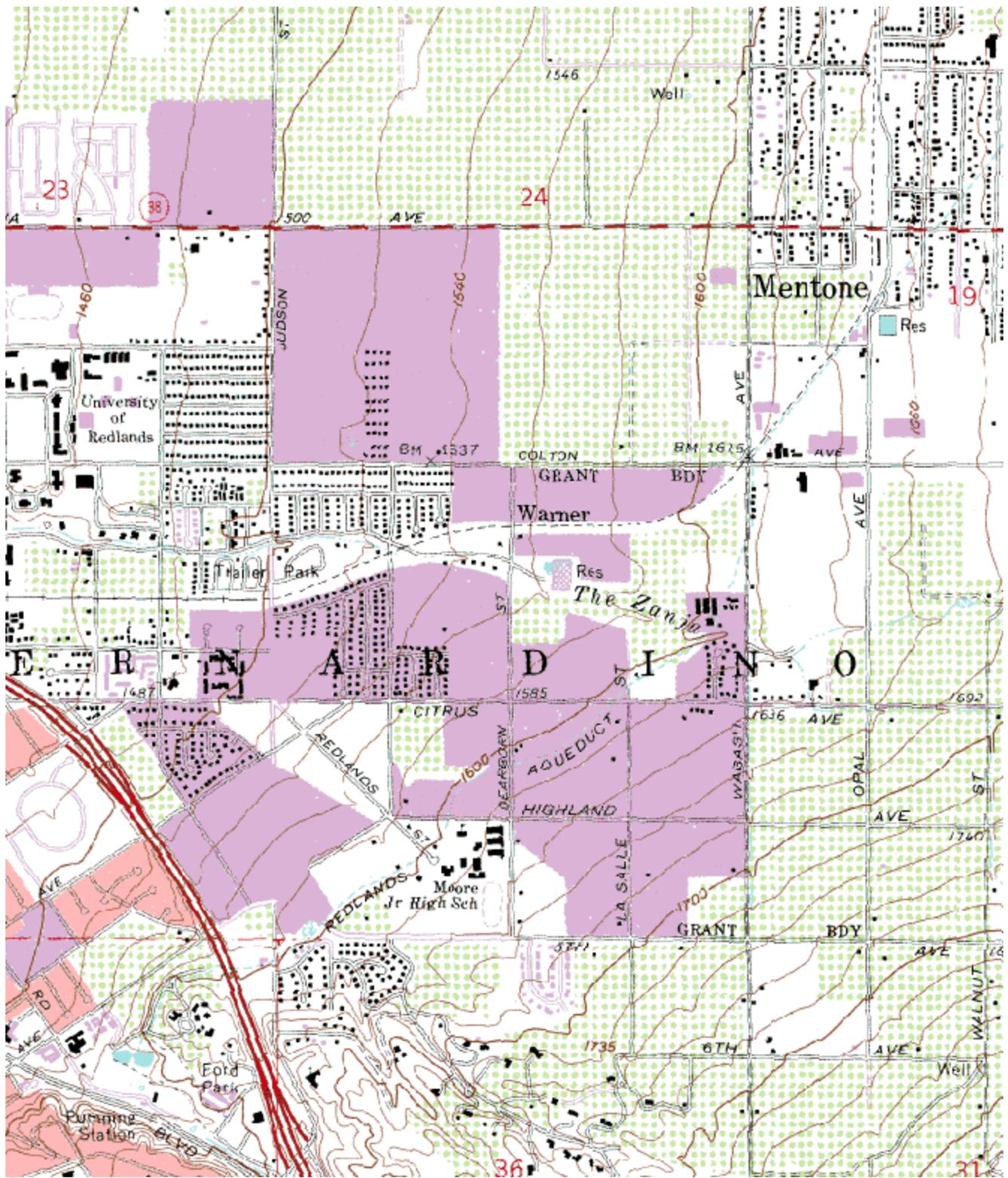
Quality Assurance Site Survey Report for Redlands

Last updated: May, 2016



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060714003	36204	09/1986	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
500 N Dearborn St Redlands, CA 92374	San Bernardino	South Coast	34° 03' 35"N	117° 08' 50"W	475



Detailed Site Information

Local site name	Redlands		
AQS ID	060714003		
GPS coordinates (decimal degrees)	Latitude: 34° 03' 35" Longitude: 117° 08' 50"		
Street Address	500 N Dearborn Ave, Redlands, CA 92374		
County	San Bernardino		
Distance to roadways (meters)	26		
Traffic count (AADT, year)	10 / 2012		
Groundcover (e.g. asphalt, dirt, sand)	Dirt		
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA		
Pollutant, POC	Ozone, 1	PM10, 1	
Primary / QA Collocated / Other	N/A	Primary	
Parameter code	44201	See Table 26	
Basic monitoring objective(s)	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	
Network affiliation	N/A	N/A	
Instrument manufacturer and model	API/Teledyne 400E	Sierra Andersen 1200 SSI	
Method code	087	063, 102	
FRM/FEM/ARM/ other	FEM	FRM	
Collecting Agency	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD	
Reporting Agency	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	09/01/1986	09/01/1986	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:6	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:6	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	
Probe height (meters)	5.0	3.5	
Distance from supporting structure (meters)	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon		
Residence time for reactive gases (seconds)	17.5	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	N/A	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Nightly	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	10/21/2016	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/13/2016, 10/28/2016		

**Redlands
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Redlands
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



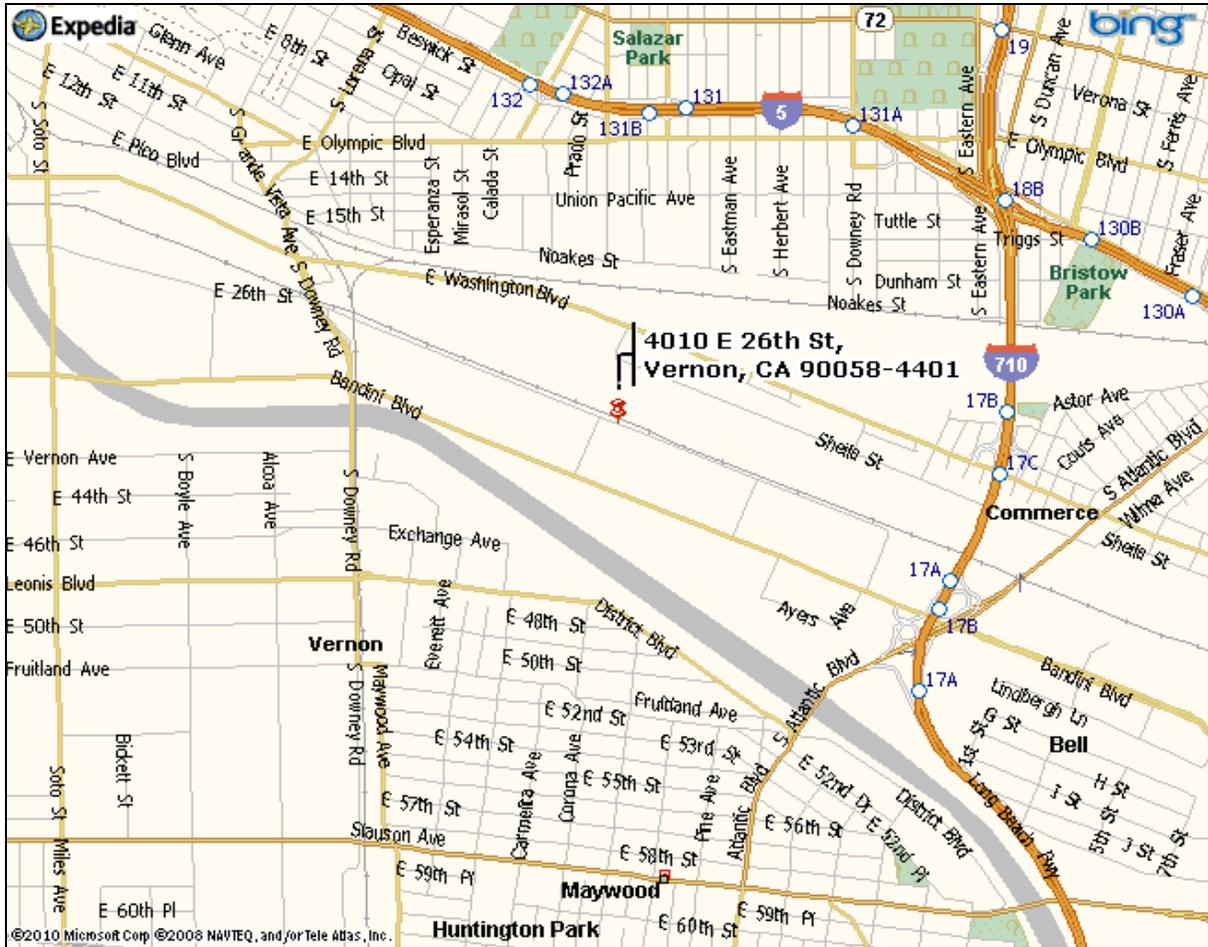
Looking at the probe from the South.



Looking at the probe from the West.

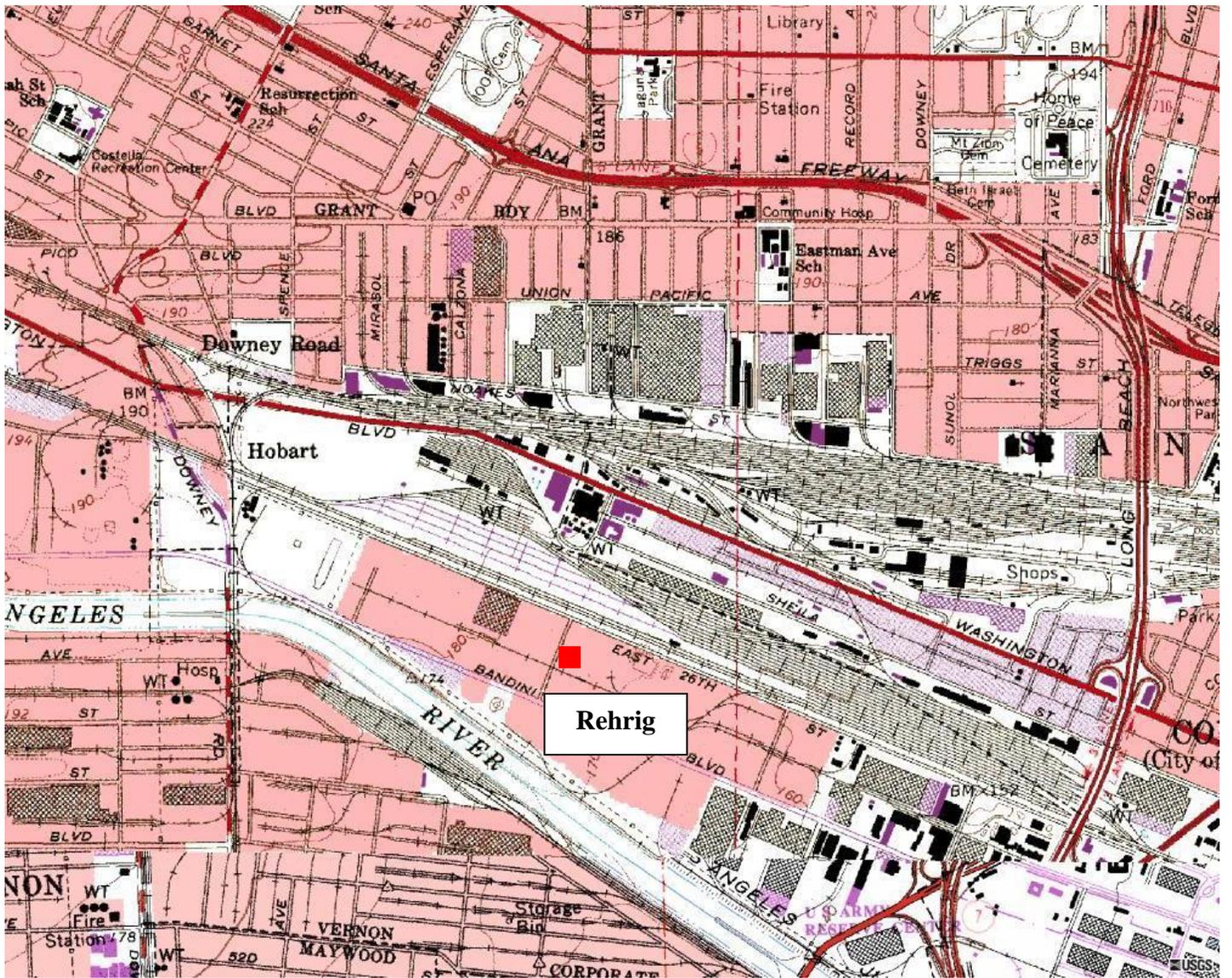
Quality Assurance Site Survey Report for Rehrig (Exide)

Last updated May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371405	70044	11/14/2007	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
4010 E. 26 th St Vernon, CA 90058	Los Angeles	South Coast	34° 00' 23"N	118° 11' 35"W	53 m



Rehrig

Detailed Site Information

Local site name	Rehrig, Site			
AQS ID	060371405			
GPS coordinates (decimal degrees)	Latitude: 34° 00' 23" Longitude: 118° 11' 35"			
Street Address	4010 E. 26 th St., Vernon, CA 90058			
County	Los Angeles			
Distance to roadways (meters)	205 (Bandini Blvd.)			
Traffic count (AADT, year)	20,291 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Dirt/Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	Lead, 1	Lead, 2	Lead, 3	
Primary / QA Collocated / Other	N/A	N/A	QA Collocated	
Parameter code	14129	14129	14129	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Source Oriented	Source Oriented	Source Oriented	
Monitor (type)	SLAMS	SLAMS	SLAMS/QA Collocated	
Network affiliation	Microscale Pb	Microscale Pb	Microscale	
Instrument manufacturer and model	GMW 1200 TSP "A"	GMW 1200 TSP "B"	GMW 1200 TSP "C"	
Method code	110	110	110	
FRM/FEM/ARM/ other	FRM	FRM	FRM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Micro	Micro	Micro	
Monitoring start date (MM/DD/YYYY)	11/2007	11/2007	11/2007	
Current sampling frequency (e.g. 1:3, continuous)	1:1 (rotating)	1:1 (rotating)	1:12	
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	1:6	1:12	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	3.0	3.0	3.0	
Distance from supporting structure (meters)	2.0	2.0	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	2	2	2	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	
Residence time for reactive gases (seconds)	N/A	N/A	N/A	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	Monthly	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/17/2016, 11/18/2016	05/17/2016, 11/18/2016	05/17/2016, 11/18/2016	

**Exide - Rehrig
Site Photos**



Looking North



Looking East from the probe.



Looking South from the probe.



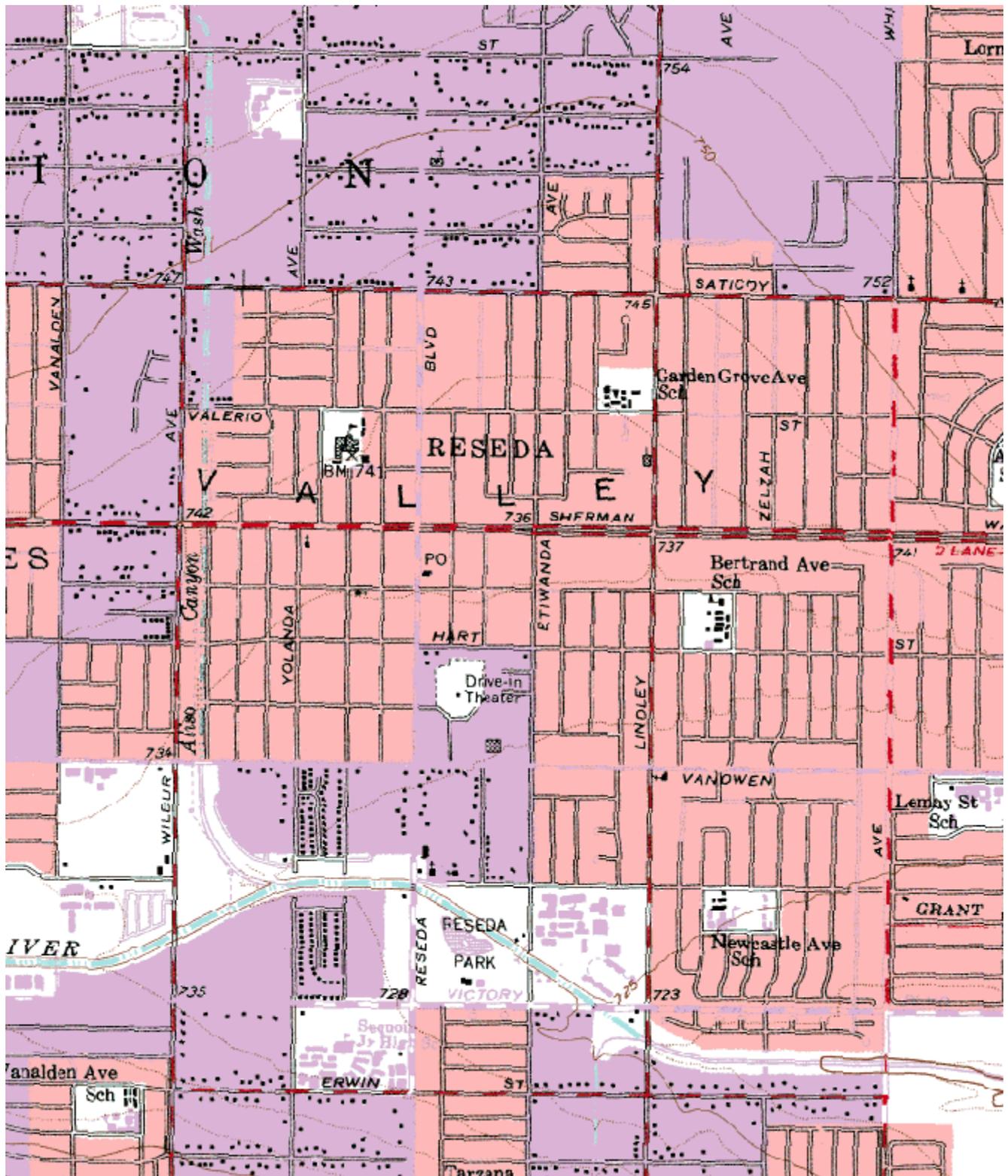
Looking West toward the probe

Quality Assurance Site Survey Report for Reseda

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code			
060371201	70074	03/1965	South Coast AQMD (061)			
Site Address		County	Air Basin	Latitude	Longitude	Elevation
18330 Gault St Reseda, CA 91702		Los Angeles	South Coast	34° 11' 57"N	118° 31' 58"W	224



Detailed Site Information

Local site name	Reseda			
AQS ID	060371201			
GPS coordinates (decimal degrees)	Latitude: 34° 11' 57" Longitude: 118° 31' 58"			
Street Address	18330 Gault St, Reseda, CA 91702			
County	Los Angeles			
Distance to roadways (meters)	16 -19			
Traffic count (AADT, year)	2,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles, Long Beach, Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 2	Ozone, 1	
Primary / QA Collocated / Other	N/A	N/A	N/A	
Parameter code	42101	42602	44201	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network affiliation	N/A	N/A	N/A	
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	Teledyne 400E	
Method code	158	074	087	
FRM/FEM/ARM/ other	FRM	FRM	FEM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Urban	Urban	
Monitoring start date (MM/DD/YYYY)	03/1965	03/1965	03/1965	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	5.8	5.8	5.8	
Distance from supporting structure (meters)	2.3	2.3	2.3	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	
Residence time for reactive gases (seconds)	5.7	7.3	6.4	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	03/03/2016	03/03/2016	03/02/2016	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

Pollutant, POC	Continuous PM2.5, 3	24 Hour PM2.5, 1		
Primary / QA Collocated / Other	Other	Primary		
Parameter code	88502	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		

Monitor (type)	SLAMS	SLAMS		
Network affiliation	N/A	N/A		
Instrument manufacturer and model	Met One BAM 1020	Andersen RAAS PM2.5		
Method code	731	780, 120		
FRM/FEM/ARM/other	Non-FEM	FRM		
Collecting Agency	SCAQMD	SCAQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD		
Reporting Agency	SCAQMD	SCAQMD		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	02/19/2009	01/24/1999		
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:3		
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:3		
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31		
Probe height (meters)	1.5	5.4		
Distance from supporting structure (meters)	2	2		
Distance from obstructions on roof (meters)	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		
Residence time for reactive gases (seconds)	N/A	N/A		
Will there be changes within the next 18 months? (Y/N)	N/A	No		

Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Yes		
Frequency of flow rate verification for manual PM samplers	N/A	Monthly		
Frequency of flow rate verification for automated PM analyzers	Monthly	N/A		
Frequency of one-point QC check for gaseous instruments	N/A	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06//19//2016, 12//14//2016	05//10//2016, 11//05//2016		

**Reseda
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Reseda
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



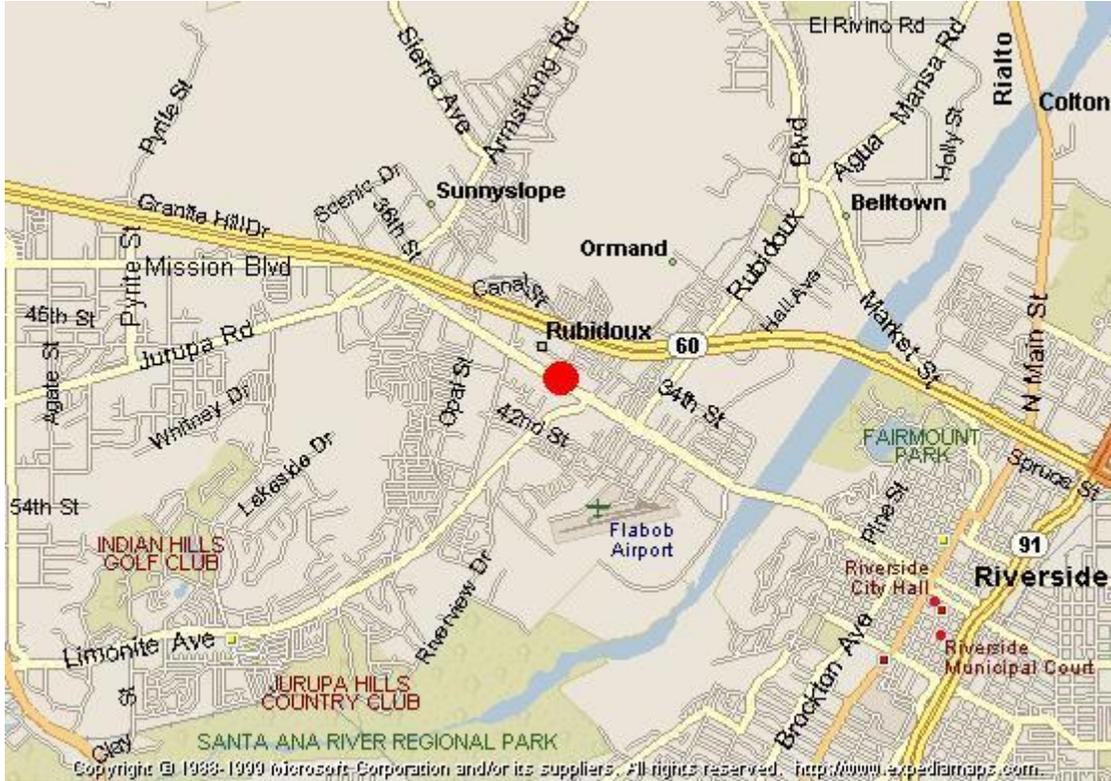
Looking at the probe from the South.



Looking at the probe from the West.

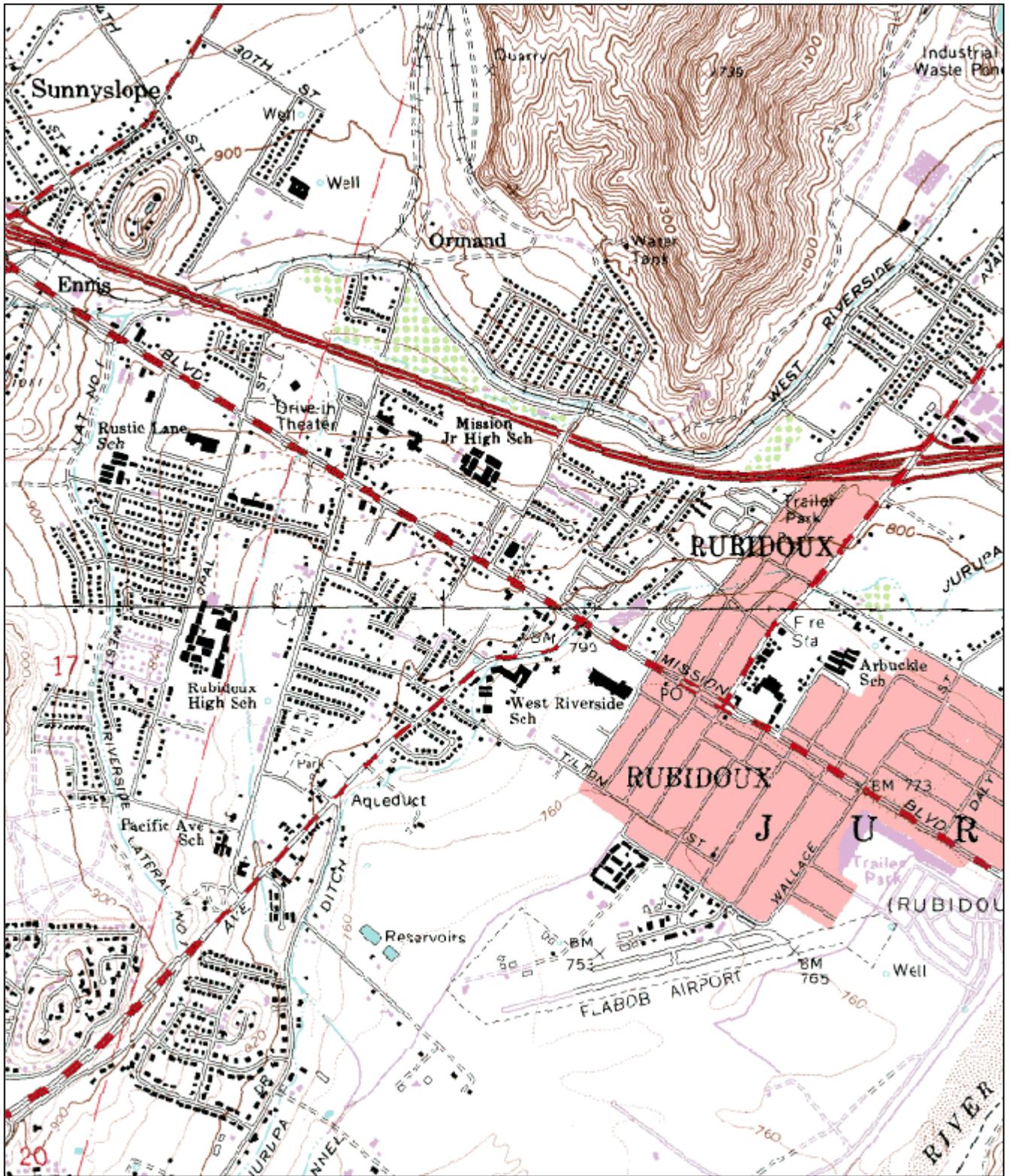
Quality Assurance Site Survey Report for Riverside-Rubidoux

Last updated May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060658001	33144	09/1972	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
5888 Mission Blvd Riverside, CA 92509	Riverside	South Coast	33° 59' 58"N	117° 24' 57"W	248



Detailed Site Information

Local site name	Riverside-Rubidoux			
AQS ID	060658001			
GPS coordinates (decimal degrees)	Latitude: 33° 59' 58" Longitude: 117° 24' 57"			
Street Address	5888 Mission Blvd, Riverside, CA 92509			
County	Riverside			
Distance to roadways (meters)	119; 686			
Traffic count (AADT, year)	20,000 / 2012; 60/Valley Way, 145,000, 2011			
Groundcover (e.g. asphalt, dirt, sand)	Gravel			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 2	Ozone, 1	
Primary / QA Collocated / Other	N/A	N/A	N/A	
Parameter code	42101	42602	44201	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network affiliation	PAMS/NATTS/NCore	PAMS/NATTS/NCore	PAMS/NATTS/NCore	
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	Thermo 49i	
Method code	158	074	047	
FRM/FEM/ARM/ other	FRM	FRM	FEM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Urban	Urban	
Monitoring start date (MM/DD/YYYY)	09/1972	09/1972	09/1972	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	4	4	4	
Distance from supporting structure (meters)	1.52	1.52	1.52	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	
Residence time for reactive gases (seconds)	7.3	9.2	8.4	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	03/30/2016	03/30/2016	03/30/2016	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

Pollutant, POC	Continuous PM2.5, PM Coarse, 9	Continuous PM2.5, 3	Continuous PM10, PM Coarse, 9	24 Hour VOCs, 4
Primary / QA Collocated / Other	Other	Other	Other	N/A

Parameter code	88502	88502	85101	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS/Research Support
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SPM	SLAMS	SLAMS
Network affiliation	N/A	N/A	N/A	NATTS
Instrument manufacturer and model	Met One BAM 1020	Thermo BAM 5014i	Met One BAM 1020	RM Env. 910
Method code	170	183	122	See Table 26
FRM/FEM/ARM/ other	FEM	FEM	FEM	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	12/2008	02/2006	07/30/2011	09/2007
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4	4	4	4
Distance from supporting structure (meters)	2	2	2	1
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	1(Flow <200 lpm)	1(Flow <200 lpm)	4	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	Stainless steel

Residence time for reactive gases (seconds)	N/A	N/A	N/A	8.4
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	No, unless the manual sampler has missing data.	N/A	No	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	Monthly	Monthly	Monthly	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	Semi Annually
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06/16/2016, 12/09/2016	06/16/2016, 12/09/2016	06/16/2016, 12/09/2016	N/A

Pollutant, POC	24 Hour VOCs, 8	24 Hour VOCs, 2	3 Hour VOCs, 1	
Primary / QA Collocated / Other	QA Collocated	N/A	N/A	
Parameter code	See Table 26	See Table 26	See Table 26	
Basic monitoring objective(s)	Research support	Research support	Research support	
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network affiliation	NATTS	PAMS	PAMS	
Instrument manufacturer and model	RM Env. 910	RM Env. 910	RM Env. 910/912 hour	
Method code	See Table 26	See Table 26	See Table 26	
FRM/FEM/ARM/ other	Other	Other	Other	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	

Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	11/2004	07/2009	06/2009	
Current sampling frequency (e.g. 1:3, continuous)	1:Every other month	1:6	1:3 Intensive season	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	07/01-09/30	
Probe height (meters)	4	4	4	
Distance from supporting structure (meters)	1	1	1	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Stainless steel	Stainless steel	Stainless steel	
Residence time for reactive gases (seconds)	8.3	6.3	6.3	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	

Frequency of one-point QC check for gaseous instruments	Semi Annually	Semi Annually	Semi Annually	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

Pollutant, POC	VOCs, N/A	24 Hour PM2.5, 2	24 Hour PM2.5, 1	Speciated PM2.5, 11
Primary / QA Collocated / Other	N/A	QA Collocated	Primary	Primary
Parameter code	N/A	88101	88101	See Table 26
Basic monitoring objective(s)	Research support	NAAQS	NAAQS	Research support
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	CA Air Toxics	N/A	N/A	N/A
Instrument manufacturer and model	RM Env. 910	Thermo 2025i PM2.5, B Sampler QA Collocated	Thermo 2025i PM2.5, A Sampler	Met One SASS
Method code	N/A	118, 145	118, 145	See Table 26
FRM/FEM/ARM/ other	Other	FRM	FRM	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB Toxics	SCAQMD	SCAQMD	SCAQMD
Reporting Agency	ARB	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	01/1989	01/03/1999	12/04/1998	10/13/2004
Current sampling frequency (e.g. 1:3, continuous)	1:12	1:6	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:6	1:3	No CFR mandated sampling schedule.
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4	3	3	3
Distance from supporting structure (meters)	1	1.6	1.6	1.6
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	10	10	10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	1.5(Flow <200 lpm)	1.5(Flow <200 lpm)	2
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Stainless steel	N/A	N/A	N/A
Residence time for reactive gases (seconds)	8.3	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Yes	Yes	N/A
Frequency of flow rate verification for manual PM samplers	N/A	Monthly	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Semi Annually	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/28/2016 11/04/2016	04/28/2016 11/04/2016	04/28/2016 11/04/2016

Pollutant, POC	Speciated PM2.5, N/A	Speciated PM2.5, N/A	PM2.5 Carbon, N/A	PM2.5 Carbon, N/A
Primary / QA Collocated / Other	Primary	QA Collocated	Primary	QA Collocated
Parameter code	N/A	N/A	N/A	N/A
Basic monitoring objective(s)	NAAQS/Research support	NAAQS/Research support	NAAQS/Research support	NAAQS/Research support

Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	Research Support	Research Support	Research Support	Research Support
Network affiliation	STN	STN	STN	STN
Instrument manufacturer and model	Met One SASS, A Sampler	Met One SASS, B Sampler	URG-3000N, A Sampler	URG-3000N, B Sampler
Method code	N/A	N/A	N/A	N/A
FRM/FEM/ARM/ other	Other	Other	Other	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	EPA STN	EPA STN	EPA STN	EPA STN
Reporting Agency	EPA	EPA	EPA	EPA
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	03/2001	03/2001	05/2007	05/2007
Current sampling frequency (e.g. 1:3, continuous)	1:3	1:6	1:3	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	1:3	1:3	1:3	1:3
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	3.0	3.0	3.0	3.0
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	1.5(Flow <200 lpm)	1.5(Flow <200 lpm)	1.5(Flow <200 lpm)	1.5(Flow <200 lpm)
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A

Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	04/28/2016 11/04/2016	04/28/2016 11/04/2016	N/A	N/A

Pollutant, POC	Lead, 2	PM10, 2	PM10, 4	Metals, CR6, Carbonyls, 1
Primary / QA Collocated / Other	N/A	Primary	QA Collocated	Primary
Parameter code	14129	See Table 26	See Table 26	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	NATTS
Network affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	GMW 1200 TSP	Sierra Andersen 1200 SSI, A Sampler	Sierra Andersen 1200 SSI, B Sampler	RM Env. 924, A Sampler
Method code	110	063, 102	063, 102	See Table 26
FRM/FEM/ARM/ other	FRM	FRM	FRM	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	09/06/1990	01/01/1988	01/01/1988	01/2007

Current sampling frequency (e.g.1:3, continuous)	1:6	1:3	1:6	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	1:6	1:6	No CFR mandated sampling schedule.
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	3.0	3.0	3.0	3.0
Distance from supporting structure (meters)	2.0	2.0	2.0	2.0
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	10	10	10	10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	4	4	4
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A

Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	04/28/2016, 11/04/2016	04/28/2016, 11/04/2016	04/28/2016, 11/04/2016	N/A

Pollutant, POC	Metals, CR6, Carbonyls, 2	Metals, CR6, Carbonyls, N/A	Polycyclic Aromatic Hydrocarbons, 1	Polycyclic Aromatic Hydrocarbons, 2
Primary / QA Collocated / Other	QA Collocated	Primary	Primary	QA Collocated
Parameter code	See Table 26	N/A	N/A	N/A
Basic monitoring objective(s)	NAAQS	Research support	Research support	Research support
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	NATTS	CA Air Toxics	NATTS	NATTS
Instrument manufacturer and model	RM Env. 924, B Sampler	RM Env. 924	Tisch Env. PUF, A Sampler	Graseby PUF, B Sampler
Method code	See Table 26	N/A	N/A	N/A
FRM/FEM/ARM/ other	Other	Other	Other	Other
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	ARB Toxics	ERG North Carolina	ERG North Carolina
Reporting Agency	SCAQMD	ARB	ERG North Carolina	ERG North Carolina
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	01/2007	01/1989	07/2007	07/2007
Current sampling frequency (e.g. 1:3, continuous)	1:Every other month	1:12	1:6	1:Every other month
Calculated sampling frequency (e.g. 1:3/1:1)	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	3	3	3	3
Distance from supporting structure (meters)	2	2	2	2
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	3	3	3	3
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A
Residence time for reactive gases (seconds)	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	Monthly	N/A	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	N/A

Pollutant, POC	Carbon Monoxide, 9	Sulfur Dioxide, 9	NOY, 9	
Primary / QA Collocated / Other	N/A	N/A	N/A	
Parameter code	42101	42401	42612	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	

Monitor (type)	SLAMS	SLAMS	SLAMS	
Network affiliation	NCore	NCore	NCore	
Instrument manufacturer and model	Teledyne 300EU	Thermo 43i-TLE	Thermo 42i-Y	
Method code	593	560	574	
FRM/FEM/ARM/other	FRM	FEM	N/A	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Urban	
Monitoring start date (MM/DD/YYYY)	03/30/2010	08/03/2010	08/19/2010	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01/-12/31	01/01/-12/31	01/01/-12/31	
Probe height (meters)	4	4	4	
Distance from supporting structure (meters)	1.5	1.5	1.5	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	
Residence time for reactive gases (seconds)	4.2	5.8	5.8	
Will there be changes within the next 18 months? (Y/N)	No	No	No	

Is it suitable for comparison against the annual PM2.5? (Y/N)	No	No	No	
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	Weekly	Weekly	Weekly	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	12/07/2016	12/07/2016`	12/08/2016	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

**Riverside-Rubidoux
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Riverside-Rubidoux
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



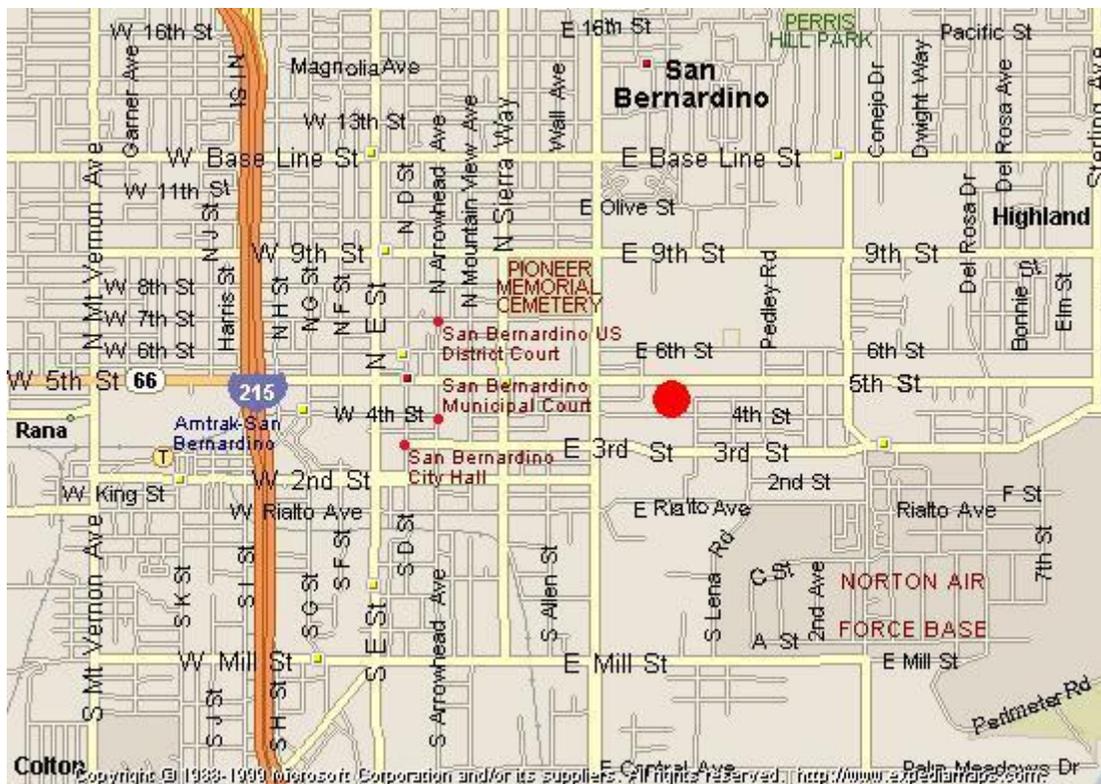
Looking at the probe from the South.



Looking at the probe from the West.

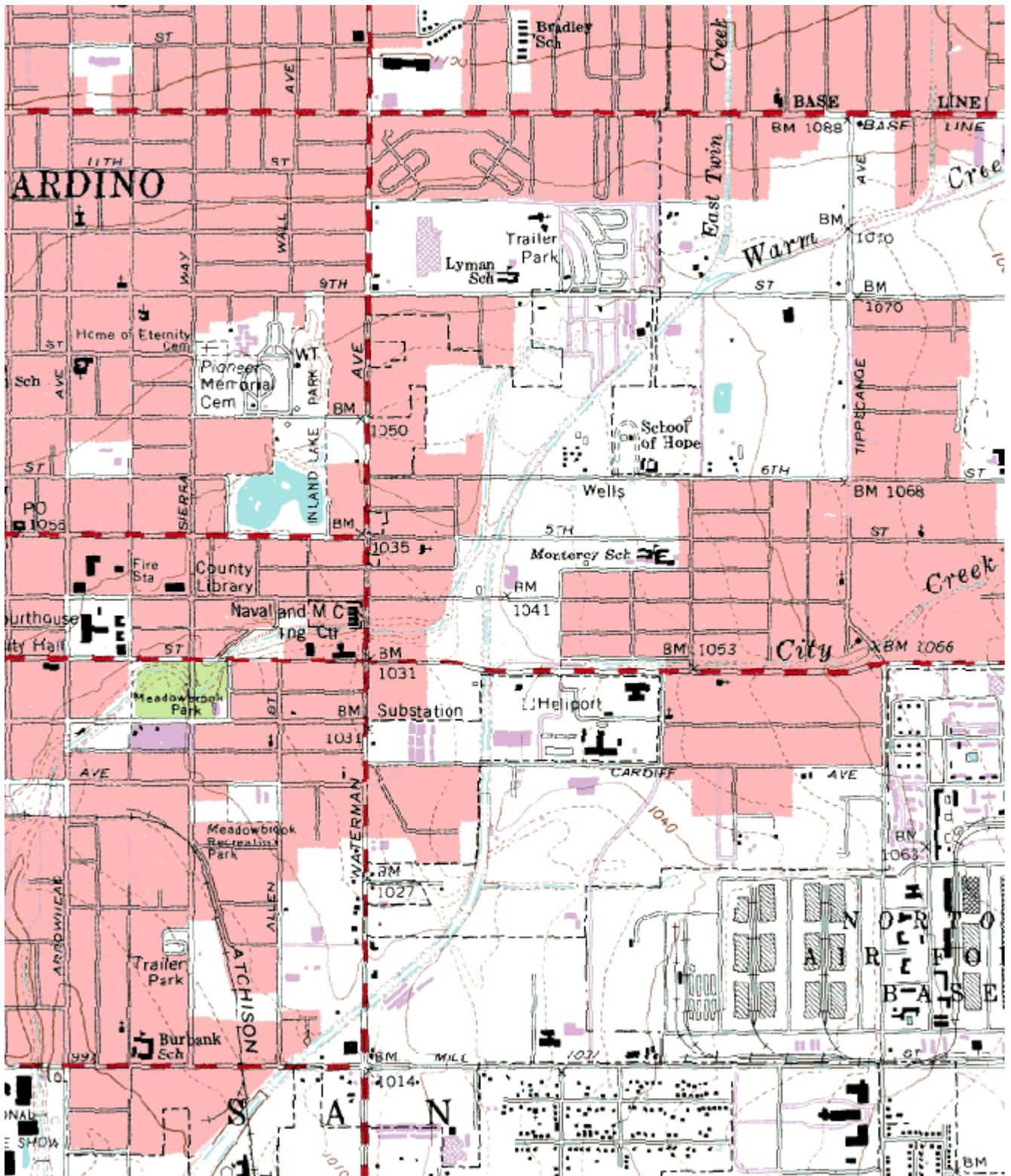
Quality Assurance Site Survey Report for San Bernardino

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060719004	36203	05/1986	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
24302 E 4th St San Bernardino, CA 92410	San Bernardino	South Coast	34° 06' 24"N	117° 16' 26"W	316



Detailed Site Information

Local site name	San Bernardino			
AQS ID	060719004			
GPS coordinates (decimal degrees)	Latitude: 34° 06' 24" Longitude: 117° 16' 26"			
Street Address	24302 E 4 th St, San Bernardino, CA 92410			
County	San Bernardino			
Distance to roadways (meters)	16 - 23			
Traffic count (AADT, year)	2,500 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	Continuous PM10, 3
Primary / QA Collocated / Other	N/A	N/A	N/A	Other
Parameter code	42101	42602	44201	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	Highest Concentration
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 370	Thermo 42i	API/Teledyne 400E	R&P 1400A TEOM
Method code	158	074	087	079
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Middle	Urban	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	05/1986	05/1986	05/1986	09/01/2004
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1;1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.8	4.8	4.8	2.4
Distance from supporting structure (meters)	1.4	1.4	1.4	1.4
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	2.6
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	7.2	7.9	7.7	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	03/26/2016	03/26/2016	03/26/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/22/2016, 12/19/2016

Pollutant, POC	Lead, 2	24 Hour PM2.5, 1	PM10, 2	
Primary / QA Collocated / Other	N/A	Primary	Primary	
Parameter code	14129	See Table 26	See Table 26	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	

Site type(s)	Population Exposure	Population Exposure	Highest Concentration	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network affiliation	N/A	N/A	N/A	
Instrument manufacturer and model	GMW 1200 TSP	Andersen RAAS PM2.5	GMW 1200 SSI	
Method code	110	780, 120	063, 102	
FRM/FEM/ARM/other	FRM	FRM	FRM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	09/1990	08/27/2008	01/1997	
Current sampling frequency (e.g. 1:3, continuous)	1:6	1:3	1:6	
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	1:3	1:6	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	2.0	2.0	2.0	
Distance from supporting structure (meters)	1.0	1.0	1.0	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	2.6	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	
Residence time for reactive gases (seconds)	N/A	N/A	N/A	

Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Yes	No	
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly	Monthly	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/05/2016, 11/07/2016	05/05/2016, 11/07/2016	05/05/2016, 11/07/2016	

**San Bernardino
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**San Bernardino
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



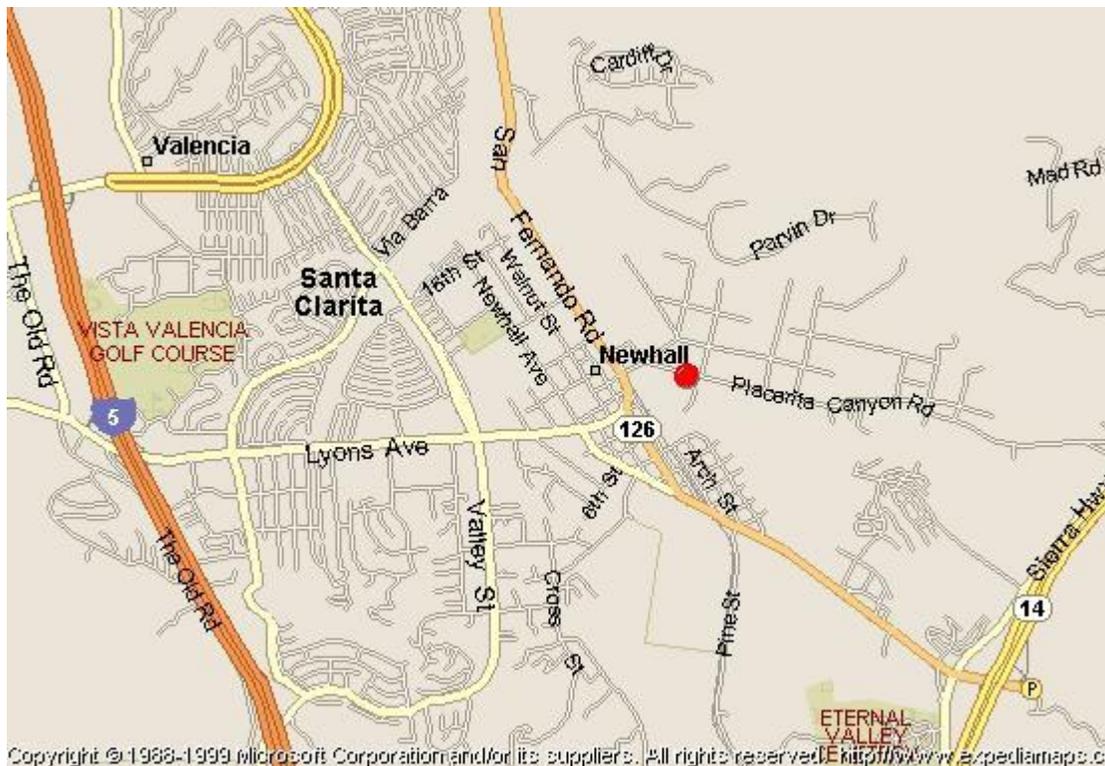
Looking at the probe from the South.



Looking at the probe from the West.

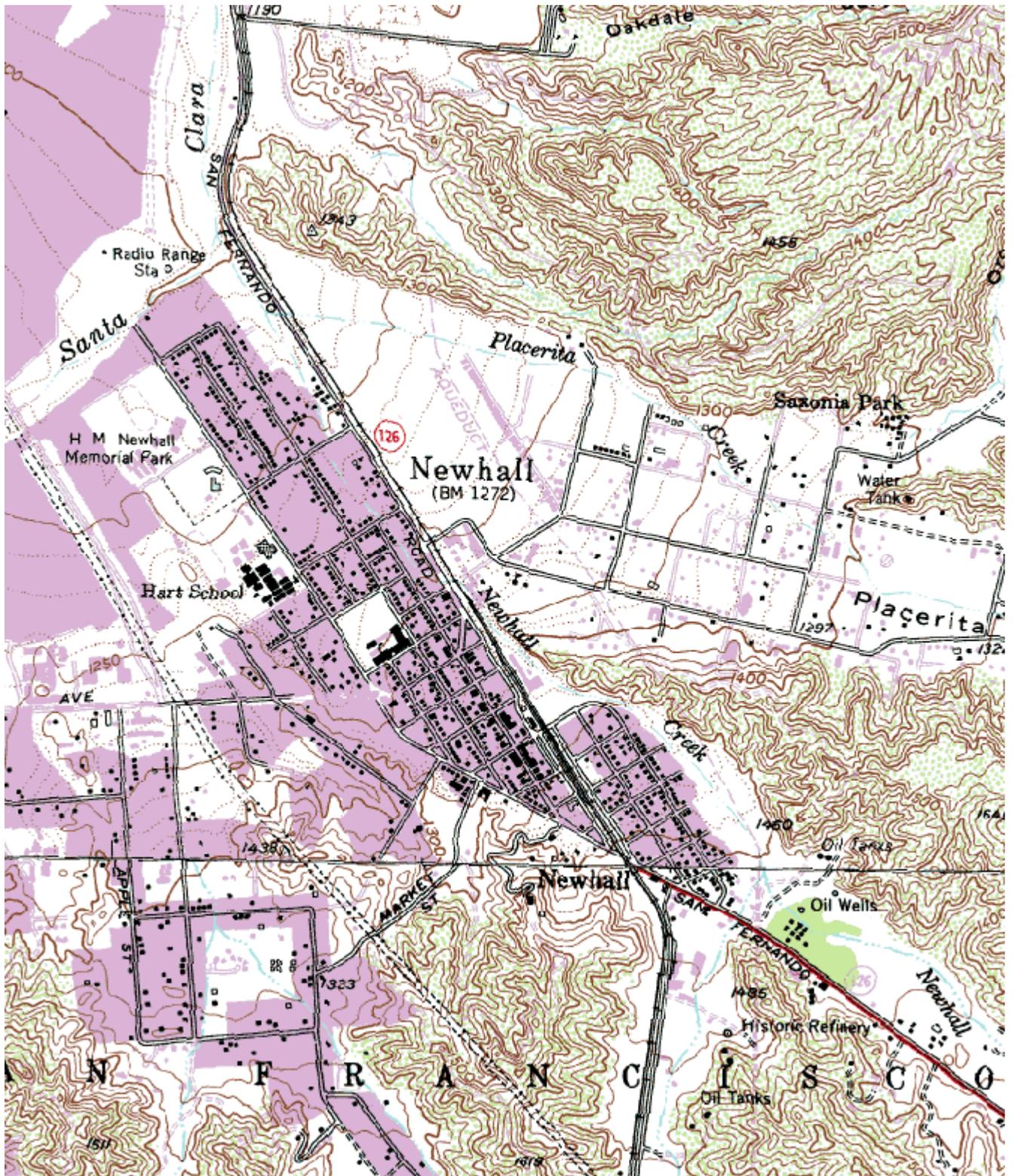
Quality Assurance Site Survey Report for Santa Clarita-Placerita

Last updated May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060376012	70090	05/2001	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
22224 Placerita Canyon Rd Santa Clarita, CA 91321	Los Angeles	South Coast	34° 23' 0"N	118° 31' 42"W	386



Detailed Site Information

Local site name	Santa Clarita-Placerita			
AQS ID	060376012			
GPS coordinates (decimal degrees)	Latitude: 34° 23' 0" Longitude: 118° 31' 42"			
Street Address	22224 Placerita Canyon, Santa Clarita, CA 91321			
County	Los Angeles			
Distance to roadways (meters)	91			
Traffic count (AADT, year)	5,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles, Long Beach, Anaheim MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	PM10, 1
Primary / QA Collocated / Other	N/A	N/A	N/A	Primary
Parameter code	42101	42602	44201	See Table 26
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Network affiliation	N/A	PAMS	PAMS	N/A
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Instrument manufacturer and model	Horiba APMA 360	Teledyne 200E	Teledyne 400E	GMW 1200 SSI
Method code	106	099	087	063, 102
FRM/FEM/ARM/ other	FRM	FRM	FEM	FRM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	SCAQMD
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Urban	Neighborhood
Monitoring start date (MM/DD/YYYY)	05/2001	05/2001	05/2001	05/2001
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:6
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.4	4.4	4.4	2.4
Distance from supporting structure (meters)	1.8	1.8	1.8	1.4
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	30	30	30	30
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	6.0	7.2	6.5	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	10/11/2016	10/11/2016	10/11/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/10/2016, 11/05/2016

Pollutant, POC	24 Hour Carbonyls, 2	24 Hour VOCs, 2	3 Hour VOCs, 1	Continuous PM2.5, 3
Primary / QA Collocated / Other	N/A	N/A	N/A	Other
Parameter code	See Table 26	See Table 26	See Table 26	88502
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS

Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	PAMS	PAMS	PAMS	N/A
Instrument manufacturer and model	ATEC 8000	RM Env. 910A	RM Env. 910A	Met One BAM 1020
Method code	See Table 26	See Table 26	See Table 26	731
FRM/FEM/ARM/ other	Other	Other	Other	Non-FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	SCAQMD	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Urban	Urban	Urban	Neighborhood
Monitoring start date (MM/DD/YYYY)	05/2001	05/2001	05/2001	10/23/2008
Current sampling frequency (e.g. 1:3, continuous)	1:6 / 1:3	1:6 / 1:3	1:6 / 1:3	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	No CFR mandated sampling schedule.	N/A
Sampling season (MM/DD-MM/DD)	07/01-09/30	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.4	4.4	4.4	5.4
Distance from supporting structure (meters)	1.8	1.8	1.8	1.8
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	16	16	16	16
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Stainless	Stainless	Stainless	Stainless
Residence time for reactive gases (seconds)	5.0	5.0	5.0	N/A

Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Semi Annually	Semi Annually	Semi Annually	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/21/2016, 12/14/2016

**Santa Clarita-Placerita
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Santa Clarita-Placerita
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



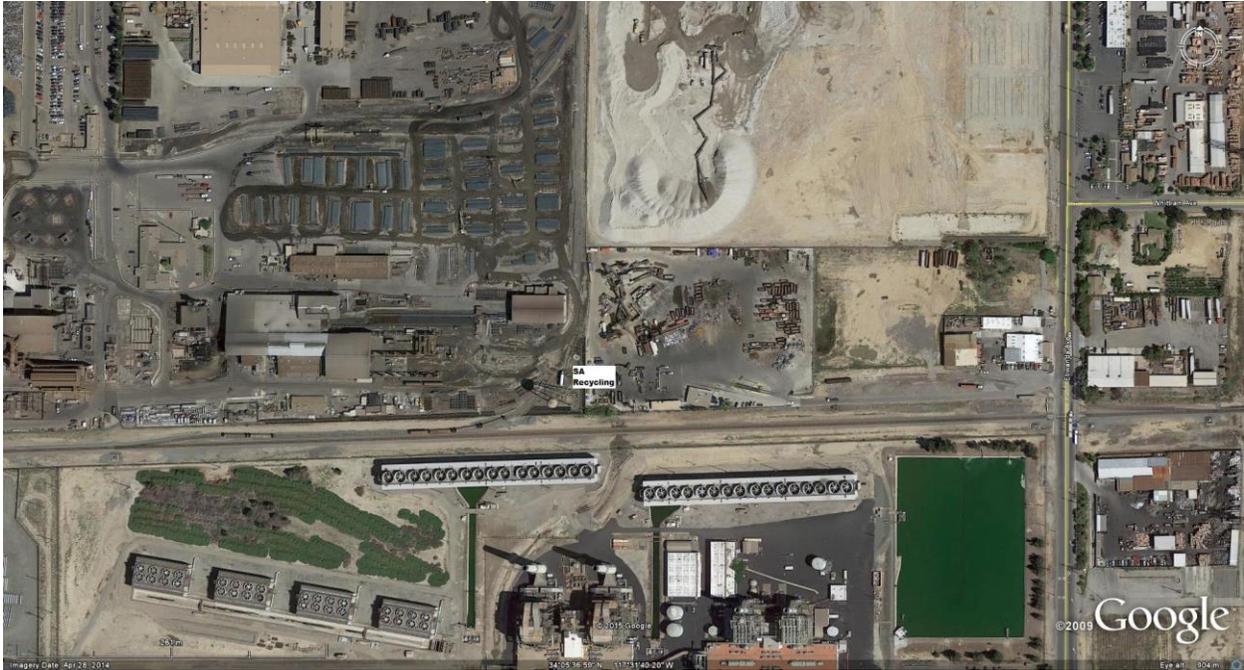
Looking at the probe from the South.



Looking at the probe from the West.

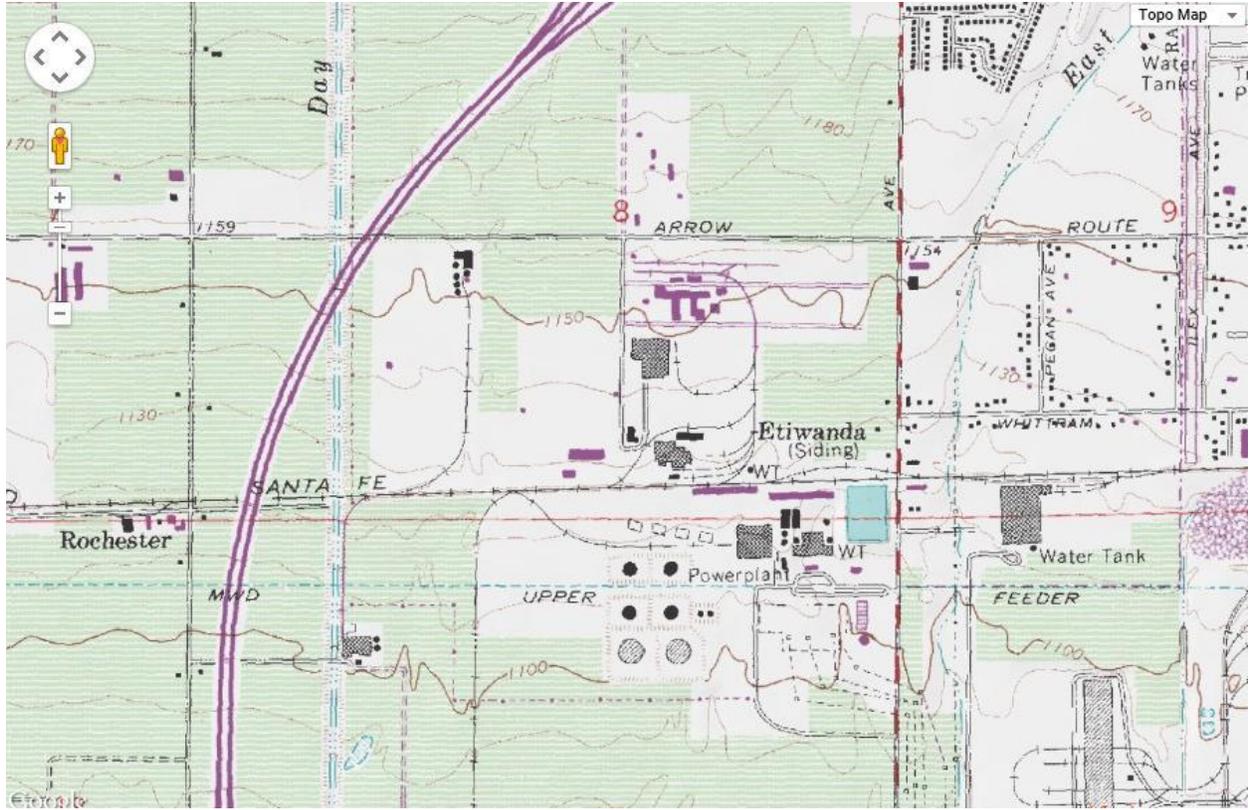
Quality Assurance Site Survey Report for SA Recycling

Last updated May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060711407	70046	6/2012	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
8822 Etiwanda Ave. , Rancho Cucamonga,CA,91739	San Bernardino	South Coast	34° 05' 35"N	117° 31' 41"W	351 m



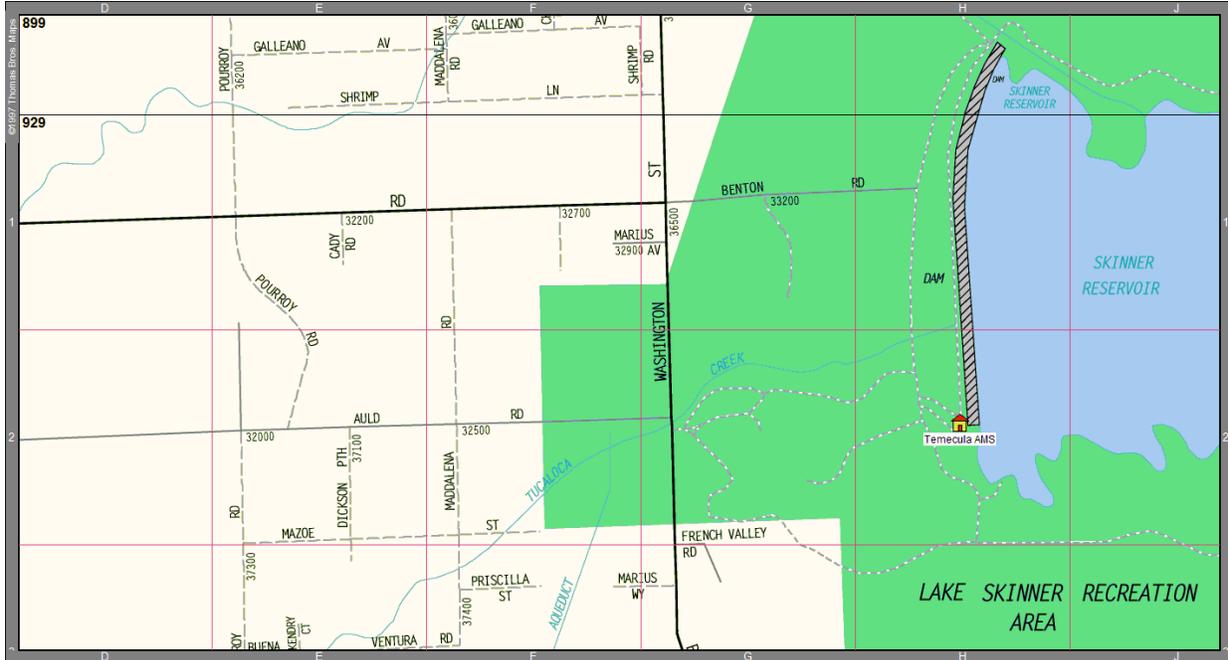
Detailed Site Information

Local site name	SA Recycling		
AQS ID	Unavailable		
GPS coordinates (decimal degrees)	Latitude: 34° 05' 35"N Longitude: 117° 31' 41"W		
Street Address	8822 Etiwanda Ave. , Rancho Cucamonga,CA,91739		
County	San Bernardino		
Distance to roadways (meters)	400 m		
Traffic count (AADT, year)	Unavailable		
Groundcover (e.g. asphalt, dirt, sand)	Asphalt		
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA		
Pollutant, POC	Lead, 1	Metals, CR6, 1	
Primary / QA Collocated / Other	N/A	Primary	
Parameter code	14129	See Table 26	
Basic monitoring objective(s)	NAAQS	NAAQS	
Site type(s)	Source Oriented	Source Oriented	
Monitor (type)	SLAMS	SLAMS	
Network affiliation	Microscale Pb	NATTS	
Instrument manufacturer and model	GMW 1200 TSP	RM Env. 924, A Sampler	
Method code	110	See Table 26	
FRM/FEM/ARM/ other	FRM	Other	
Collecting Agency	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD	SCAQMD	
Reporting Agency	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Micro	Micro	
Monitoring start date (MM/DD/YYYY)	6/26/12	7/19/12	
Current sampling frequency (e.g. 1:3, continuous)	1:6	1:3	
Calculated sampling frequency (e.g. 1:3/1:1)	1:6	No CFR mandated sampling schedule.	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	
Probe height (meters)	2.6	3	
Distance from supporting structure (meters)	1	1.6	
Distance from obstructions on roof (meters)	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		
Residence time for reactive gases (seconds)	N/A	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	Monthly	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	N/A	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/13/2016, 11/22/2016	N/A		

Quality Assurance Site Survey Report for Temecula (Lake Skinner)

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060650016	33031	06/30/2010	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
33700 Borel Rd. Winchester, CA 92596	Riverside	South Coast	33° 34' 59"N	117° 04' 20"W	453 m



Detailed Site Information

Local site name	Temecula (Lake Skinner)		
AQS ID	060650016		
GPS coordinates (decimal degrees)	Latitude: 33° 34' 59" Longitude: 117° 04' 20"		
Street Address	33700 Borel Rd. Winchester, CA 92596		
County	Riverside		
Distance to roadways (meters)	10		
Traffic count (AADT, year)	20 / 2012		
Groundcover (e.g. asphalt, dirt, sand)	Asphalt		
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA		
Pollutant, POC	Ozone , 1	Continuous PM2.5, 3	
Primary / QA Collocated / Other	N/A	Other	
Parameter code	44201	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	
Site type(s)	Highest Concentration	Population Exposure	
Monitor (type)	SLAMS	SLAMS	
Network affiliation	N/A	N/A	
Instrument manufacturer and model	Teledyne API 400E	Met One BAM 1020	
Method code	087	731	
FRM/FEM/ARM/ other	FEM	Non-FEM	
Collecting Agency	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	09/30/2010	06/30/2010	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	
Probe height (meters)	4	4	
Distance from supporting structure (meters)	1	1	
Distance from obstructions on roof (meters)	N/A	N/A	

Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		
Residence time for reactive gases (seconds)	7.1	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	Nightly	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	10/28/2016	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	06/22/2016, 12/19/2016		

**Temecula – Lake Skinner
Site Photos**



Looking North from probe



Looking East from the probe.



Looking South from the probe.



Looking West from the probe

**Temecula – Lake Skinner
Site Photos (Cont.)**



Looking at the probe to the North.



Looking from the probe to the East.



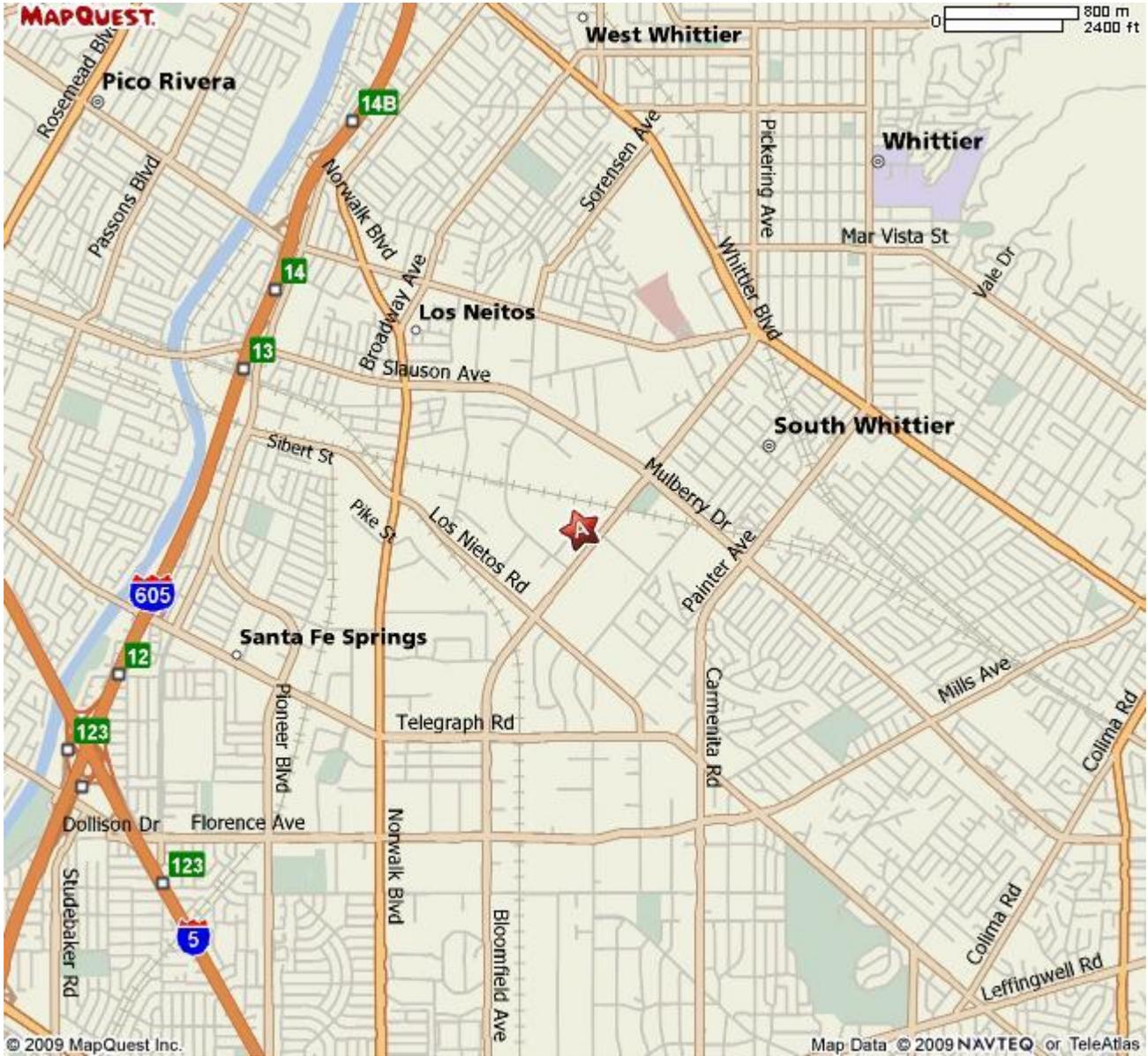
Looking at the probe to the South.



Looking at the probe to the West.

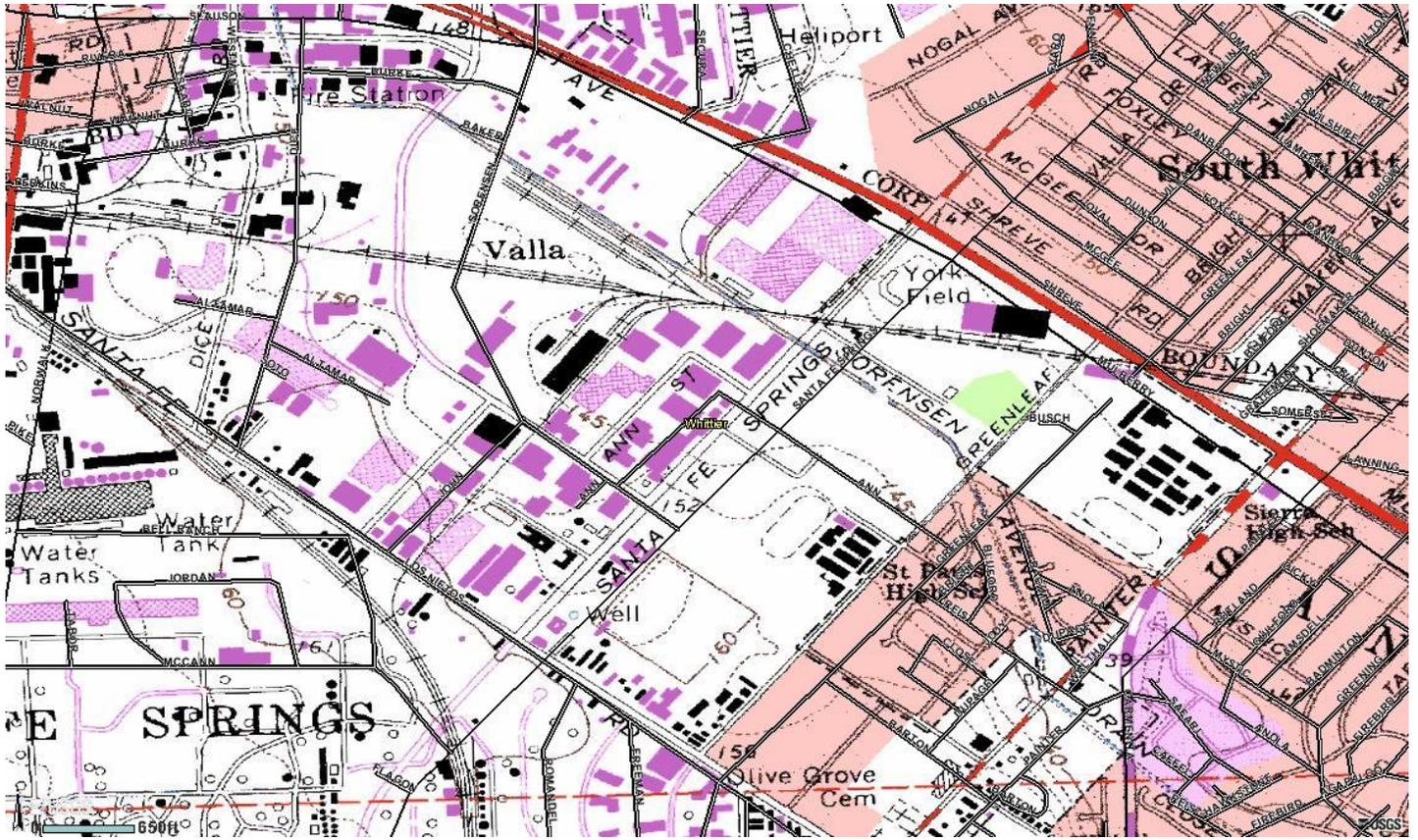
Quality Assurance Site Survey Report for Uddeholm (Quemetco)

Last updated May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371403	70045	11/26/1992	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
9440 Ann St. Santa Fe Springs, CA 90670	Los Angeles	South Coast	33° 57' 17"N	118° 03' 19"W	44 m



Detailed Site Information

Local site name	Uddeholm (Trojan Battery)			
AQS ID	060371403			
GPS coordinates (decimal degrees)	Latitude: 33° 57' 17" Longitude: 118° 03' 19"			
Street Address	9440 Ann St. Santa Fe Springs, CA 90670			
County	Los Angeles			
Distance to roadways (meters)	26			
Traffic count (AADT, year)	30,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim MSA			
Pollutant, POC	Lead, 1			
Primary / QA Collocated / Other	N/A			
Parameter code	14129			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Source Oriented			
Monitor (type)	SLAMS			
Network affiliation	Microscale Pb			
Instrument manufacturer and model	GMW 1200 TSP			
Method code	110			
FRM/FEM/ARM/ other	FRM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Micro			
Monitoring start date (MM/DD/YYYY)	11/26/1992			
Current sampling frequency (e.g. 1:3, continuous)	1:6			
Calculated sampling frequency (e.g. 1:3/1:1)	1:6			
Sampling season (MM/DD-MM/DD)	01/01-12/31			
Probe height (meters)	2.6			
Distance from supporting structure (meters)	1			
Distance from obstructions on roof (meters)	N/A			

Distance from obstructions not on roof (meters)	N/A			
Distance from trees (meters)	N/A			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between collocated monitors (meters)	2			
Unrestricted airflow (degrees)	360°			
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A			
Residence time for reactive gases (seconds)	N/A			
Will there be changes within the next 18 months? (Y/N)	No			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A			
Frequency of flow rate verification for manual PM samplers	Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A			
Frequency of one-point QC check for gaseous instruments	N/A			
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A			
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/17/2016, 11/18/2016			

**Trojan Battery - UDDH
Site Photos**



Looking North from the probe



Looking East from the probe.



Looking South toward the probe.



Looking West from the probe

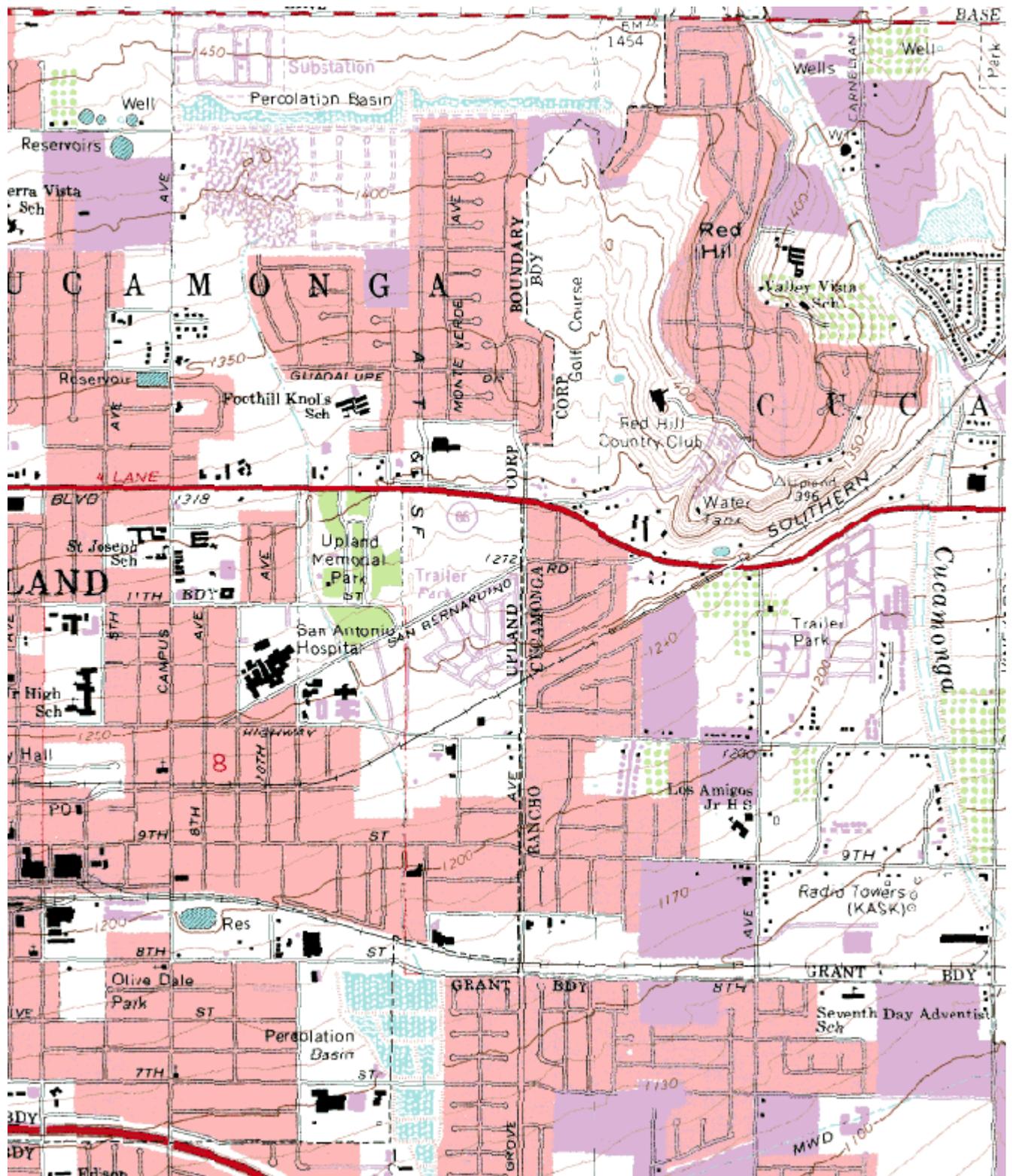
Quality Assurance Site Survey Report for Upland

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060711004	36175	03/1973	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1350 San Bernardino Rd Upland, CA 91786	San Bernardino	South Coast	34° 06' 13"N	117° 37' 45"W	385



Detailed Site Information

Local site name	Upland			
AQS ID	060711004			
GPS coordinates (decimal degrees)	Latitude: 34° 06' 13" Longitude: 117° 37' 45"			
Street Address	1350 San Bernardino Rd, #62, Upland, CA 91786			
County	San Bernardino			
Distance to roadways (meters)	80			
Traffic count (AADT, year)	10,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Gravel			
Representative statistical area name (i.e. MSA, CBSA, other)	40140-Riverside-San Bernardino-Ontario, CA MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 2	Ozone, 1	Continuous PM10, 3
Primary / QA Collocated / Other	N/A	N/A	N/A	Other
Parameter code	42101	42602	44201	81162
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor (type)	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Horiba APMA 370	Thermo Scientific 42i	API/Teledyne 400E	Met One BAM 1020
Method code	158	074	087	122
FRM/FEM/ARM/ other	FRM	FRM	FEM	FEM
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	SCAQMD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	03/1973	03/1973	03/1973	04/02/2010
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	1:1
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.7	4.7	4.7	5.1
Distance from supporting structure (meters)	1.3	1.3	1.3	1.7
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A

Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360°	360°	360°	360°
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	8.4	11.4	9.2	N/A
Will there be changes within the next 18 months? (Y/N)	No	No	No	No
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	08/31/2016	08/31/2016	08/31/2016	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/24/2016, 12/11/2016

Pollutant, POC	Continuous PM2.5, 3	Lead, 1		
Primary / QA Collocated / Other	Other	N/A		
Parameter code	88502	14129		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		

Monitor (type)	SLAMS	SLAMS		
Network affiliation	N/A	N/A		
Instrument manufacturer and model	Met One BAM 1020	GMW 1200 TSP/Hi-Q		
Method code	731	110		
FRM/FEM/ARM/other	Non-FEM	FRM		
Collecting Agency	SCAQMD	SCAQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	SCAQMD		
Reporting Agency	SCAQMD	SCAQMD		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	05/08/2009	09/1990		
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:6		
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	1:6		
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31		
Probe height (meters)	5.1	2.9		
Distance from supporting structure (meters)	1.7	2.0		
Distance from obstructions on roof (meters)	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A		
Distance from trees (meters)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between collocated monitors (meters)	N/A	N/A		
Unrestricted airflow (degrees)	360°	360°		
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A		
Residence time for reactive gases (seconds)	N/A	N/A		
Will there be changes within the next 18 months? (Y/N)	No	No		

Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A		
Frequency of flow rate verification for manual PM samplers	N/A	Monthly		
Frequency of flow rate verification for automated PM analyzers	Monthly	N/A		
Frequency of one-point QC check for gaseous instruments	N/A	N/A		
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	N/A	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	06/24/2016, 12/11/2016	05/05/2016, 11/05/2016		

**Upland
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.



Looking West from the probe.

**Upland
Site Photos (Cont.)**



Looking at the probe from the North.



Looking at the probe from the East.



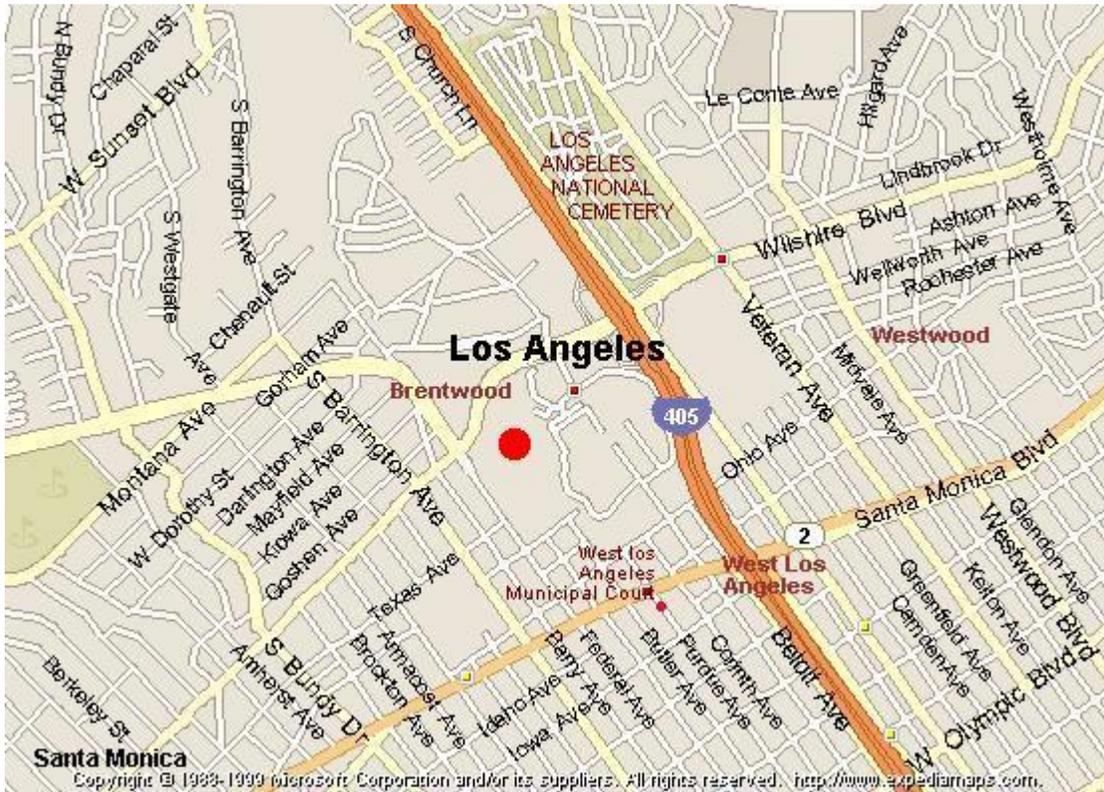
Looking at the probe from the South.



Looking at the probe from the West.

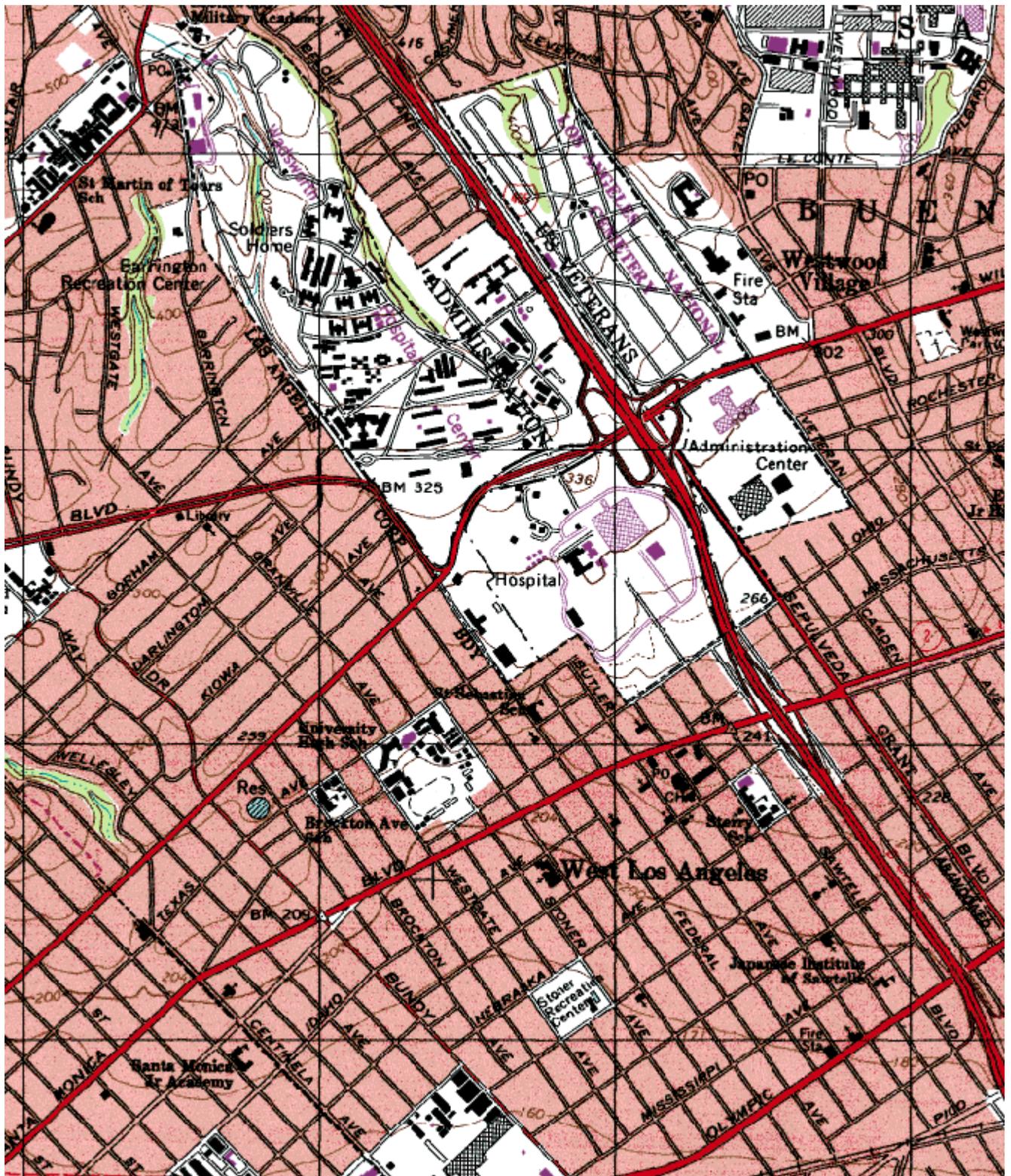
Quality Assurance Site Survey Report for Los Angeles-VA Hospital

Last updated: May, 2017



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060370113	70091	05/1984	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
Wilshire Blvd & Sawtelle Blvd Los Angeles, CA 90025	Los Angeles	South Coast	34° 03' 03"N	118° 27' 23"W	92



Detailed Site Information

Local site name	Los Angeles-VA Hospital			
AQS ID	060370113			
GPS coordinates (decimal degrees)	Latitude: 34° 03' 03" Longitude: 118° 27' 22"			
Street Address	Wilshire Blvd & Sawtelle Blvd, Los Angeles, CA 90025			
County	Los Angeles			
Distance to roadways (meters)	15			
Traffic count (AADT, year)	1,000 / 2012			
Groundcover (e.g. asphalt, dirt, sand)	Dirt/Grass			
Representative statistical area name (i.e. MSA, CBSA, other)	31080-Los Angeles-Long Beach-Anaheim, MSA			
Pollutant, POC	Carbon Monoxide, 1	Nitrogen Dioxide, 1	Ozone, 1	
Primary / QA Collocated / Other	N/A	N/A	N/A	
Parameter code	42101	42602	44201	
Network affiliation	N/A	N/A	N/A	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Highest Concentration	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Network affiliation				
Instrument manufacturer and model	Horiba APMA 360	Thermo 42i	API/Teledyne 400E	
Method code	106	074	087	
FRM/FEM/ARM/ other	FRM	FRM	FEM	
Collecting Agency	SCAQMD	SCAQMD	SCAQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	
Reporting Agency	SCAQMD	SCAQMD	SCAQMD	
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Middle	Neighborhood	
Monitoring start date (MM/DD/YYYY)	05/1984	05/1984	05/1984	
Current sampling frequency (e.g. 1:3, continuous)	1:1	1:1	1:1	
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	N/A	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	4.2	4.2	4.2	
Distance from supporting structure (meters)	1.7	1.7	1.7	
Distance from obstructions on roof	N/A	N/A	N/A	

(meters)				
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	23	23	23	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between collocated monitors (meters)	N/A	N/A	N/A	
Unrestricted airflow (degrees)	360°	360°	360°	
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	
Residence time for reactive gases (seconds)	6.9	7.2	7.4	
Will there be changes within the next 18 months? (Y/N)	No	No	No	
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	Nightly	Nightly	Nightly	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/10/2016	06/10/2016	06/10/2016	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	

APPENDIX C

PM2.5 Continuous Monitor Comparability Assessment and Request for Waiver

Introduction

The SCAQMD monitoring program has historically operated PM2.5 continuous monitors primarily to support forecasting and reporting of the Air Quality Index (AQI). These monitors supply data every hour to update the AQI on our web site as well as national web sites such as AirNow (www.airnow.gov). SCAQMD has been using these monitors since the early part of the last decade as the PM2.5 monitoring program was implemented. Over the last few years, a number of PM2.5 continuous monitors have been approved as Federal Equivalent Methods (FEMs). By utilizing an approved FEM, any subsequent data produced from the method may be eligible for comparison to EPA's health based standard known as the NAAQS. The primary advantage of operating a PM2.5 continuous FEM is that it can support the AQI, while also supplying data that are eligible for comparison to the NAAQS. Thus, a network utilizing PM2.5 continuous FEMs can potentially lower the number of filter-based FRMs operated in the network, which are primarily used for comparison to the NAAQS. These filter-based FRMs are resource intensive in that they require field operations as well as pre- and post-sampling laboratory analysis which results in data not being available for approximately 2-4 weeks after sample collection.

The SCAQMD monitoring program has been evaluating PM2.5 continuous FEMs over the past several years. Although the PM2.5 continuous FEMs are automated methods, these methods still require careful attention in their set-up, operation, and validation of data. Once enough data was collected, we began to evaluate the performance of these methods compared to collocated FRMs. That evaluation is explained further below and includes our request regarding the use of the data from these methods.

Request for Exclusion of PM2.5 Continuous FEM data from Comparison to the NAAQS

The network technical requirements for requesting exclusion of data from comparison to the NAAQS are identified in 40 CFR §58.11(e). These requirements refer to the performance criteria

described in Table C-4 to subpart C of part 53. To accommodate the differences in how routine monitoring agencies operate their networks, several additional provisions are described in §58.11(e). When a topic is not addressed in §58.11(e), then the test specifications from table C-4 applies.

As shown in the Table below, the slopes of the regression between collocated FRM and FEM measurements at the Anaheim, Central Los Angeles, North Long Beach, South Long Beach, and Rubidoux (POC 3) stations are higher than 1.1, which is outside the test specification indicated in §53 Table C-4 (i.e. slope = 1 ± 0.1). Although the slope criteria was met for Anaheim, Rubidoux, and Mira Loma (Central LA and South Long Beach failed intercept test), the intercept of the regression relationship between FRM and FEM data of ± 2.0 (also indicated in §53 Table C-4) failed for Anaheim (5.06), Central LA (4.51), Rubidoux (3.37), and Mira Loma (4.98). Failure of one or both criteria in the EPA equivalency acceptance “box test” was observed at all FEM/FRM paired sites in the SCAQMD jurisdiction for PM_{2.5} monitoring.

Thus, in accordance with the PM NAAQS rule published on January 15th, 2013 (78 FR 3086) and specific to the provisions detailed in §58.10 (b)(13) and §58.11 (e), SCAQMD is requesting that data from the all of the SCAQMD FEM PM_{2.5} monitors be set aside for comparison to the NAAQS. While SCAQMD is working to optimize the monitoring instrumentation to meet all of our monitoring objectives, the performance is not yet at a point where the comparability of the PM_{2.5} continuous FEMs operated in our network compared to collocated FRMs is acceptable. After assessing the comparability of the PM_{2.5} FEMs to the collocated FRMs for our network, the sites listed below do not meet the comparability requirements. Detailed one-page assessments from which the information described below was obtained are included at the end of this section.

Air Quality Monitoring Network Plan –2016

Table – Request for Exclusion of PM_{2.5} Continuous FEM Data

Site Name	City	Site ID	Cont POC	Cont Method Description	PM _{2.5} Cont Begin Date	PM _{2.5} Cont End Date	Continuous/ FRM Sampler Pairs Per Season	Slope (m)	Intercept (y)	Meets Bias Requirement	Correlation (r)
<i>Sites with PM_{2.5} continuous FEMs that are collocated with FRMs</i>											
Anaheim	Anaheim	06-059-0007	3	Met-One BAM 1020 w/VSCC	01/01/2013	12/31/2015	Winter = 241 Spring = 252 Summer = 241 Fall = 214 Total = 948	0.99	5.06	No	0.85
Central Los Angeles	Los Angeles	06-037-1103	3	Met-One BAM 1020 w/VSCC	01/01/2013	11/16/2015	Winter = 232 Spring = 244 Summer = 236 Fall = 211 Total = 923	1.18	4.51	No	0.91
South Long Beach	Long Beach	06-037-4004	3	Met-One BAM 1020 w/VSCC	01/03/2013	12/31/2015	Winter = 201 Spring = 248 Summer = 253 Fall = 243 Total = 945	1.21	1.22	No	0.91
Riverside/Rubidoux	Rubidoux	06-065-8001	9	Met-One BAM 1020 w/PM _{2.5} SCC	01/01/2013	12/31/2015	Winter = 232 Spring = 244 Summer = 255 Fall = 247 Total = 978	1.12	2.86	No	0.62
Mira Loma	Riverside	06-065-8005	3	Met-One BAM 1020 w/VSCC	01/01/2013	12/31/2015	Winter = 262 Spring = 236 Summer = 245 Fall = 232 Total = 975	0.99	4.98	No	0.89

Period of Exclusion of Data from the PM2.5 Continuous FEMs

The above table details the period of available data by monitor on which the request to exclude PM2.5 continuous FEM data is based. Per EPA Regional Office approval, these data will be entered into EPA’s AQS database in a manner where the data are only used for the appropriate monitoring objective(s) (i.e., use data for just the AQI). Additionally, SCAQMD will continue to load any new data generated for the next 18 months (intended to represent the period until December 31 of 2017) in the same manner or until such time we request and receive approval from the EPA Regional Office to change the status of these monitors.

PM2.5 Continuous FEM data for Reporting the AQI

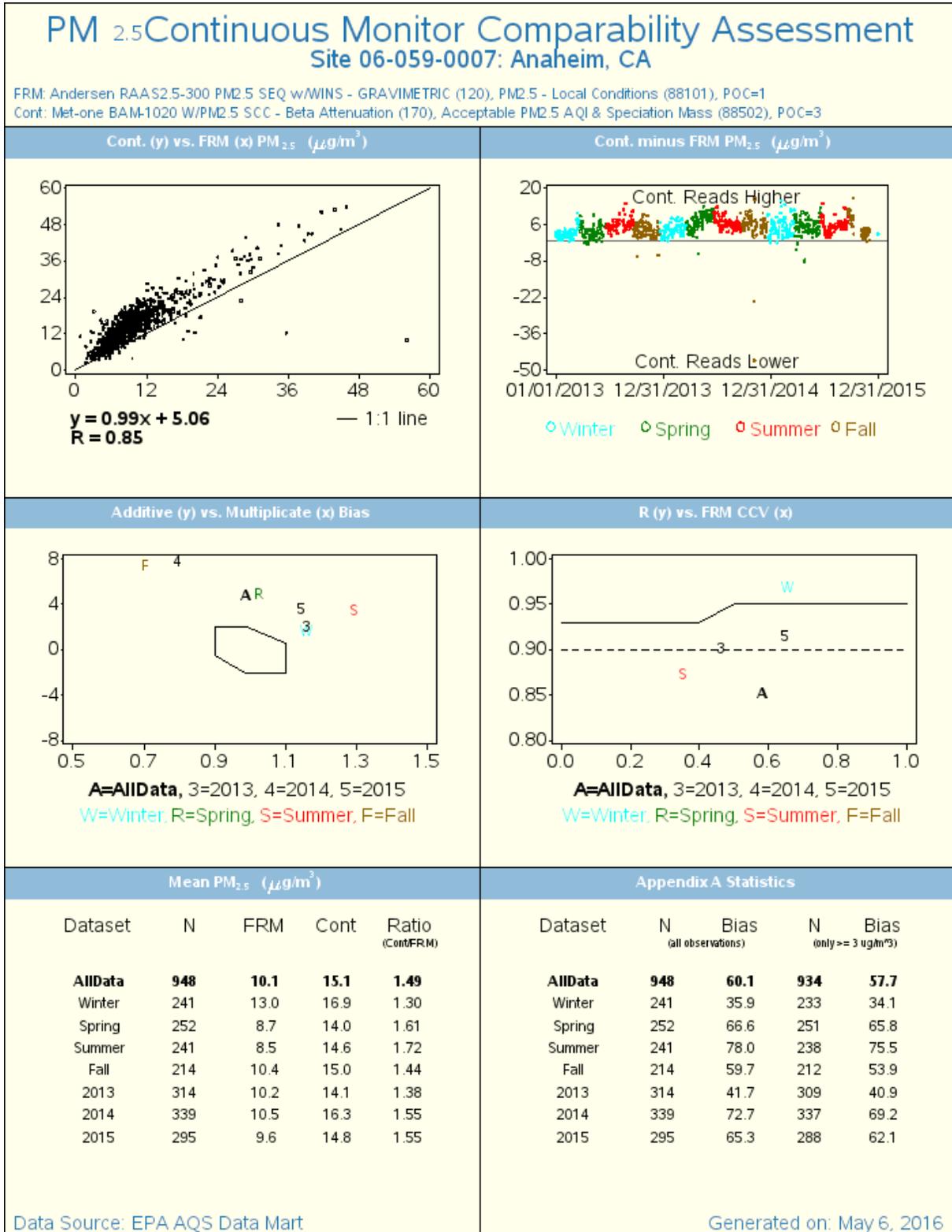
While the analysis supports the request for the monitors above not be used for comparison to the NAAQS, the data are of sufficient comparability to collocated FRMs that they be used for public AQI reporting. Therefore, with EPA Regional Office approval we will report these data on our web site and to AIRNow (www.airnow.gov). As such, data submitted to EPA’s AQS database will be under “acceptable AQI” reporting (i.e., parameter code 88101) so that data users will know that these data are appropriate for use in AQI calculations, but not NAAQS comparison.

Assessments

The following one-page assessments are locations where our agency has collocated PM2.5 FRM and continuous FEM monitors. Each of these assessments is represented in the “**Table – Request for Exclusion of PM2.5 Continuous FEM Data**” above.

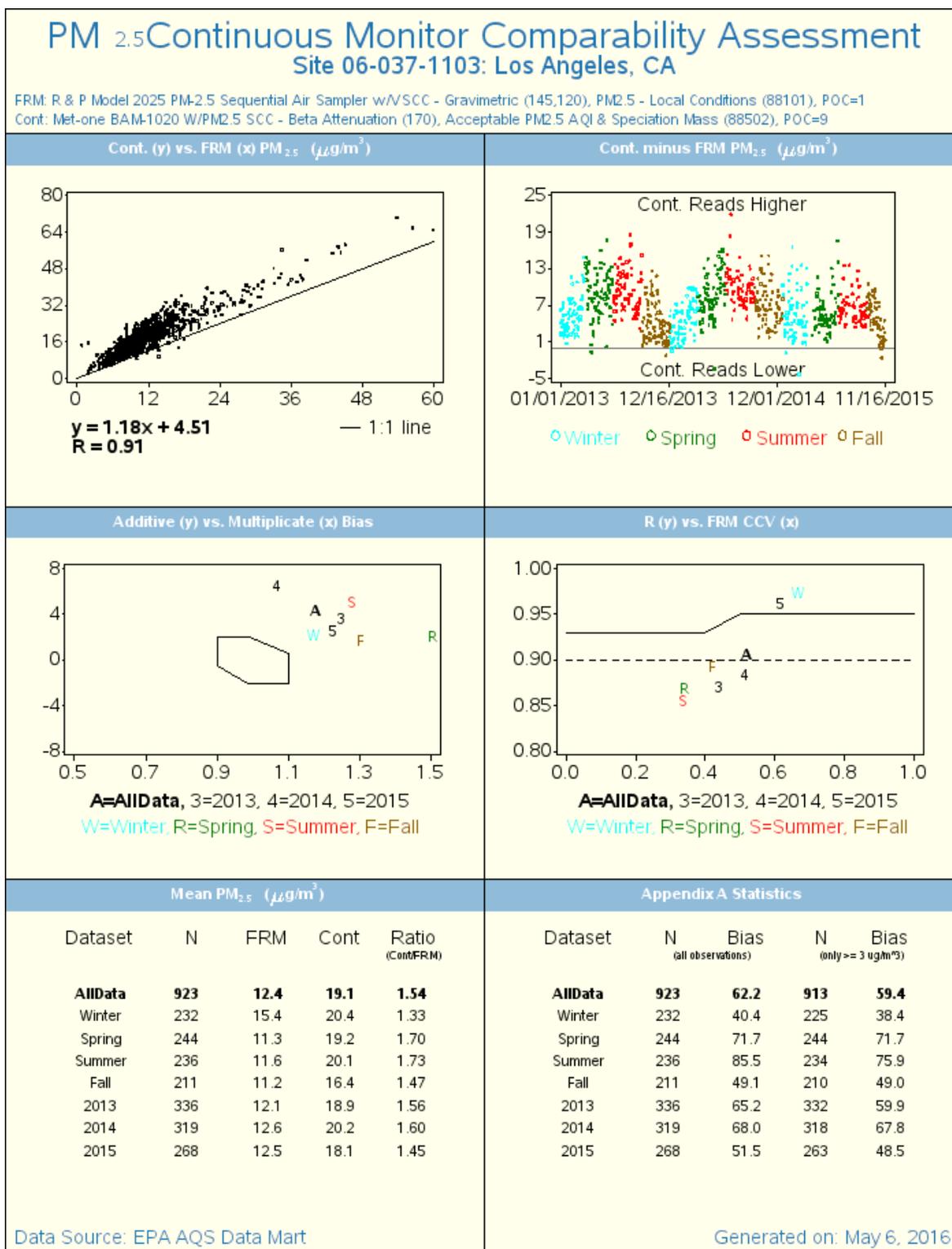
Anaheim

(FRM POC: 1; FEM POC: 3)



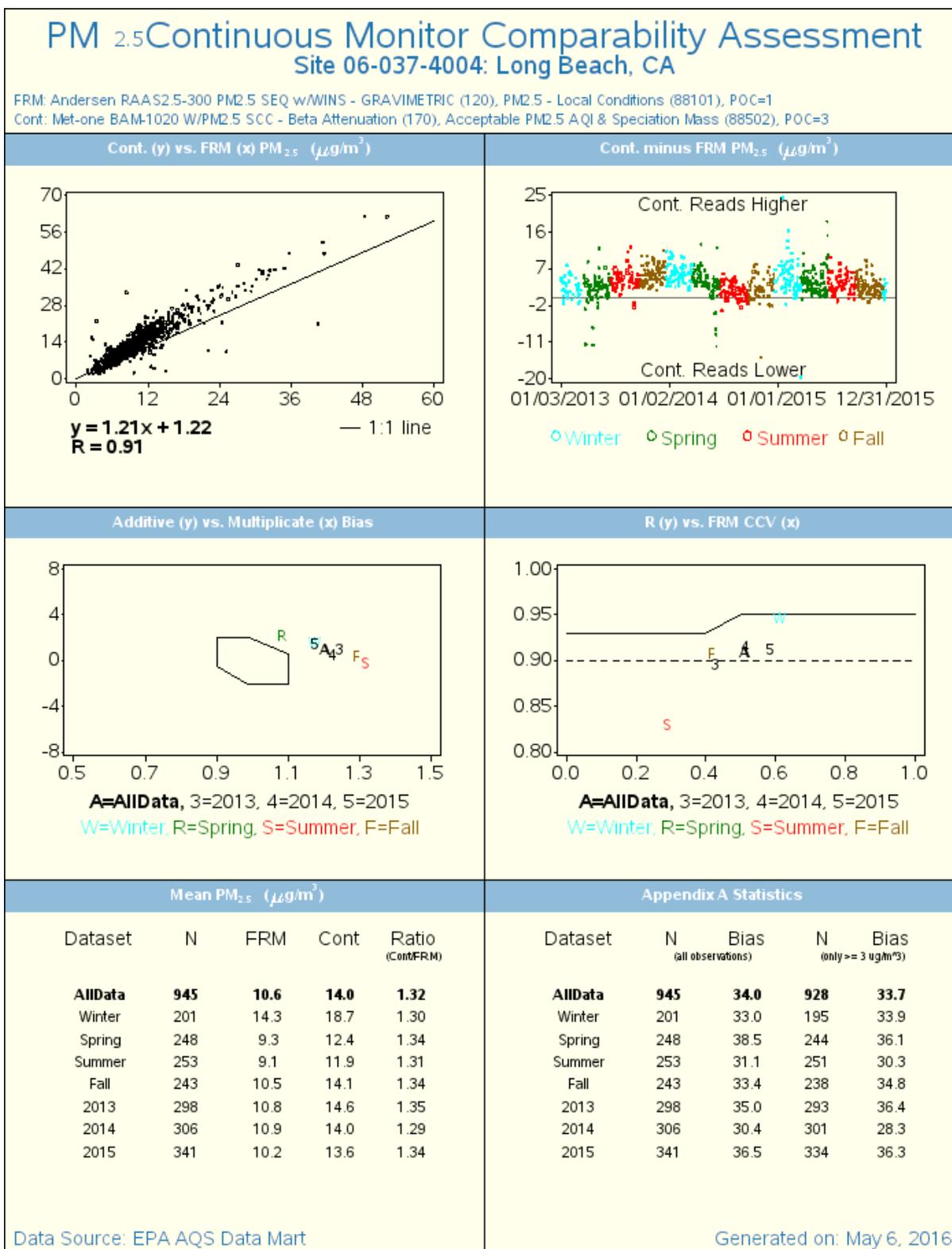
Central Los Angeles

(FRM POC: 1; FEM POC: 9)



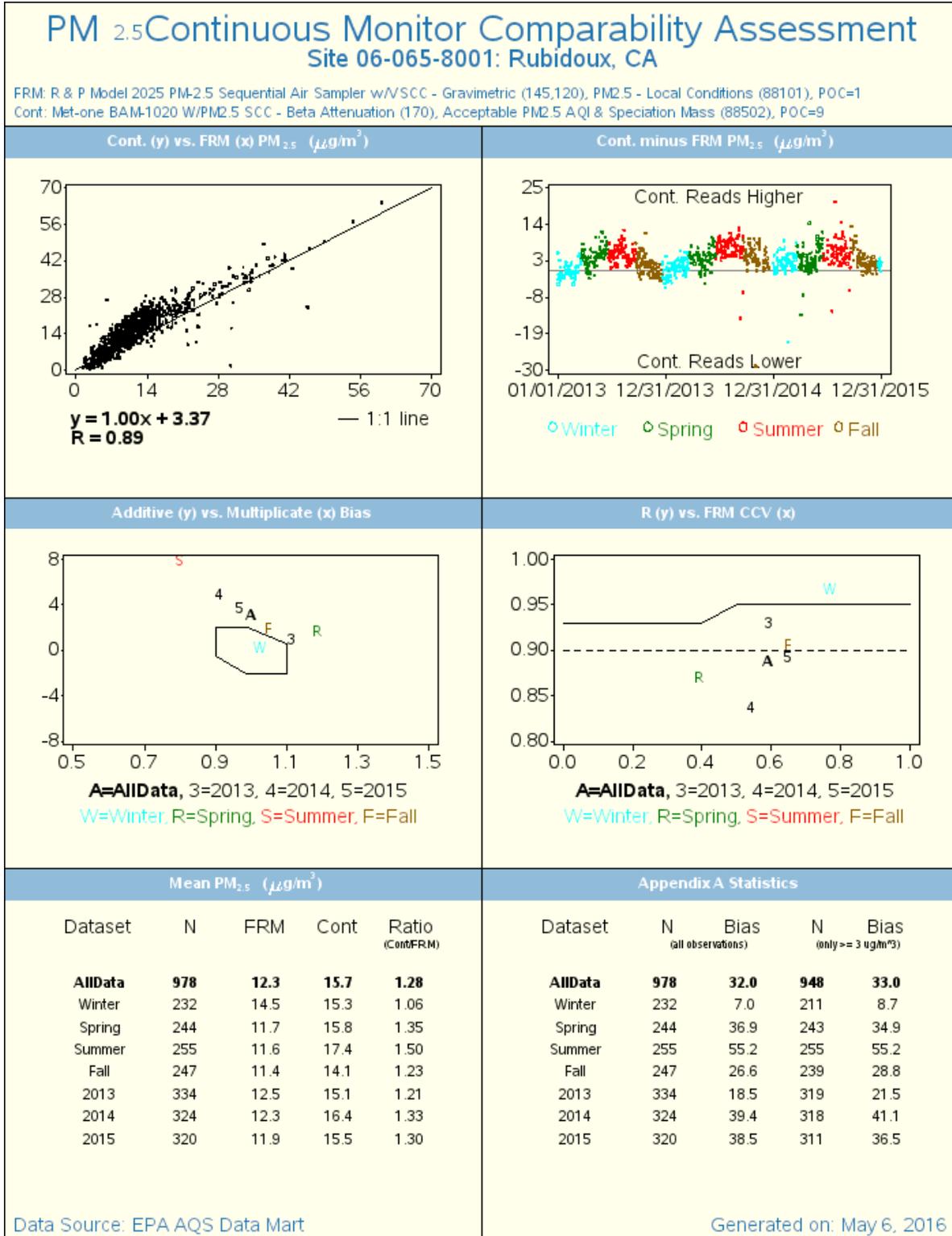
South Long Beach

(FRM POC: 1; FEM POC: 3)



Rubidoux

(FRM POC: 1; FEM POC: 9)



Mira Loma

(FRM POC: 1; FEM POC: 3)

