



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 2015-2016 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 and comment beginning May 25, 2016 for a period of 30 days prior to submission of the final plan to EPA. Hard copies of the final document are made available by July 1, 2016 at the SCAQMD's Public Information Desk in Diamond Bar, CA. The Final document is also available on the SCAQMD website as of July 1, 2016 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>). No public comments were received, however if any were received they would be included in the final plan submitted to EPA to fulfill Federal regulatory requirements.

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 Mecca site, which monitors windblown particulates and potential emissions from the Salton Sea, was established as a permanent site. The newest source impact Pb sites were added in January 2010 as required by EPA regulation. During 2014, the Burbank, Ontario Fire Station, and Riverside Magnolia sites were discontinued due to termination of leases and/or safety

concerns. 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	Crestline	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		Pb	
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		NS/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			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			EX
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)

MONITORING PURPOSE

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			
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			
Palm Springs	TEOM/FEM	RM/TP	HC	NS					
Reseda					BAM/NON-FEM	RM	PE	NS	
Rubidoux	TEOM/FEM	RM/TR	HC	NS	BAM/FEM & NON-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 2015 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 Anaheim and Mira Loma sites are shown as expected maximum value sites by MSA in Tables 13. Consequently, as expected maximum concentration sites, Mira Loma and Anaheim 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
Anaheim	ANAH	30178	060590007	01/03/99	1-in-6
Azusa	AZUS	70060	060370002	01/04/99	1-in-6
Banning	BNAP	33164	060650012	04/01/97	1-in-6
Crestline	CRES	36181	060710005	10/01/73	1-in-6
Fontana	FONT	36197	060712002	01/03/99	1-in-6
Indio “A”	INDI	33157	060652002	01/30/99	1-in-6
Indio “B”	INDI	33157	060652002	01/30/99	1-in-3
Indio “C” ¹	INDI	33157	060652002	01/30/99	1-in-6
Los Angeles (Hastings)	LAXH	70111	060375005	04/01/04	1-in-6
Long Beach (Hudson)	HDSN	70033	060374006	01/01/10	1-in-6
Mecca (Saul Martinez)	SLMZ	33033	060652005	01/01/11	1-in-6
Los Angeles (Main St.)	CELA	70087	060371103	01/03/99	1-in-6
Mira Loma (Van Buren) “A”	MRLM	33165	060658005	11/09/05	1-in-6
Mira Loma (Van Buren) “B”	MRLM	33165	060658005	03/08/12	1-in-3
Mira Loma (Van Buren) “C” ¹	MRLM	33165	060658005	03/08/12	1-in-6
Mission Viejo	MSVJ	30002	060592022	06/01/99	1-in-6
Norco	NORC	33155	060650003	12/01/80	1-in-6
Palm Springs	PLSP	33137	060655001	12/26/99	1-in-6
Perris	PERI	33149	060656001	05/01/73	1-in-6
Redlands	RDLD	36204	060714003	09/01/86	1-in-6
Rubidoux “A”	RIVR	33144	060658001	01/03/99	1-in-6
Rubidoux “B” ¹	RIVR	33144	060658001	01/03/99	1-in-3
San Bernardino	SNBO	36203	060719004	01/03/99	1-in-6
Santa Clarita	SCLR	70090	060376012	05/01/01	1-in-6
South Long Beach	SLBH	70110	060374004	06/01/03	1-in-6

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

PM_{10-2.5}

PM_{10-2.5} (PM Coarse) is required at NCore sites only, and is derived from the continuous BAM PM₁₀ and PM_{2.5} particulate monitors at those sites. The Purpose, Site Type and Scale are similar to the continuous PM₁₀ and PM_{2.5} instruments from which data is calculated. PM Coarse is currently measured at the Los Angeles (Main St.) and Rubidoux sites and is shown in Table 4.

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. These 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 and formal designation is requested in Appendix D. 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 2015 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 2015 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	NEI SO ₂ Emissions*	PWEI Value	Minimum Required SO ₂
31080	13,131,431	6,102.45	80,134	1
40140	4,380,878	2,307.02	10,107	1

* 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 34 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, Riverside Magnolia, Rubidoux, San Bernardino, South Long Beach, and Upland exceed the minimum monitoring requirements.

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 4/26/2016 shows no sites exceed the 1.0 tpy threshold requiring a monitoring plan:

TPY	State	County	Facility
0.8	CA	Los Angeles	LONG BEACH-DAUGHERTY FIELD AIRPORT
0.68	CA	Los Angeles	VAN NUYS AIRPORT
0.58	CA	Orange	JOHN WAYNE AIRPORT
0.58	CA	San Bernardino	CHINO AIRPORT

As of the end of 2015, 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.

Although SCAQMD has used the 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 2016 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 2016, 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.

TABLE 7. PAMS Network

Site Type	Date Established as PAMS	Site / AQS ID#	January 1 to December 31		Additional Requirements
			VOC	Carbonyl	
1	04/01/2004	LAX Hastings (replaced Hawthorne)	1 x 24 hr sample every 6 th day	No Sampling	
2	06/01/1995	Azusa	1 x 24 hr sample every 6 th day	No Sampling	No/NOx required
2	07/01/1997	Burbank	1 x 24 hr sample every 6 th day	1 x 24 hr sample every 6 th day	
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.
2	08/01/2005	Pico Rivera #2	1 x 24 hr sample every 6 th day	1 x 24 hr sample every 6 th day	
3	06/09/2009	Rubidoux	1 x 24 hr sample every 6 th day	No Sampling	NOy required
3	05/01/2001	Santa Clarita	1 x 24 hr sample every 6 th day	1 x 24 hr sample every 6 th day	

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, 2014 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 Los Angeles and Mira Loma sites. A replacement site is currently being sought for Burbank due to termination of lease and the Mira Loma 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 2013-2015, SCAQMD 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 did 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 2013-2014. Meanwhile, SCAQMD is conducting comparison studies of newer technology to determine their ability to meet the criteria to be compared against the NAAQS. At such time when the assessment indicates that the FEM monitors are within the acceptance criteria, then U.S. EPA will be notified of the results and the AQS parameters will be changed to indicate that the data will be eligible for comparison to the NAAQS upon U.S. EPA approval. SCAQMD requests a waiver for 2015 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. To meet this optional parameter, SCAQMD measures this value 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 STN 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 STN 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 STN 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

¹ Although 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.

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 Newport Beach, Riverside, and other locations throughout the SCAQMD jurisdiction.

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 SOx and NOx. 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 low income 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>).

Carlton Forge

Carlton Forge Works (CFW) operates furnaces, presses and grinders at its facility in Paramount to manufacture large metal rings used by aerospace and other industries. As part of its on-going investigation of air quality complaints and community concerns about potential burnt metal odors and emission from CFW, SCAQMD has deployed TSP monitors to monitor for metals. Based on the results of air sampling to date, SCAQMD has found ambient levels of some metals measured on few days in August, September and October 2013 at concentrations significantly higher than average levels measured throughout the basin. However, more recent measured ambient concentrations have declined.

Recent or Proposed Modifications to Network

5 Year Network Assessment

During 2015, an assessment of the monitoring network was conducted as required. A summary of suggested air monitoring network 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 suggestions summarized below are under review and 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, and potentially consolidate measurements at nearby sites or at a new site in Diamond Bar.
- Reconsider the value of the Big Bear Lake PM_{2.5} site.
- 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.
- Continue to transition to continuous PM measurements that can eventually replace filter-based measurements.

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 has received approved drawings from the San Bernardino County Planning, Building and Safety departments for construction plans. Construction is anticipated during fall 2016; however the schedule is dependent upon the approval and contract process.

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. However, due to recent legislation, the SCAQMD lease is under review by the Veterans Administration. Construction schedule is dependent upon pending lease renewal.

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 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 of the site is include in Appendix D of this report.

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.

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	13,131,431 2013	97 2012-2014	Santa Clarita 060376012	4	16	0
40140	San Bernardino Riverside	4,380,878 2013	102 2012-2014	Redlands 060714003	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 PM_{2.5} SLAMS (FRM/FEM/ARM)

(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/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 SLAMS Monitors	# Active SLAMS Monitors	# Additional SLAMS needed
30180	Los Angeles Orange	13,131,431 2013	12.4 2012-2014	Los Angeles 060371103	32 2012-2014	Los Angeles 060371103	3	10	0
40140	San Bernardino Riverside	4,380,878 2013	14.7 2012-2014	Mira Loma 060658005	38 2012-2014	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 PM_{2.5} 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/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 Continuous Monitors	# Active Continuous Monitors	# Additional Continuous needed
30180	Los Angeles Orange	13,131,431 2013	19.58 2012-2014	Los Angeles 060371103	41.7, 2012-2014	Los Angeles 060371103	2	4-FEM 3-Non FEM	0
40140	San Bernardino Riverside	4,380,878 2013	19.37, 2012-2014	Mira Loma 060658005	52.6, 2012-2014	Rubidoux 060658001	2	3-FEM 6-Non FEM ²	0

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

Monitors required for SIP or Maintenance Plan: 15

²One Non FEM is collocated at the Rubidoux site with a FEM.

* 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 PM_{2.5} 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	13,131,431 2013	1	2	0
40140	San Bernardino Riverside	4,380,878 2013	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	2014 Max Concentration [ug/m3]	Max Concentration site (name AQS ID)	# Required Monitors	# Active Monitors	# Additional Monitors Needed
30180	Los Angeles Orange	13,131,431 2013	98	Azusa 060370002	2-4 Low Conc	8	0
40140	San Bernardino Riverside	4,380,878 2013	136 ¹	San Bernardino 060719004	4-8 Med Conc	11	0

Monitors required for SIP or Maintenance Plan: 19

¹Excluding high concentration at Indio (298 ug/m3, on 8/18/2014.)

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 (2013) 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	13,131,431 2013	377,000 2013	2	2	0	1	15	0
40140	4,380,878 2013	267,000 2013	2	2	0	1	8	0

¹Max AADT Counts – 2013 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	6102.45 2013	80,134	0	1	4	0
40140	San Bernardino Riverside	2307.02 2013	10,107	0	1	2	0

¹Using latest NEI data 2013, available on EPA website: <http://www.epa.gov/ttn/chief/net/2013inventory.html>

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	13,131,431 2013	1	1	0	16
40140	4,380,878 2013	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	13,131,431 2013	1	2 ¹	0
Rubidoux 060658001	40140	4,380,878 2013	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
Van Nuys Airport	16461 Sherman Way, Van Nuys, CA 91406	0.68	NEI 2011	0.06	7; 2012	0	0	0
TAMCO	12459-B Arrow Route, Rancho Cucamonga, CA 91739	0.42	NEI 2011	Unavailable	Unavailable	0	1	0
Exide Technologies	2700 S Indiana St, Vernon, CA 90058	0.1	NEI 2011	0.46	7; 2011	1	2	0
Trojan Battery	9440 Ann St., Santa Fe Springs, CA 90670	0.00556	NEI 2011	0.11	4; 2011	0	1	0
Quemetco Inc.	720 S 7th Ave, City Of Industry, CA 91746	0.0048	NEI 2011	0.11	7; 2010	0	1	0

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

¹Consider data from past three years.

²Data found at <http://www.epa.gov/ttn/chief/net/2011inventory.html> (5/1/2015)

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	13,131,431 2013	0.01, 2012-2014	0	4	0
40140	4,380,878 2013	0.01, 2012-2014	0	2	0

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

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, 2015.

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, 2015.

APPENDIX A

SCAQMD Network Depictions

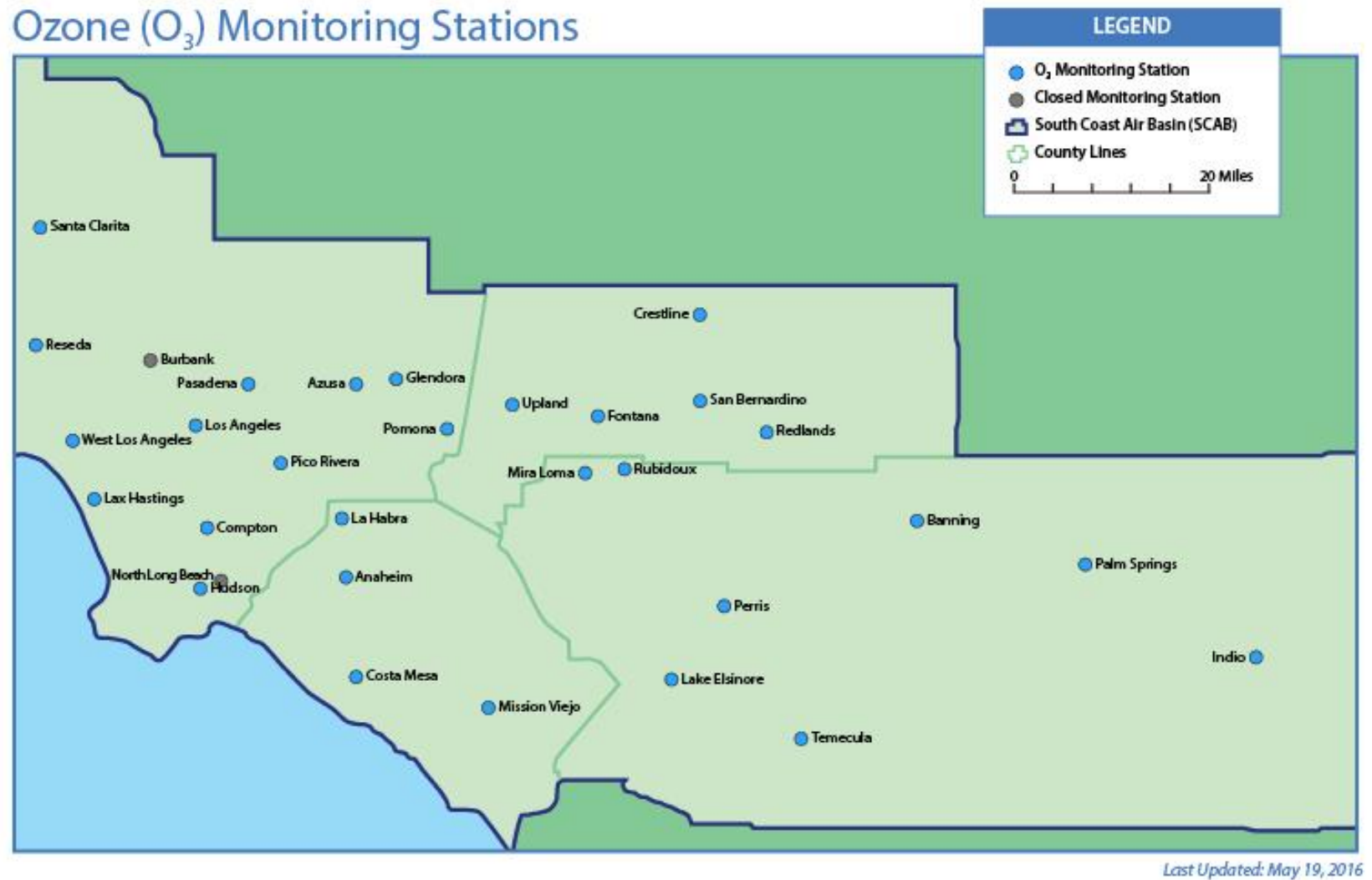


Figure 1 SCAQMD Ozone Monitoring Locations

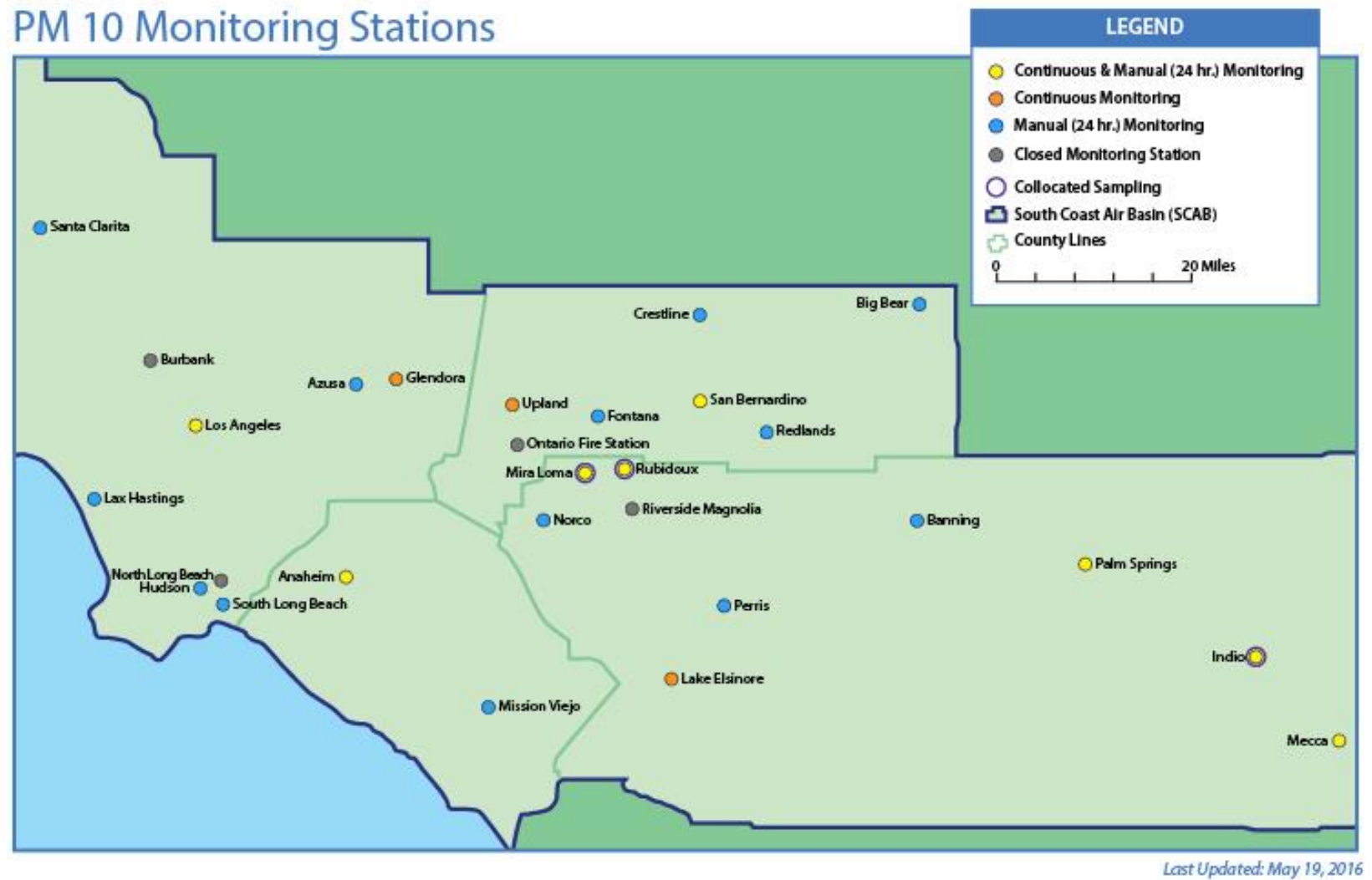


Figure 2 SCAQMD PM10 Monitoring Locations

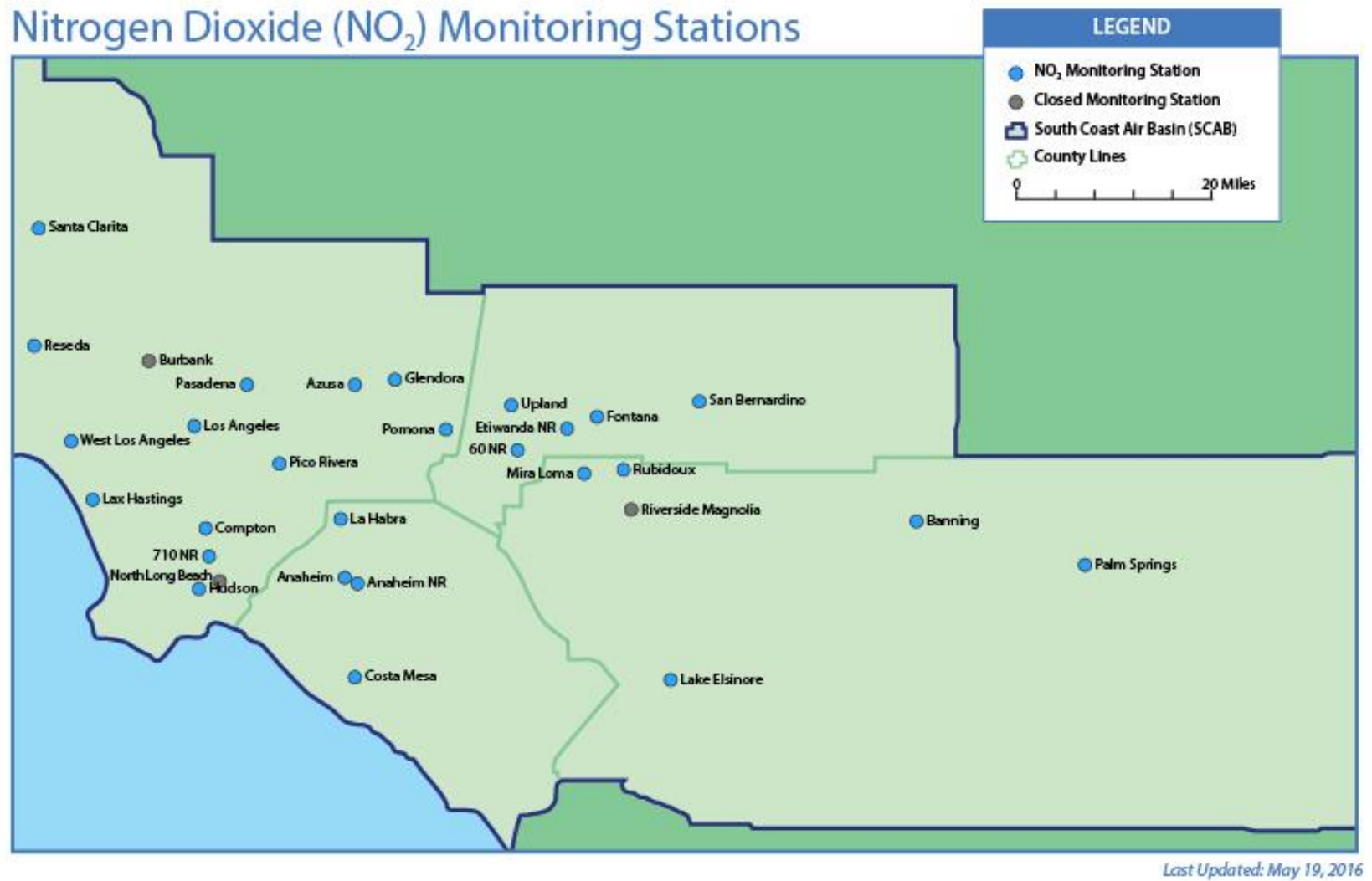


Figure 3 SCAQMD Monitoring Locations for Nitrogen Dioxide

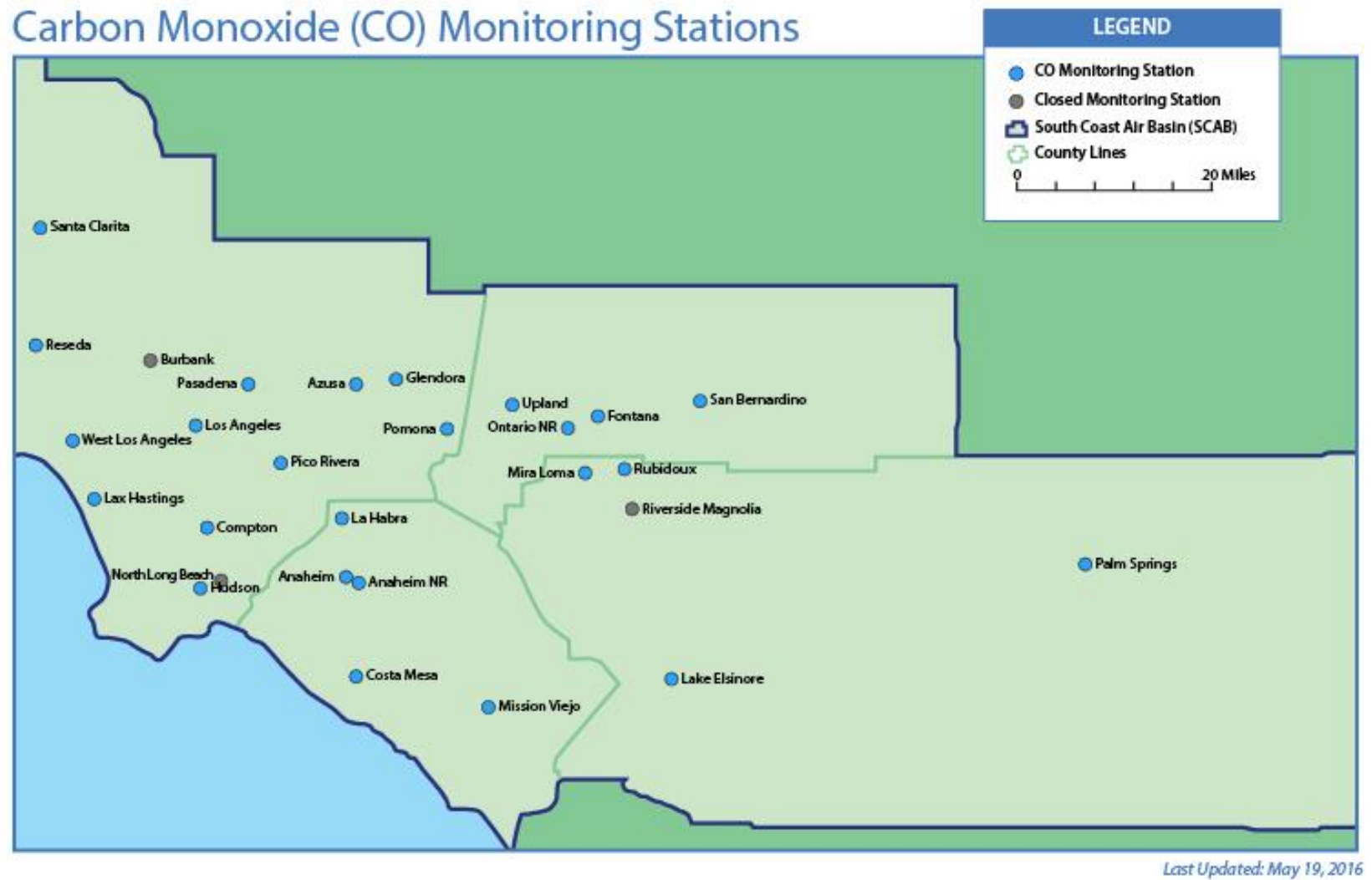


Figure 4 SCAQMD Monitoring Locations for Carbon Monoxide

Sulfur Dioxide (SO₂) Monitoring Stations

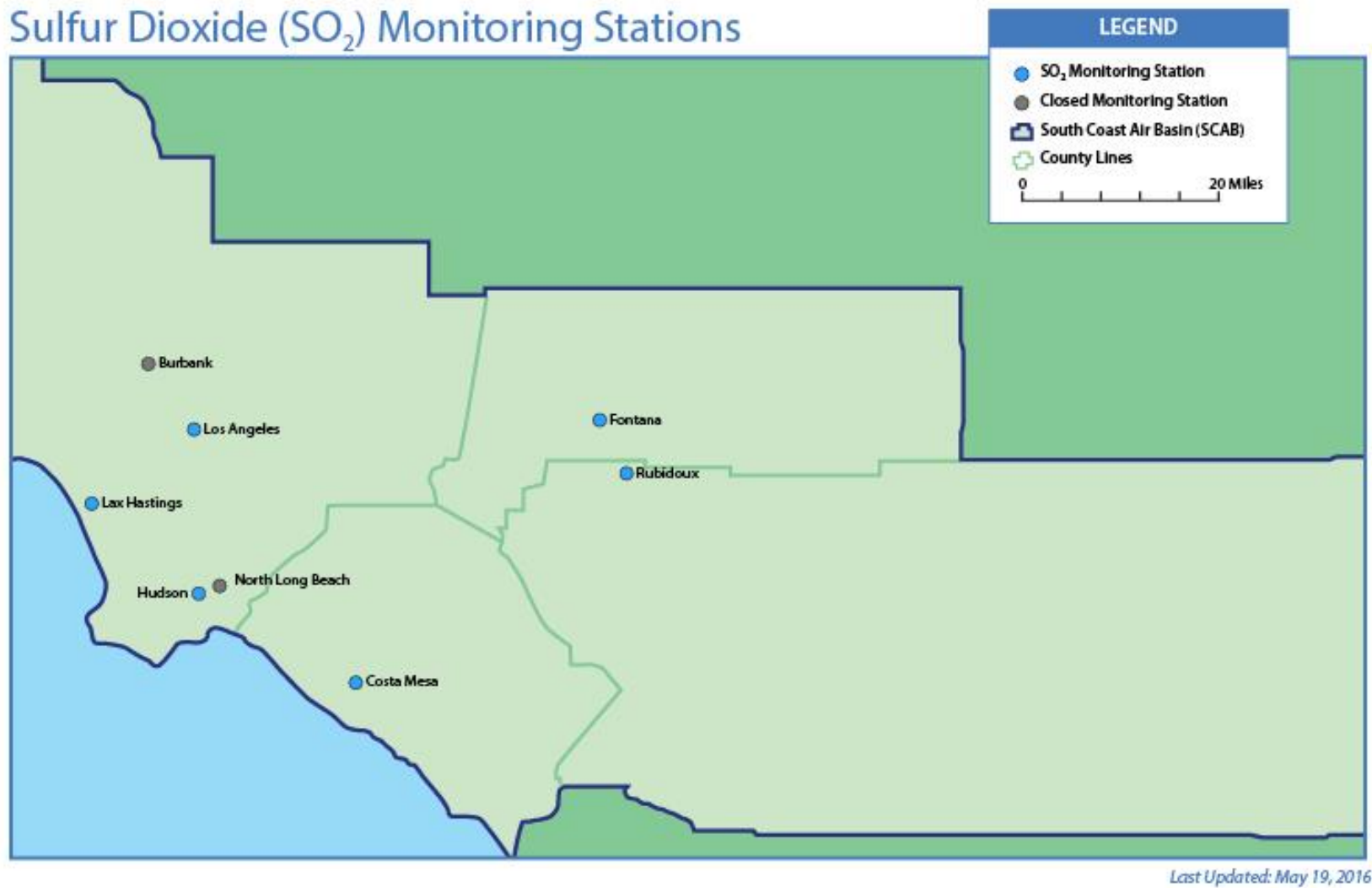


Figure 5 SCAQMD Monitoring Locations for Sulfur Dioxide

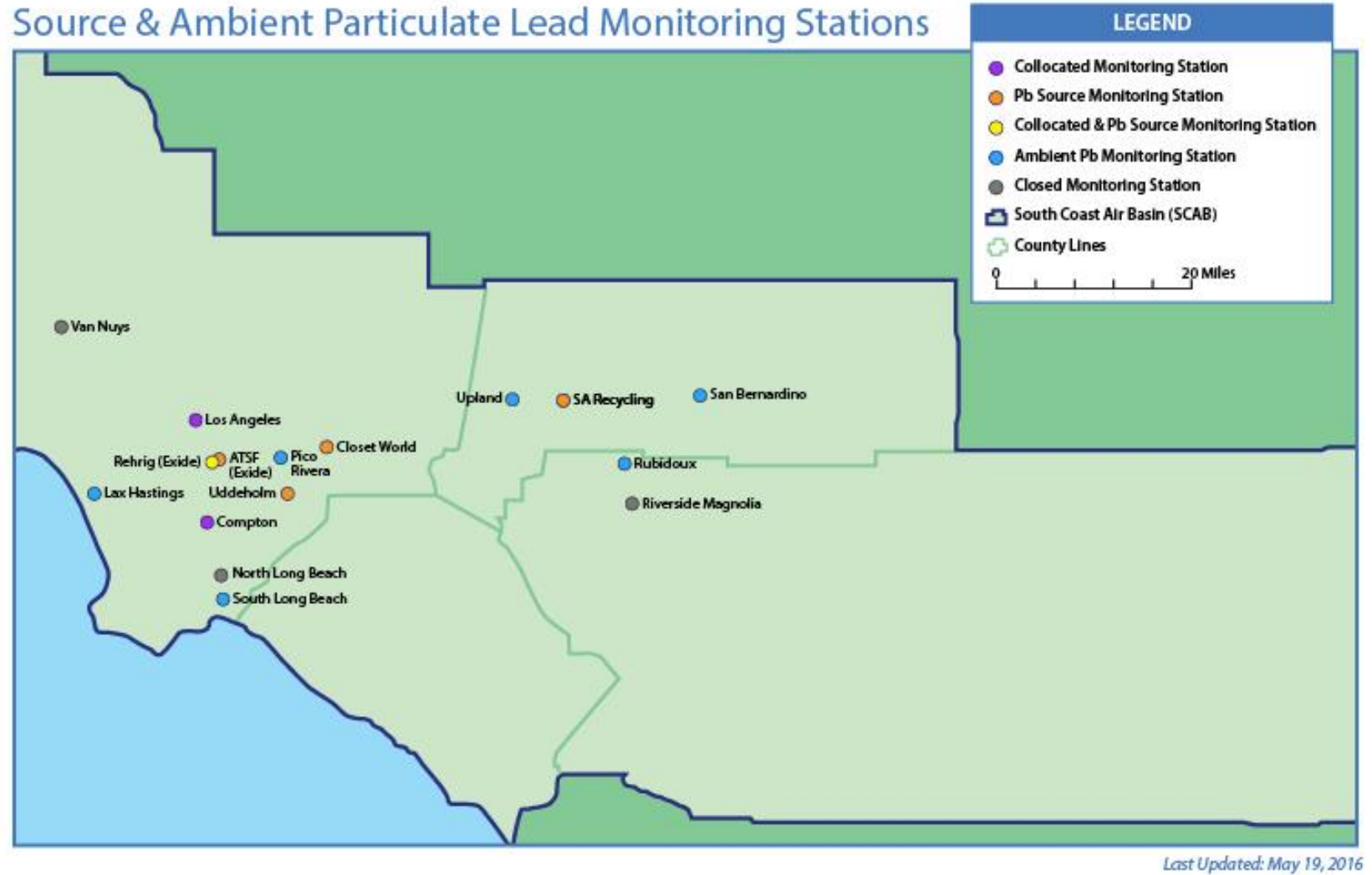


Figure 6 SCAQMD Source and Ambient Particulate Lead Monitoring Locations

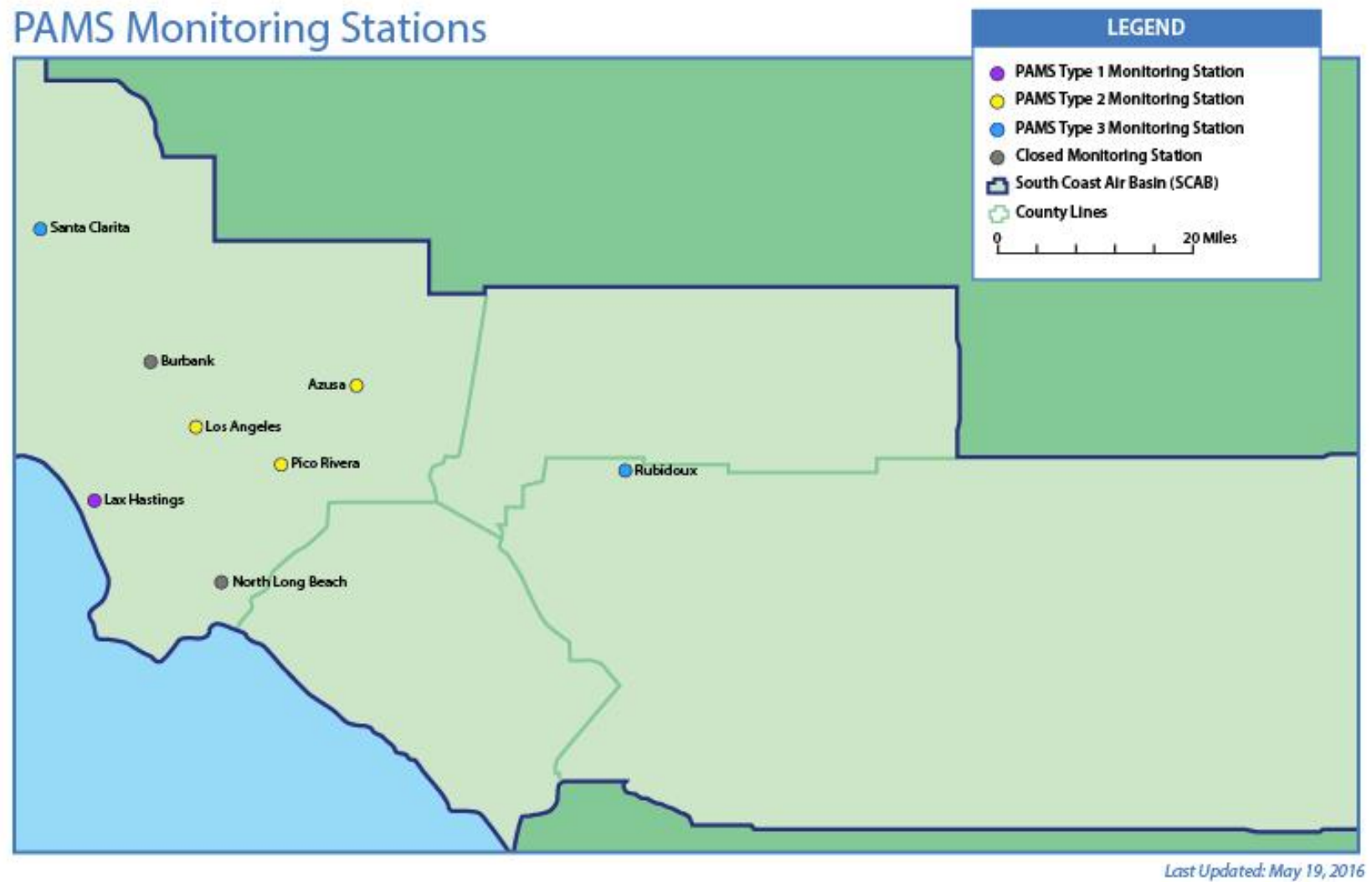


Figure 7 SCAQMD PAMS Monitoring Locations



Figure 8 SCAQMD PM2.5 Monitoring Locations

2014 AIR QUALITY SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT																						
Source/Receptor Area No. Location		Station No.	Carbon Monoxide ^{a)}			Ozone									Nitrogen Dioxide ^{b)}				Sulfur Dioxide ^{c)}			
			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. in ppm 8-hour	Old Federal > 0.124 ppm 1-hour	No. Days Standard Exceeded					No. Days of Data	Max. Conc. in ppb 1-hour	98 th Percentile Conc. ppb 1-hour	Annual Average AAM Conc. ppb	No. Days of Data	Max. Conc. in ppb 1-hour	99 th Percentile Conc. ppb 1-hour
											Current 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								
LOS ANGELES COUNTY																						
1	Central LA	087	365	3	2.0	365	0.113	0.094	0.072	0	2	1	3	7	365	82.1	67.4	22.2	364	5.4	4.4	
2	Northwest Coastal LA County	091	365	2	1.3	365	0.116	0.094	0.077	0	4	2	1	6	337	63.9	53.9	13.3	--	--	--	
3	Southwest Coastal LA County	820	365	3	1.9	365	0.114	0.080	0.075	0	3	0	1	6	365	87.3	66.4	11.9	365	15.3	9.1	
4	South Coastal LA County 1	072	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4	South Coastal LA County 3	033	345	4	2.6	351	0.087	0.072	0.061	0	0	0	0	1	340	135.9	84.8	20.7	288	14.7	10.1	
6	West San Fernando Valley	074	365	4	3.0	365	0.116	0.092	0.083	0	11	2	6	31	327	58.9	52.4	11.7	--	--	--	
7	East San Fernando Valley	069	158*	3	3.0	161*	0.091	0.079	0.069	0	1	0	0	2	150*	73.2	65.2	21.8	154*	4.5	3.9	
8	West San Gabriel Valley	088	348	3	1.8	333	0.124	0.096	0.086	0	7	4	6	13	347	75.2	60.1	16.6	--	--	--	
9	East San Gabriel Valley 1	060	365	2	1.9	365	0.123	0.092	0.081	0	11	3	11	20	361	70.2	60.6	17.8	--	--	--	
9	East San Gabriel Valley 2	591	365	1	0.7	364	0.133	0.101	0.096	5	38	14	41	60	352	65.7	51.1	13.1	--	--	--	
10	Pomona/Walnut Valley	075	365	2	1.6	358	0.123	0.099	0.090	0	33	9	22	56	365	88.9	63.8	22.1	--	--	--	
11	South San Gabriel Valley	085	364	4	2.5	361	0.121	0.092	0.079	0	5	1	7	7	365	86.7	61.9	19.5	--	--	--	
12	South Central LA County	112	356	6	3.8	355	0.094	0.081	0.073	0	2	0	0	4	350	68.2	59.2	15.6	--	--	--	
13	Santa Clarita Valley	090	361	3	1.2	360	0.137	0.110	0.097	2	45	16	32	65	360	57.7	46.1	12.7	--	--	--	
ORANGE COUNTY																						
16	North Orange County	3177	363	4	2.1	362	0.119	0.088	0.075	0	2	2	5	6	361	83.6	56.6	15.2	--	--	--	
17	Central Orange County	3176	365	3	2.1	338	0.111	0.081	0.076	0	4	0	2	6	338	75.8	59.8	15.2	--	--	--	
18	North Coastal Orange County	3195	365	3	1.9	364	0.096	0.079	0.076	0	4	0	1	6	365	60.6	53.7	10.8	357	8.8	3.7	
19	Saddleback Valley	3812	365	1	0.7	365	0.115	0.088	0.078	0	5	2	4	10	--	--	--	--	--	--	--	
RIVERSIDE COUNTY																						
22	Norco/Corona	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
23	Metropolitan Riverside County 1	4144	365	2	1.9	365	0.141	0.104	0.091	1	41	12	29	69	362	59.9	53.2	15.1	365	5.6	3.5	
23	Metropolitan Riverside County 2	4146	363	2	1.4	--	--	--	--	--	--	--	--	--	361	56.3	50.2	15.8	--	--	--	
23	Mira Loma	4165	364	2	2.4	364	0.138	0.102	0.087	1	29	6	17	55	364	57.7	49.2	13.7	--	--	--	
24	Perris Valley	4149	--	--	--	341	0.117	0.094	0.089	0	38	7	16	63	--	--	--	--	--	--	--	
25	Lake Elsinore	4158	355	2	1.4	354	0.104	0.086	0.079	0	6	1	4	13	334	45.3	39.6	8.2	--	--	--	
26	Temecula	4031	--	--	--	345	0.119	0.100	0.077	0	4	1	1	14	--	--	--	--	--	--	--	
29	Banning Airport	4164	--	--	--	362	0.114	0.097	0.094	0	38	11	22	58	351	52.3	45.5	8.5	--	--	--	
30	Coschella Valley 1**	4137	365	2	0.9	365	0.108	0.093	0.089	0	35	7	9	61	341	46.3	41.2	7.1	--	--	--	
30	Coschella Valley 2**	4157	--	--	--	365	0.095	0.091	0.084	0	10	2	2	30	--	--	--	--	--	--	--	
SAN BERNARDINO COUNTY																						
32	Northwest San Bernardino Valley	5175	361	3	1.2	361	0.126	0.101	0.093	1	42	15	34	60	357	74.1	56.7	16.6	--	--	--	
33	Southwest San Bernardino Valley	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
34	Central San Bernardino Valley 1	5197	331	3	1.2	330*	0.127	0.105	0.093	1	37	14	31	52	330	70.4	63.6	20.2	330	4.0	2.8	
34	Central San Bernardino Valley 2	5203	360	4	2.4	365	0.121	0.099	0.095	0	51	21	38	76	365	72.6	56.1	18.0	--	--	--	
35	East San Bernardino Valley	5204	--	--	--	365	0.128	0.104	0.099	2	55	27	47	83	--	--	--	--	--	--	--	
37	Central San Bernardino Mountains	5181	--	--	--	365	0.130	0.106	0.102	1	68	41	50	97	--	--	--	--	--	--	--	
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
DISTRICT MAXIMUM			6	3.8		0.141	0.110	0.102	5	68	41	50	97		135.9	84.8	22.2		15.3	10.1		
SOUTH COAST AIR BASIN				3.8		0.141	0.110	0.102	10	92	54	74	129		135.9	84.8	22.2		15.3	10.1		

* 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 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded.

The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded either.

b) - 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 (180 ppb) and 0.030 ppm (30 ppb).

c) - 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).

For information on the current standard levels and most recent revisions please refer to "Appendix II - Current Air Quality" of the "Final 2012 AQMP" which can be accessed at <http://www.aqmd.gov/docs/default-source/clean-air-plan/air-quality-management-plan/2012-air-quality-management-plan-final-2012-aqmp-february-2013/appendix-ii-final-2012.pdf>. 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, accessed from <http://www2.aqmd.gov/webapp/visus2/VEMap3D.aspx>. A 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.



**South Coast
Air Quality Management District**
21865 Copley Drive
Diamond Bar, CA 91765-4182
www.aqmd.gov

Figure 9 SCAQMD 2014 Air Quality Data Summary

2014 AIR QUALITY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2014

Source/Receptor Area No. Location	Station No.	Suspended Particulates PM10 d)		Fine Particulates PM2.5 e)		Lead i)		PM10 Sulfate j)	
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m ³ 24-hour	Annual Average Conc. k) µg/m ³	No. Days of Data	Max. Conc. in µg/m ³ 24-hour
No.	Location	Station No.	No. Days of Data	Max. Conc. in µg/m ³ 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m ³ 24-hour	No. (%) Samples Exceeding State Standard > 5			



Figure 9 SCAQMD 2014 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, 2, 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

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

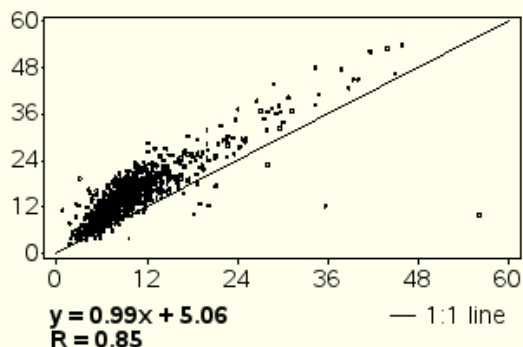
(FRM POC: 1; FEM POC: 3)

PM_{2.5} Continuous Monitor Comparability Assessment Site 06-059-0007: Anaheim, CA

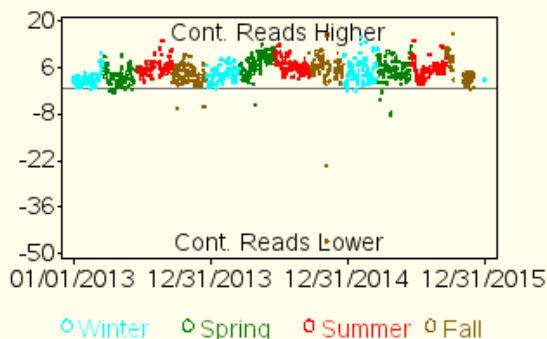
FRM: Andersen RAAS2.5-300 PM_{2.5} SEQ w/WINS - GRAVIMETRIC (120), PM_{2.5} - Local Conditions (88101), POC=1

Cont: Met-one BAM-1020 W/PM_{2.5} SCC - Beta Attenuation (170), Acceptable PM_{2.5} AQI & Speciation Mass (88502), POC=3

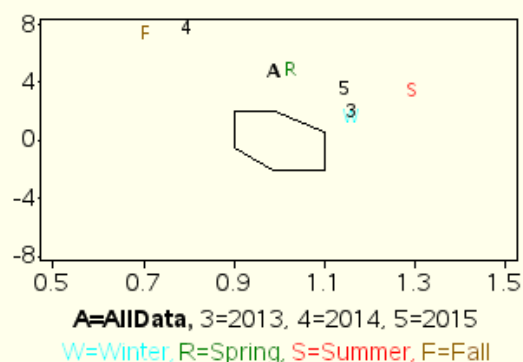
Cont. (y) vs. FRM (x) PM_{2.5} ($\mu\text{g}/\text{m}^3$)



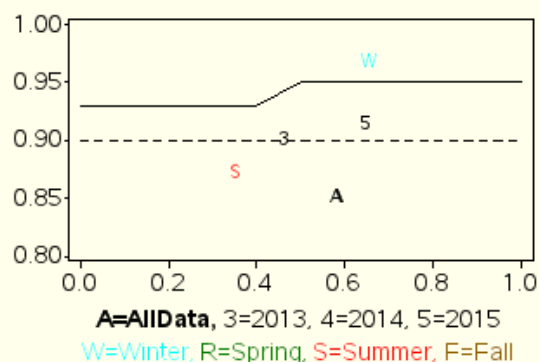
Cont. minus FRM PM_{2.5} ($\mu\text{g}/\text{m}^3$)



Additive (y) vs. Multiply (x) Bias



R (y) vs. FRM CCV (x)



Mean PM_{2.5} ($\mu\text{g}/\text{m}^3$)

Dataset	N	FRM	Cont	Ratio (Cont/FRM)
AllData	948	10.1	15.1	1.49
Winter	241	13.0	16.9	1.30
Spring	252	8.7	14.0	1.61
Summer	241	8.5	14.6	1.72
Fall	214	10.4	15.0	1.44
2013	314	10.2	14.1	1.38
2014	339	10.5	16.3	1.55
2015	295	9.6	14.8	1.55

Appendix A Statistics

Dataset	N	Bias (all observations)	N	Bias (only $\geq 3 \mu\text{g}/\text{m}^3$)
AllData	948	60.1	934	57.7
Winter	241	35.9	233	34.1
Spring	252	66.6	251	65.8
Summer	241	78.0	238	75.5
Fall	214	59.7	212	53.9
2013	314	41.7	309	40.9
2014	339	72.7	337	69.2
2015	295	65.3	288	62.1

Data Source: EPA AQS Data Mart

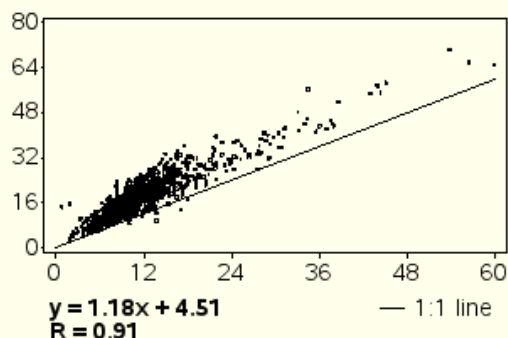
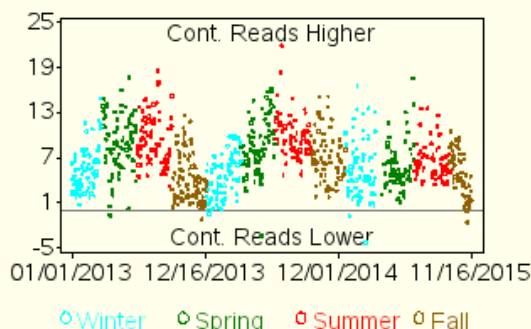
Generated on: May 6, 2016

Central Los Angeles

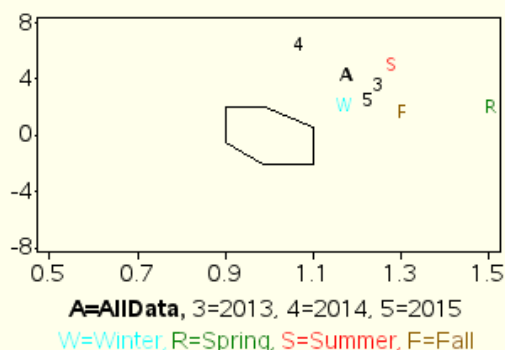
(FRM POC: 1; FEM POC: 9)

PM_{2.5} Continuous Monitor Comparability Assessment Site 06-037-1103: Los Angeles, CA

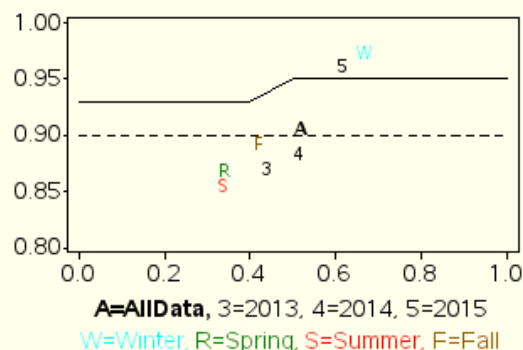
FRM: R & P Model 2025 PM_{2.5} Sequential Air Sampler w/VSCC - Gravimetric (145,120), PM_{2.5} - Local Conditions (88101), POC=1
Cont: Met-one BAM-1020 W/PM_{2.5} SCC - Beta Attenuation (170), Acceptable PM_{2.5} AQI & Speciation Mass (88502), POC=9

Cont. (y) vs. FRM (x) PM_{2.5} (μg/m³)

Cont. minus FRM PM_{2.5} (μg/m³)


Additive (y) vs. Multiplicate (x) Bias



R (y) vs. FRM CCV (x)


Mean PM_{2.5} (μg/m³)

Dataset	N	FRM	Cont	Ratio (Cont/FRM)
AllData	923	12.4	19.1	1.54
Winter	232	15.4	20.4	1.33
Spring	244	11.3	19.2	1.70
Summer	236	11.6	20.1	1.73
Fall	211	11.2	16.4	1.47
2013	336	12.1	18.9	1.56
2014	319	12.6	20.2	1.60
2015	268	12.5	18.1	1.45

Appendix A Statistics

Dataset	N (all observations)	Bias	N (only >= 3 μg/m ³)	Bias
AllData	923	62.2	913	59.4
Winter	232	40.4	225	38.4
Spring	244	71.7	244	71.7
Summer	236	85.5	234	75.9
Fall	211	49.1	210	49.0
2013	336	65.2	332	59.9
2014	319	68.0	318	67.8
2015	268	51.5	263	48.5

Data Source: EPA AQS Data Mart

Generated on: May 6, 2016

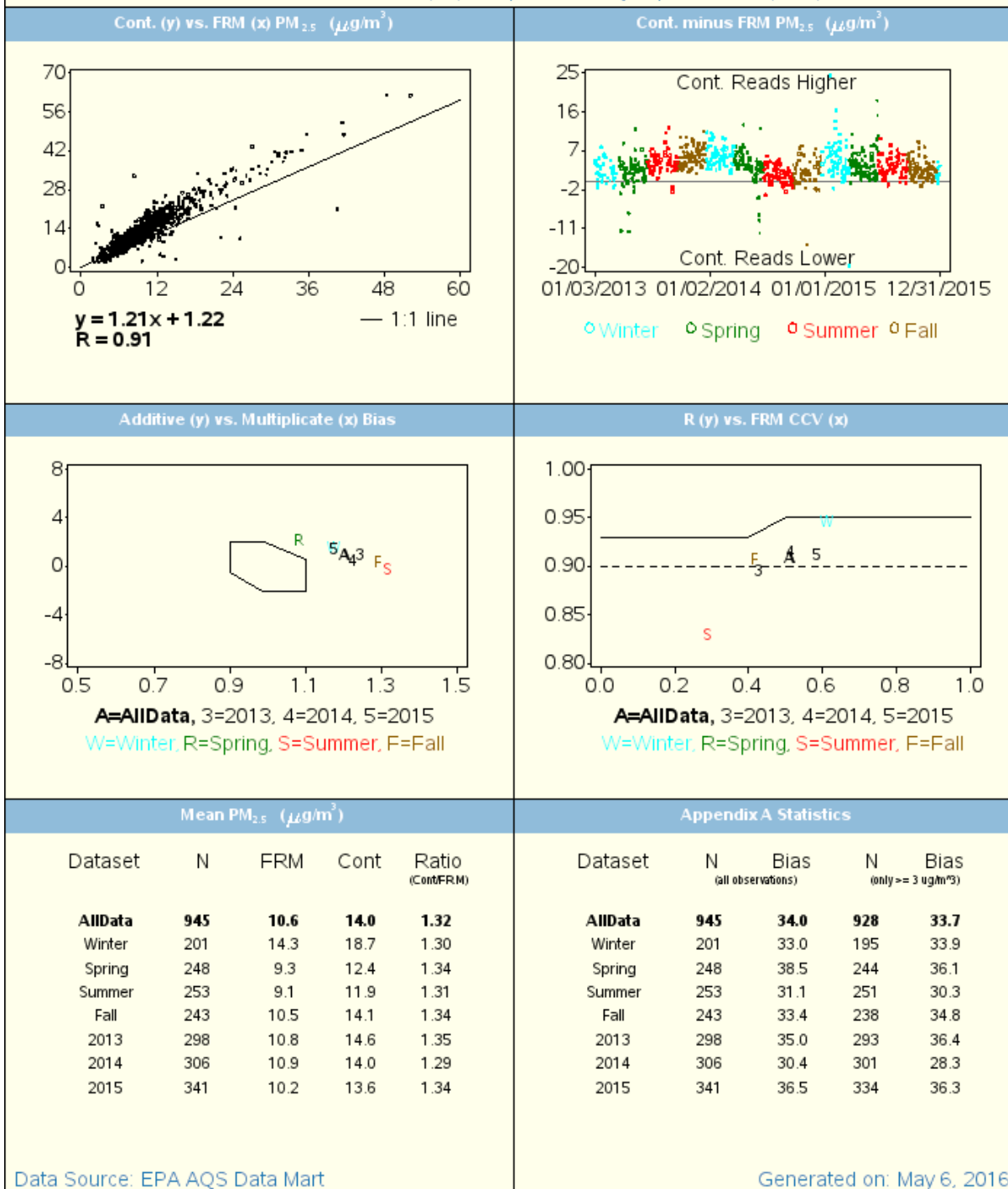
South Long Beach

(FRM POC: 1; FEM POC: 3)

PM_{2.5} Continuous Monitor Comparability Assessment Site 06-037-4004: Long Beach, CA

FRM: Andersen RAAS2.5-300 PM_{2.5} SEQ w/WINS - GRAVIMETRIC (120), PM_{2.5} - Local Conditions (88101), POC=1

Cont: Met-one BAM-1020 W/PM_{2.5} SCC - Beta Attenuation (170), Acceptable PM_{2.5} AQI & Speciation Mass (88502), POC=3

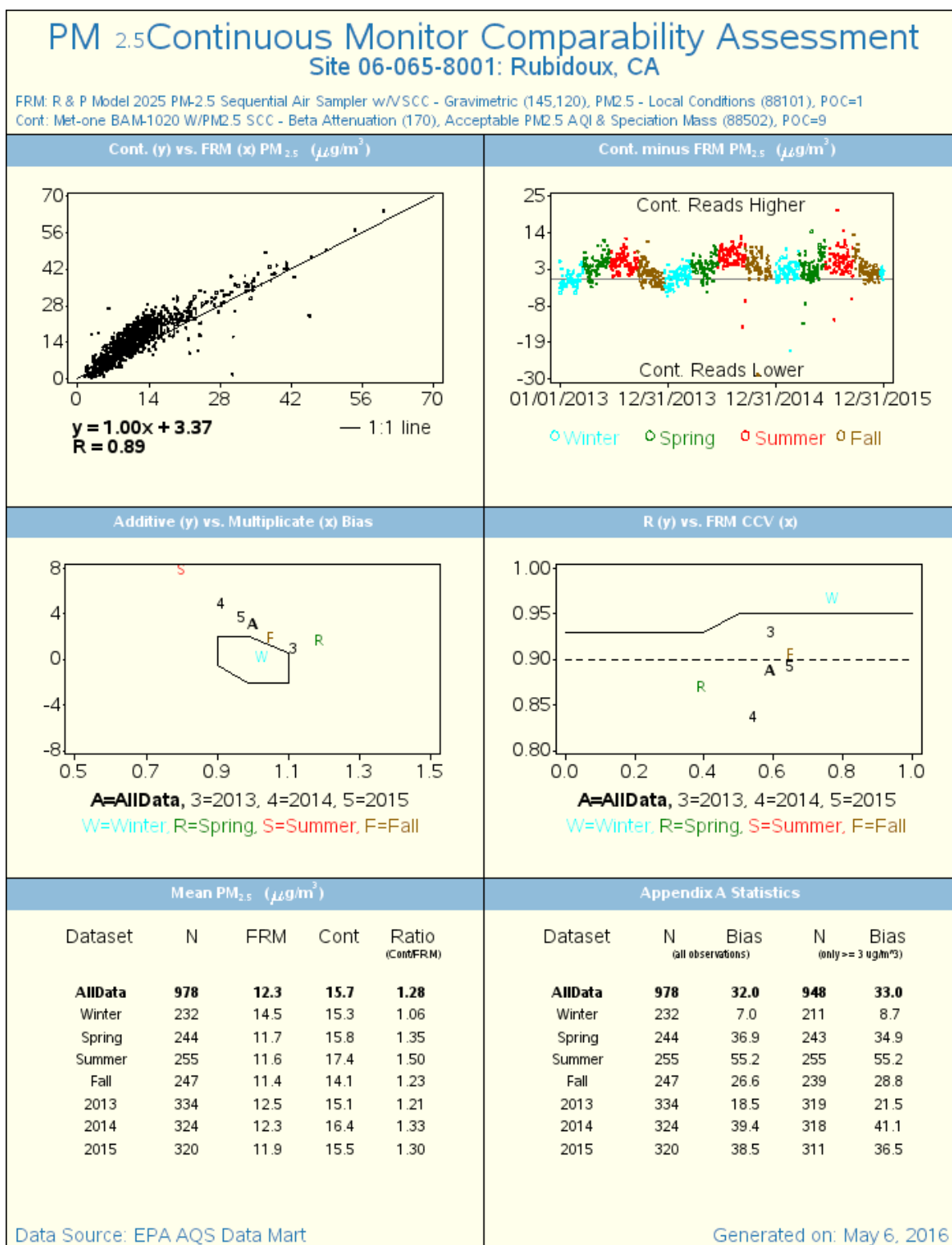


Data Source: EPA AQS Data Mart

Generated on: May 6, 2016

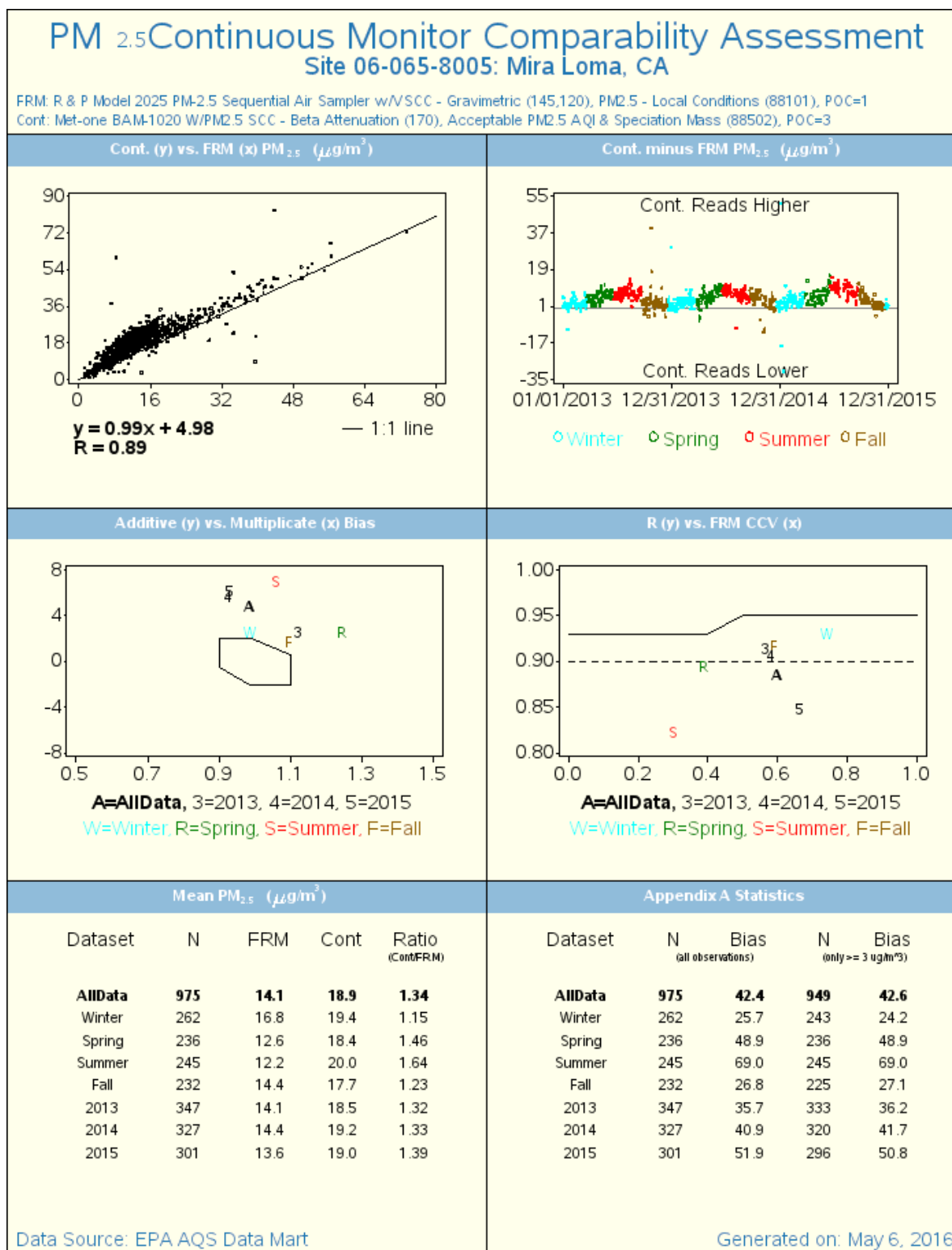
Rubidoux

(FRM POC: 1; FEM POC: 9)



Mira Loma

(FRM POC: 1; FEM POC: 3)



APPENDIX D

NETWORK WAIVER REQUESTS

Burbank

The Palm Avenue Burbank air monitoring site was decommissioned During June, 2014 at the request of the property owner by means of non-extension of lease. Currently SCAQMD is working with LADWP to relocate to a site within one mile of the former site. EPA was informed of this closure via email in prior to its closure.

At the time of closure, the Burbank was the DV location for the Los Angeles CBSA with a 24 hour value of 30.8 ug/m³ and Mira Loma the basin DV at 36.6 ug/m³. This year the DV site for the Los Angeles is the Los Angeles Main site at 32.0 ug/m³ and basin DV Mira Loma at 36.6 ug/m³. SCAQMD is working in consultation with EPA to establish a new site to represent Burbank in FY 2015-2016. It is requested a waiver be granted for suspension of monitoring until a suitable replacement site can be located. This request is per 40 CFR 58.14 (c)(6) which states

A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.

Even with the site closure, SCAQMD exceeds the minimum monitoring requirements for all criteria pollutants and monitoring programs.

North Long Beach

The North Long Beach air monitoring site was decommissioned during September, 2013 at the request of the property owner by means of non-extension of lease. Currently SCAQMD is working with Long Beach Public Health to locate a suitable site within one mile of the former site. EPA was informed of this closure via email prior to closure. In consultation with EPA Compton was designated as a RA-40 NO₂ site. A separate smaller site at the rear of the facility remains open measuring PM_{2.5} FRM particulate only. It is requested a waiver be granted for suspension of monitoring until a suitable replacement site can be located. This request is per 40 CFR 58.14 (c)(6) which states

A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.

Even with the site closure, SCAQMD exceeds the minimum monitoring requirements for all criteria pollutants and monitoring programs. SCAQMD is working in consultation with EPA to establish a new site to represent Burbank in FY 2015-2016. It is requested a waiver be granted for suspension of monitoring and formal designation of Compton as a RA-40 NO₂ site until a suitable replacement site can be located.

Ontario

The Ontario (Fire Station) air monitoring site was decommissioned during June, 2014 at the request of the property owner by means of non-extension of lease. Currently SCAQMD is working with San Bernardino County Public Health to consolidate measurements with nearby sites. EPA was informed of this closure via email prior to its closure. At the time of closure, Ontario was a collocated site for PM10. In order to meet the minimum collocation requirements a PM10 was relocated to the Mira Loma (Van Buren) site. It is requested a waiver be granted for suspension of monitoring until a suitable replacement site can be located under 40 CFR 58.14 (c)(6) which states

A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.

Even with the site closure, SCAQMD exceeds the minimum monitoring requirements for all criteria pollutants and monitoring programs. It is requested a waiver be granted to discontinue monitoring at Ontario.

Riverside Magnolia

The Riverside Magnolia air monitoring site was decommissioned during March 2015 at the end of the lease due to safety issues. Specifically the monitoring site was assessed and determined the roof was inadequate to safely maintain the weight of the air monitoring equipment and platform. Additionally, the interior ceiling contained asbestos and side walls were in a state of deterioration. Currently SCAQMD is assessing relocation of the site and considering underrepresented areas identified in the 5 year network assessment. EPA was informed of this closure via email prior to its closure. It is requested a waiver be granted for suspension of monitoring until a suitable replacement site can be located under 40 CFR 58.14 (c)(6) which states

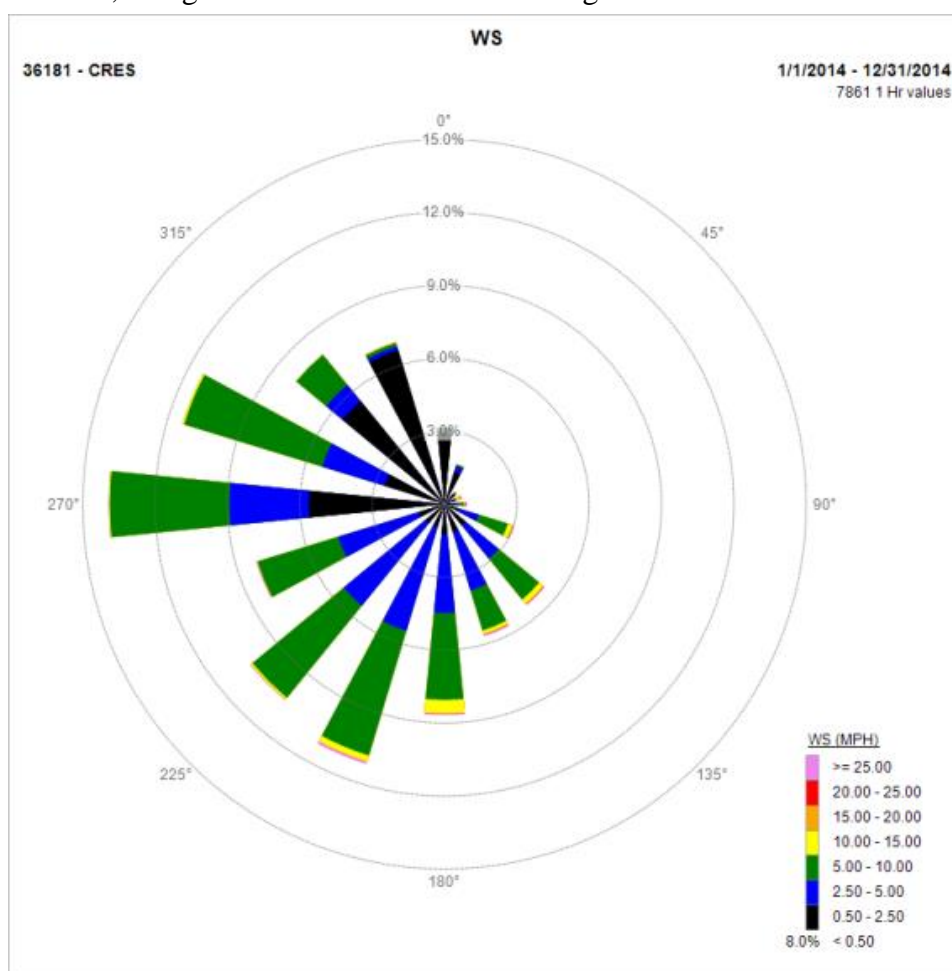
A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.

Due to safety issues at the site, along with the owner's inability to resolve the issues, it is requested a waiver be granted to discontinue monitoring until a suitable replacement site is identified. Even with the site closure, SCAQMD exceeds the minimum monitoring requirements for all criteria pollutants and monitoring programs.

Crestline

The Crestline air monitoring site is located on the grounds of the Lake Gregory, San Bernardino County Regional Park within the San Bernardino National Forest. The site began operation in October, 1973 and has at times been a design value site for ozone. Since the time of its

inception, trees adjacent to the facility have grown to a height greater than the inlet probe. Because these trees are parallel to the site a majority of the time they are not considered an obstruction per 40 CFR 58 Appendix E. Readings remain unaffected since the nearest tree is at 10 meters from the inlet probe and the predominant wind direction is from the west. A wind rose showing direction for 2014 is shown below. 40 CFR 58 Appendix E 10.1.1 states a waiver can be granted if, “The site can be demonstrated to be as representative of the monitoring area as it would be if the siting criteria were being met. Section 10.1.2 also states a waiver can be granted if, “The monitor or probe cannot reasonably be located so as to meet the siting criteria because of physical constraints (e.g., inability to locate the required type of site the necessary distance from roadways or obstructions).” Furthermore, the current site maintains a historical trend dating back to October, 1973 which adds support to the waiver request. It is requested a waiver be granted for siting at Crestline based on predominant wind direction, probe being in the optimal location for the site, along with the historical trend dating back to October 1973.



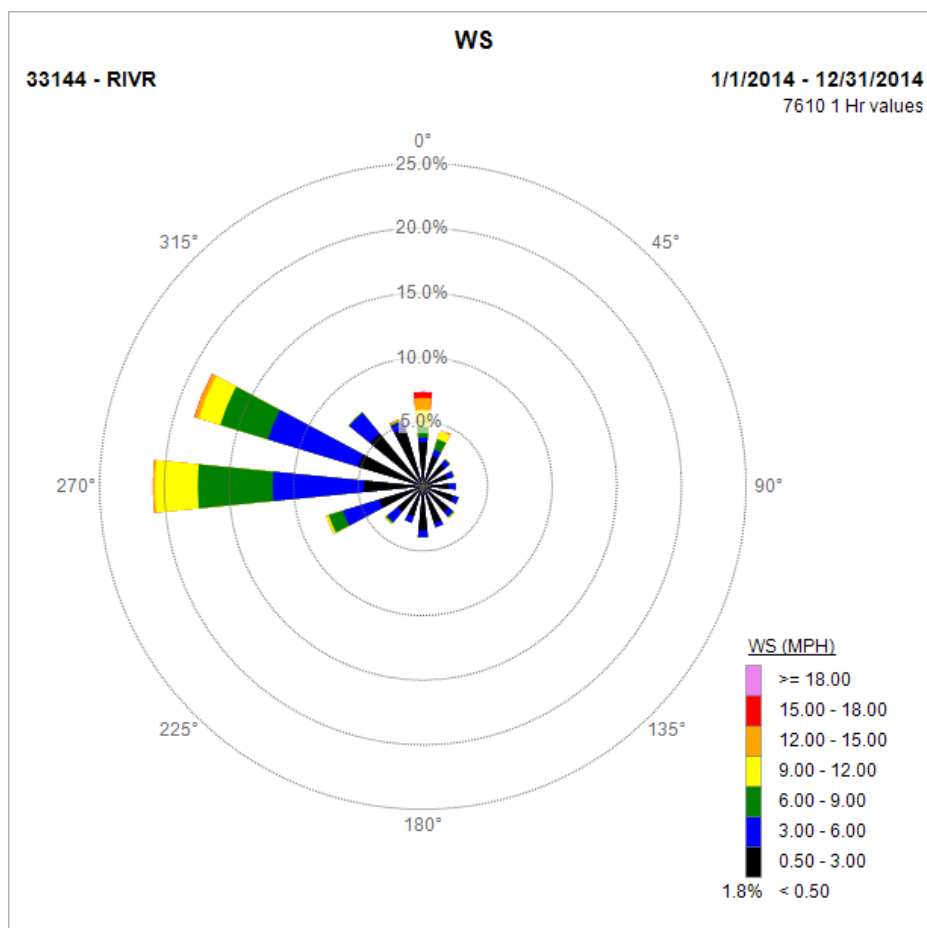
Crestline Wind Data 2014



Crestline Satellite View

Rubidoux

The Rubidoux air monitoring site is located on property owned by Southern California Edison. The site began operation in September, 1972. Since that time trees north east of the particulate samplers have grown to a height exceeding siting criteria; however measurements remain unaffected since the predominant wind direction is parallel to trees. Contract revisions with Southern California Edison are expected to be completed during December, 2016 which will allow for extra space to move the particulate samplers further from trees to meet EPA siting criteria. A waiver is requested based on 40 CFR 58 Appendix E 10.1.1 which states a waiver can be granted if, “The site can be demonstrated to be as representative of the monitoring area as it would be if the siting criteria were being met. Section 10.1.2 also states a waiver can be granted if, “The monitor or probe cannot reasonably be located so as to meet the siting criteria because of physical constraints (e.g., inability to locate the required type of site the necessary distance from roadways or obstructions).” Furthermore, the current site maintains a historical trend dating back to September, 1972 which adds support to the waiver request. It is requested a waiver be granted for siting at Rubidoux to continue monitoring until contract modifications are completed and monitors can be moved to meet EPA siting criteria.



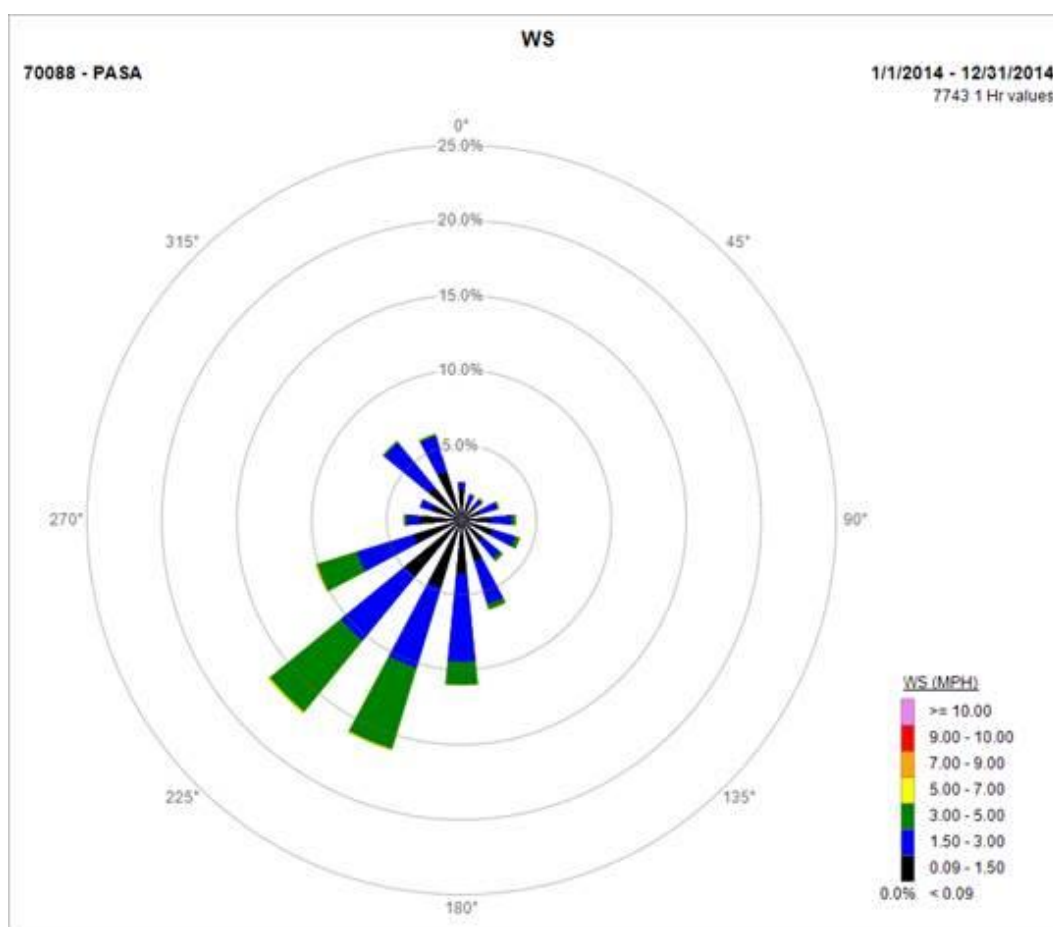
Rubidoux Wind Data 2014



Rubidoux Satellite View

Pasadena

The Pasadena air monitoring site is located on property owned by Caltech Pasadena. The site began operation in April, 1982. Since that time trees east and west of the particulate samplers have grown to a height exceeding siting criteria and while they can be considered an obstruction, it is requested a waiver be granted to continue morning based on population exposure. Longer term, the site was examined in the 5 year network assessment for consolidation with nearby sites. Decisions regarding site consolidation will be made in consultation with EPA Region IX representatives. Section 10.1.2 states a waiver can be granted if, “The monitor or probe cannot reasonably be located so as to meet the siting criteria because of physical constraints (e.g., inability to locate the required type of site the necessary distance from roadways or obstructions).” Furthermore, the current site maintains a historical trend dating back to April, 1982 which adds support to the waiver request. It is requested a waiver be granted for siting at Pasadena to continue monitoring until a suitable site, or location to consolidate can be secured.



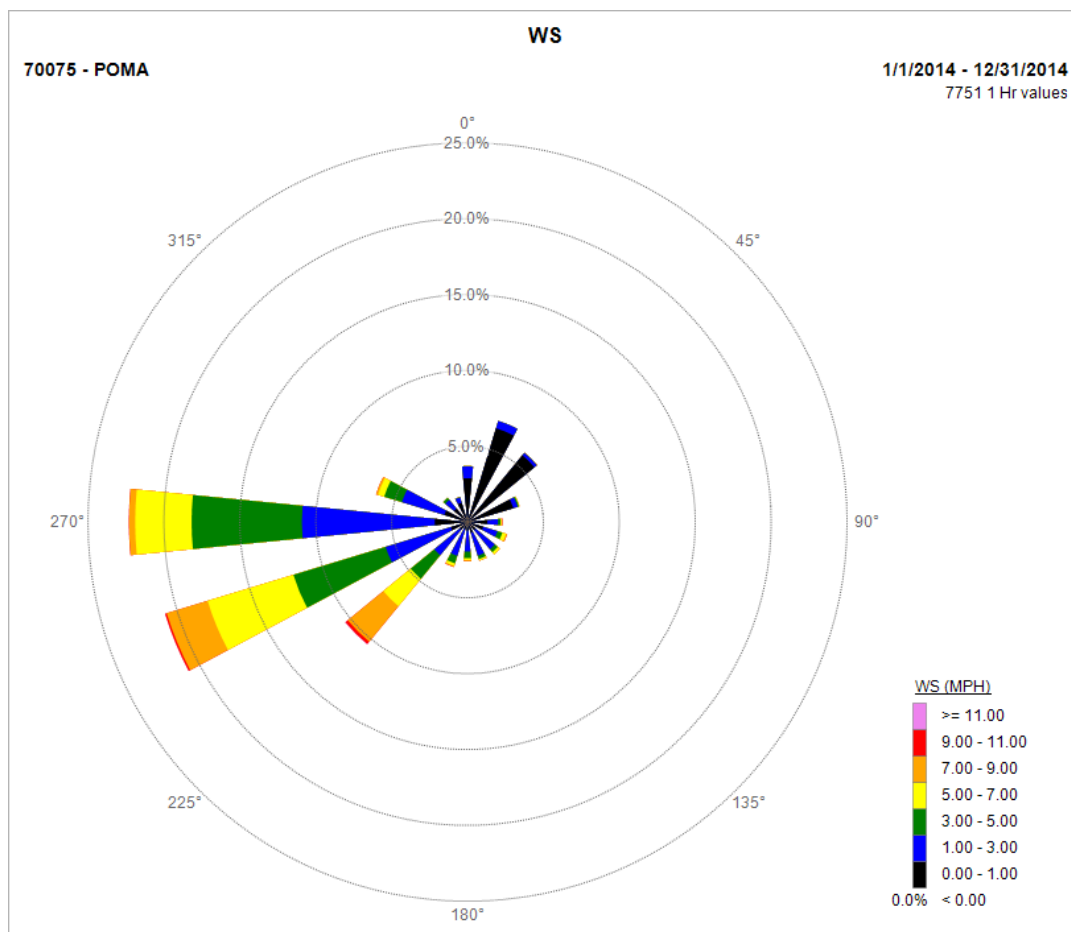
Pasadena Wind Data 2014



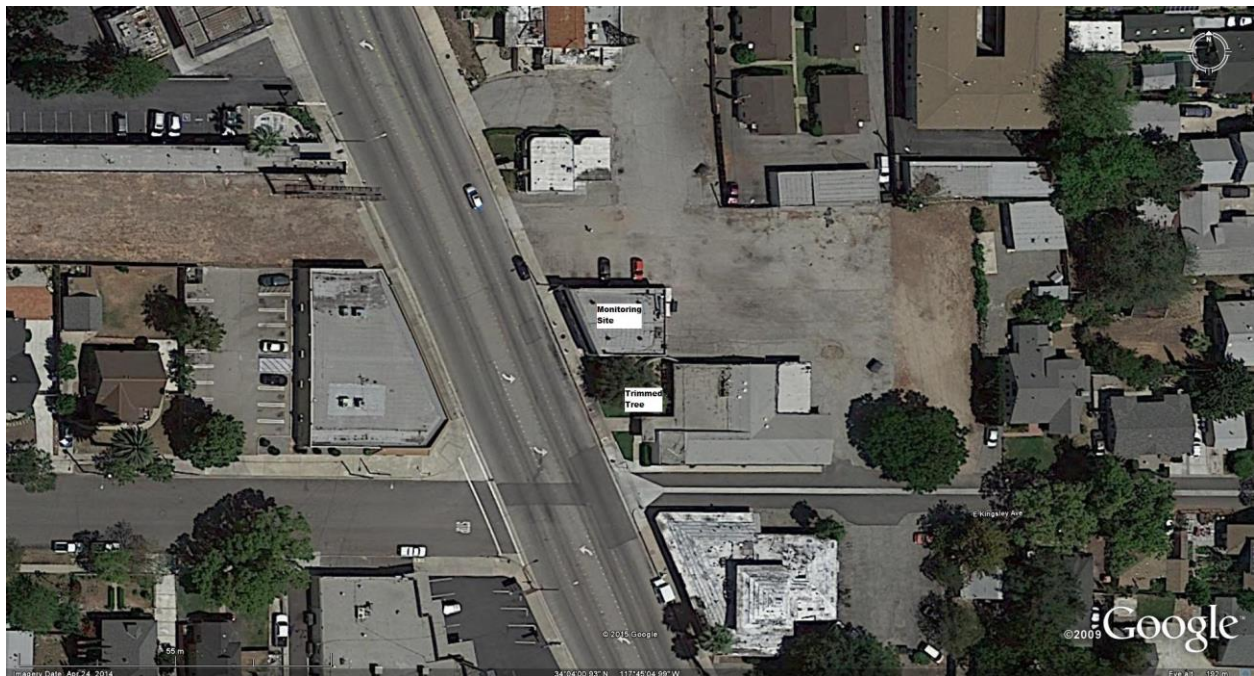
Pasadena Satellite View

Pomona

The Pomona air monitoring site has been in operation since June, 1965. The site was originally a microscale site for carbon monoxide. Since the time of inception it was noted trees south of the site grew to be an obstruction, however they were trimmed during December, 2014 to a height below the inlet. It is requested a waiver be granted for Pomona based on site maintenance completed and data continuity until the 5 year network assessment is complete and further discussions can take place to consolidate or close the site.



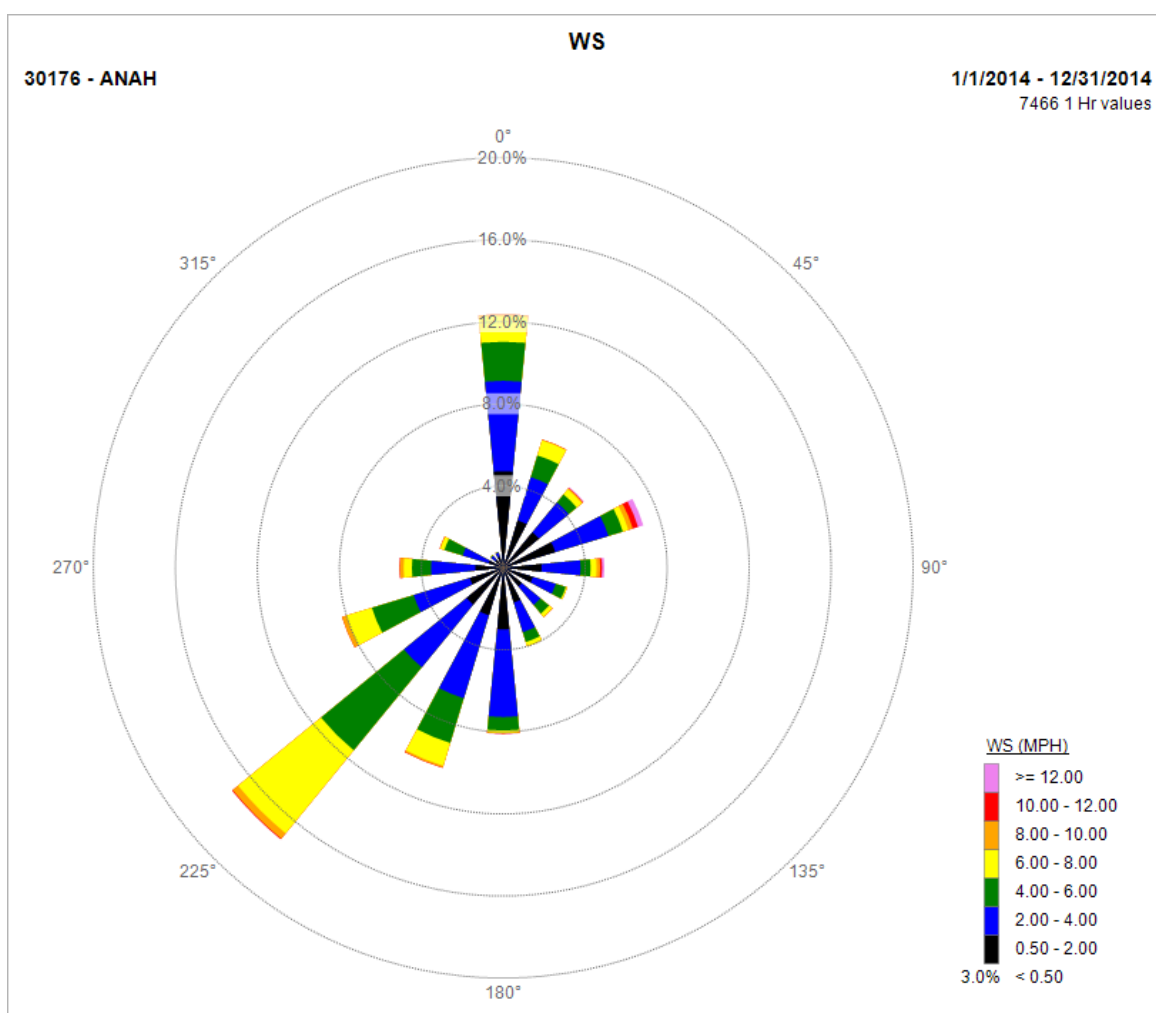
Pomona Wind Data 2014



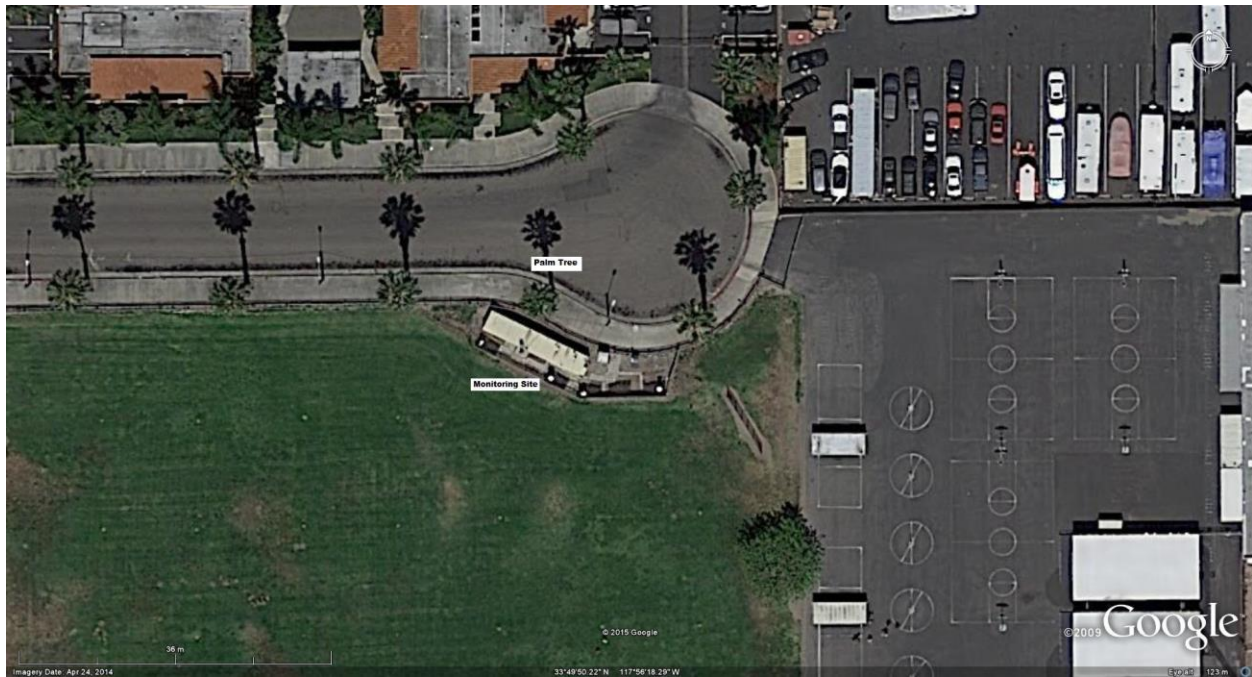
Pomona Satellite View

Anaheim

The Anaheim air monitoring site is located on Anaheim City School District property. The site began operation in August, 2001. The site was originally anticipated as a temporary location however since then it has become permanent. Because of this there are siting issues including palm trees and proximity to the nearest traffic lane of the residential street (at 8m north from the inlet probes). Measurements remain unaffected due to predominant wind. The majority of the time the wind direction is from the south, the palm trees are minimal obstruction, and traffic is residential. A waiver is requested based on 40 CFR 58 Appendix E 10.1.1 which states a waiver can be granted if, “The site can be demonstrated to be as representative of the monitoring area as it would be if the siting criteria were being met.” Furthermore, the current site maintains a historical trend dating back to August, 2001 which adds support to the waiver request. Longer term the site is scheduled to be renovated placing the inlet probes at greater than 10m from the traffic lanes and trees.



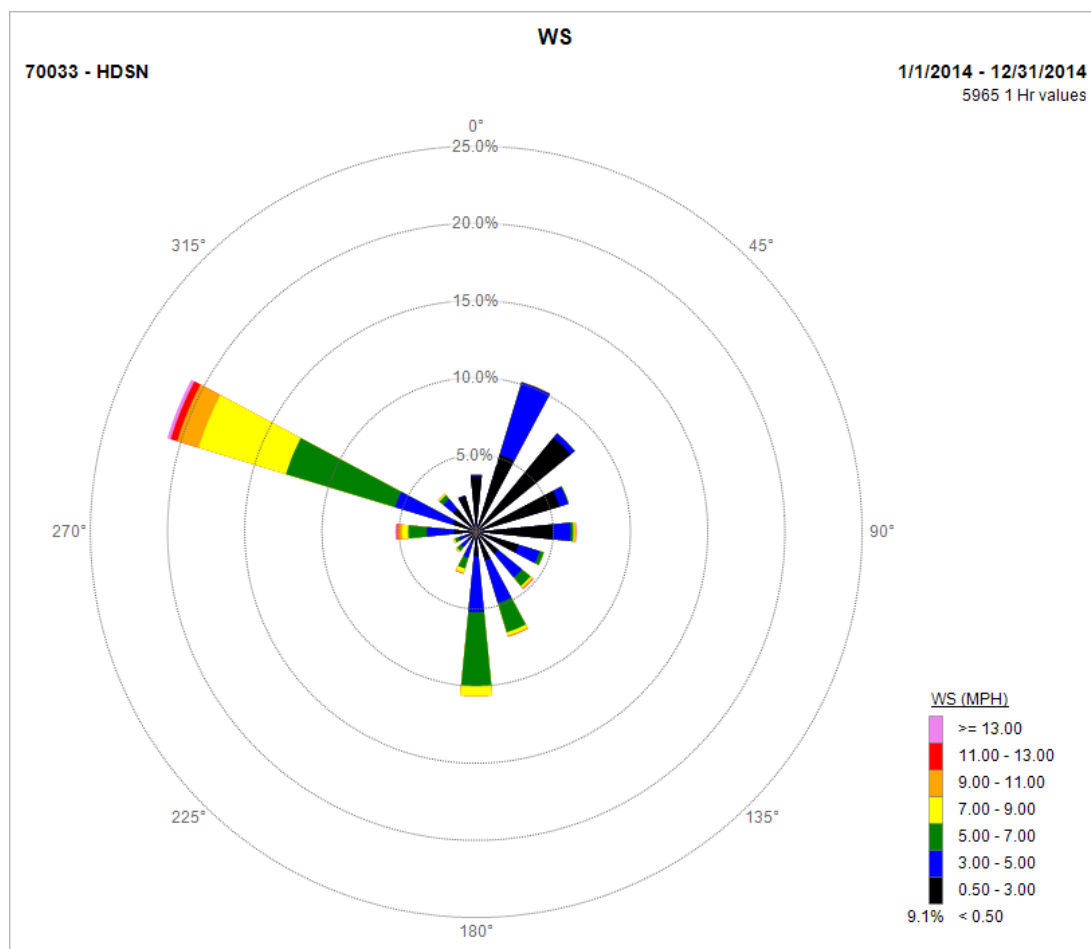
Anaheim Wind Data 2014



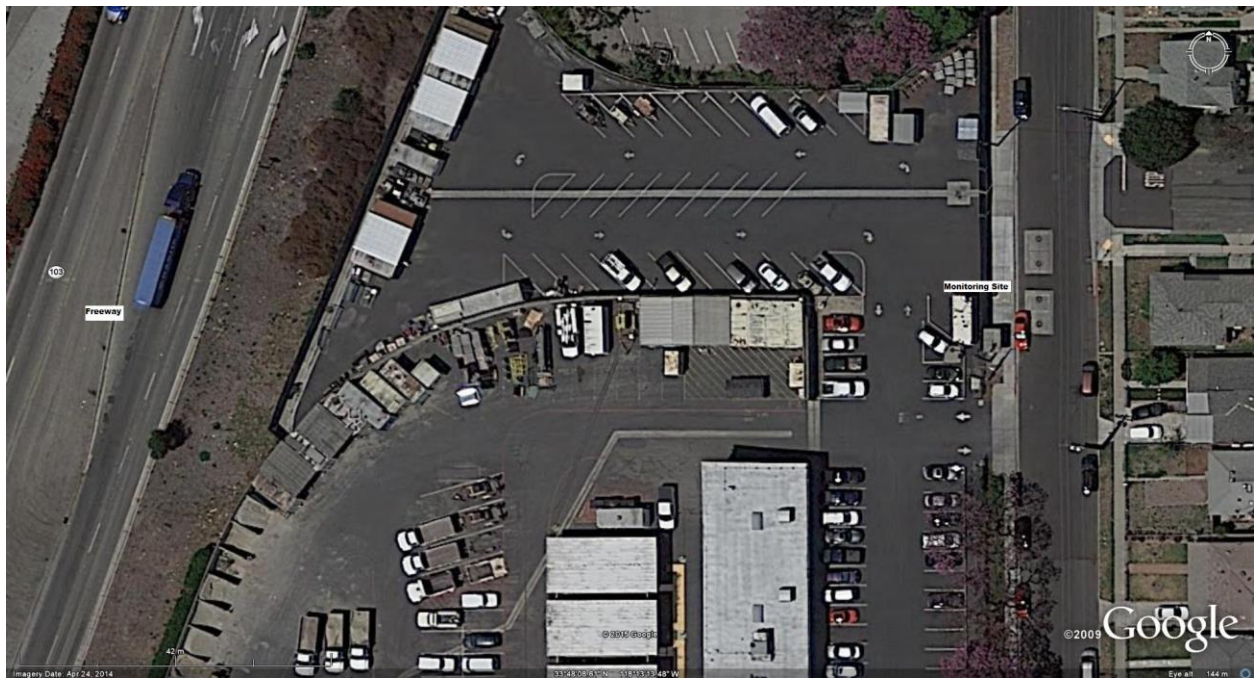
Anaheim Satellite View

Hudson

The Hudson air monitoring site is located on Long Beach Unified School District property. The site began operation as part of the MATES IV project. The site was originally anticipated as a temporary location however since then it has become permanent, monitoring potential emissions from the nearby the ports of Los Angeles, Long Beach and Terminal Island Freeway. Because of this there are siting issues including proximity to the nearest traffic lane. Measurements remain unaffected since the predominant wind direction is from the south west and the roadway is to the east. A waiver is requested based on 40 CFR 58 Appendix E 10.1.1 which states a waiver can be granted if, “The site can be demonstrated to be as representative of the monitoring area as it would be if the siting criteria were being met.” Longer term the site is being examined closely in the 5 year network assessment for consolidation with nearby sites.



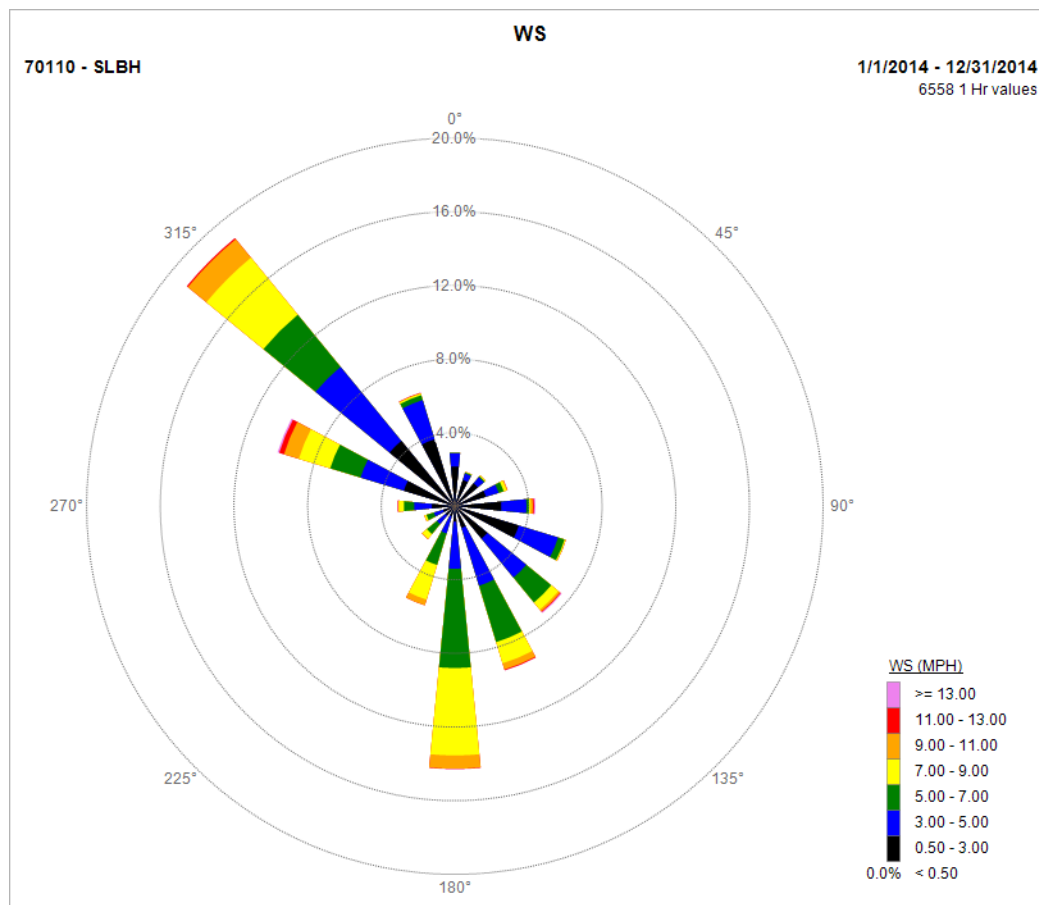
Hudson Wind Data 2014



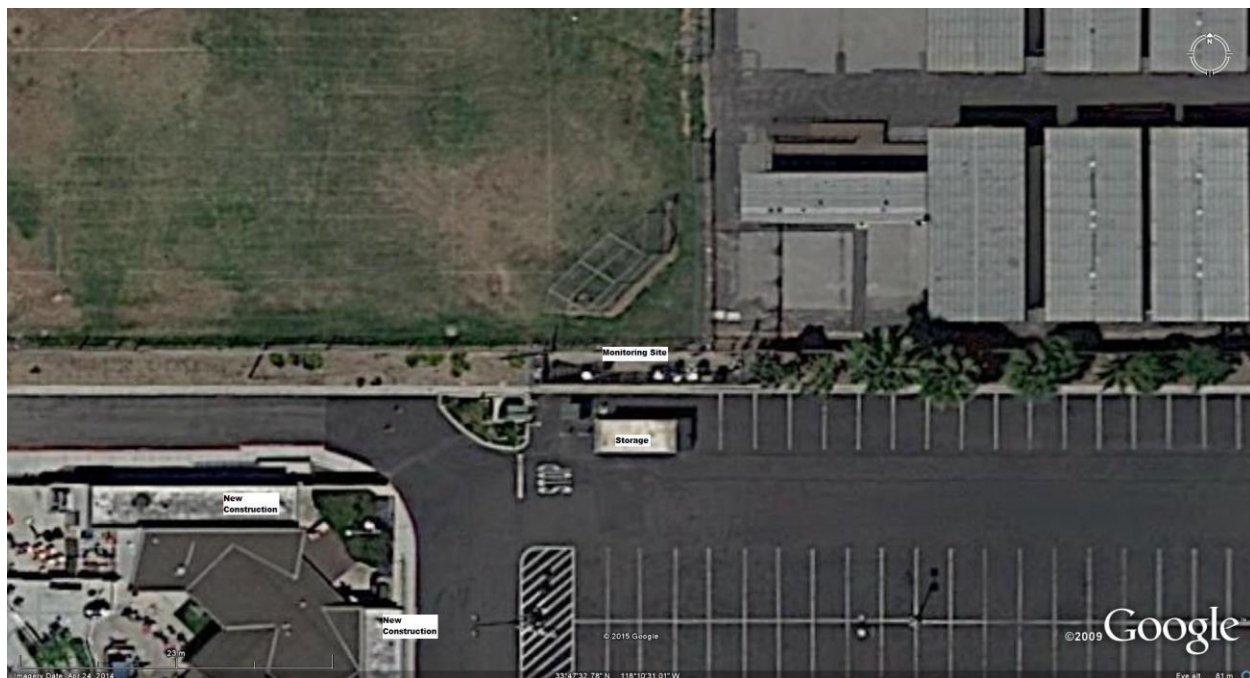
Hudson Satellite View

South Long Beach

The South Long Beach air monitoring site is located on the Long Beach City College campus. The site was established to focus on particulate emissions from the Ports of Long Beach and Los Angeles. Since the inception of the site, the college has expanded, storing temporary containers nearby, constructing new buildings and expanding parking. Because of this there are potential siting issues. A waiver is requested based on 40 CFR 58 Appendix E 10.1.1 which states a waiver can be granted if, “The site can be demonstrated to be as representative of the monitoring area as it would be if the siting criteria were being met.” Longer term the site is being examined for consolidation with nearby sites.



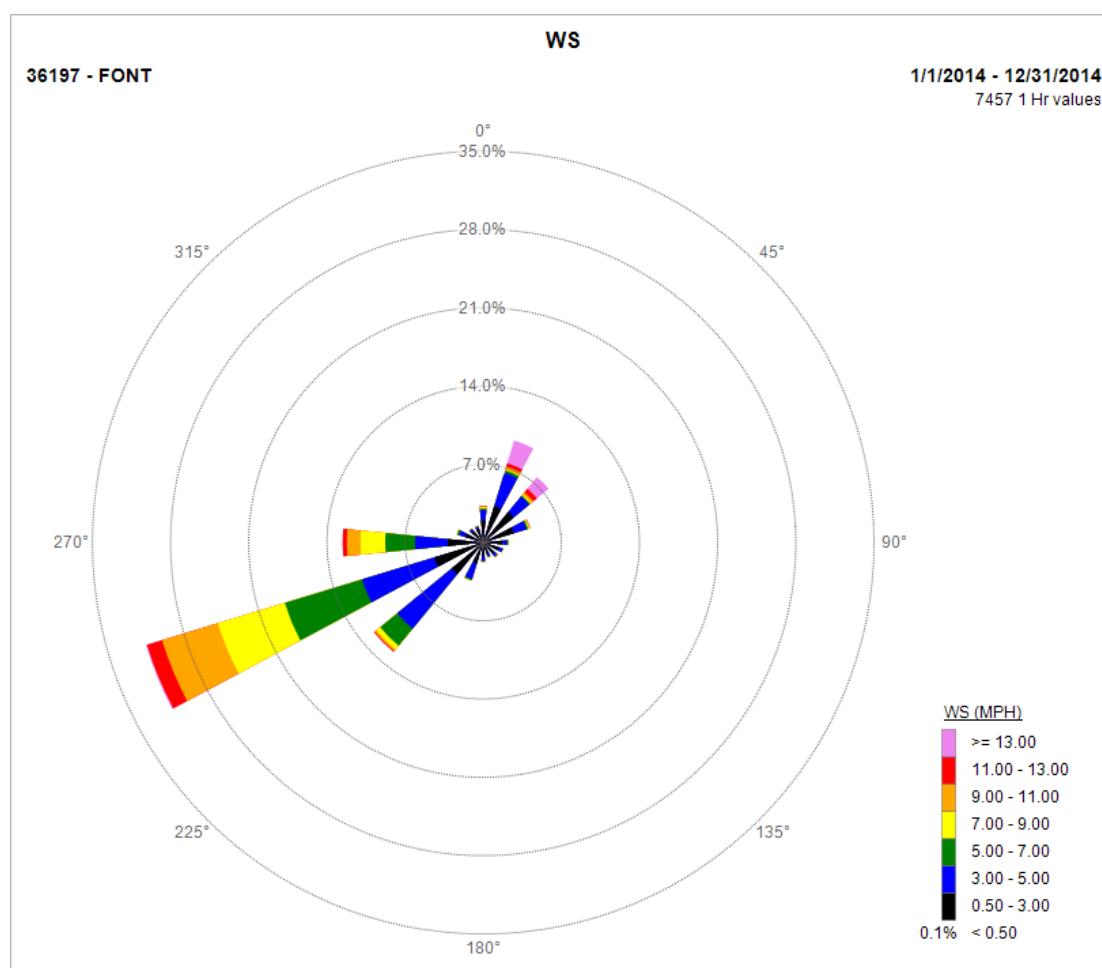
South Long Beach Wind Data 2014



South Long Beach Satellite View

Fontana

The Fontana air monitoring site has been in operation since August, 1981. Since the time of inception it was noted a wall downwind of the site exceeded the height of the inlet probes as did a nearby building. The adjacent wall and building are greater than the 2m minimum distance requirement and meet the, “twice the height that the obstacle protrudes above the probe, inlet, or monitoring path” requirement in 40 CFR 58 Appendix E. Measurements remain unaffected since the predominant wind direction is from the south west. A waiver is requested based on 40 CFR 58 Appendix E 10.1.1 which states a waiver can be granted if, “The site can be demonstrated to be as representative of the monitoring area as it would be if the siting criteria were being met.” Recently, the San Bernardino County Fire Department has relocated from the facility and City of Fontana has taken responsibility for the site. Future plans are uncertain at the site and the site could potentially be sold to a private owner.



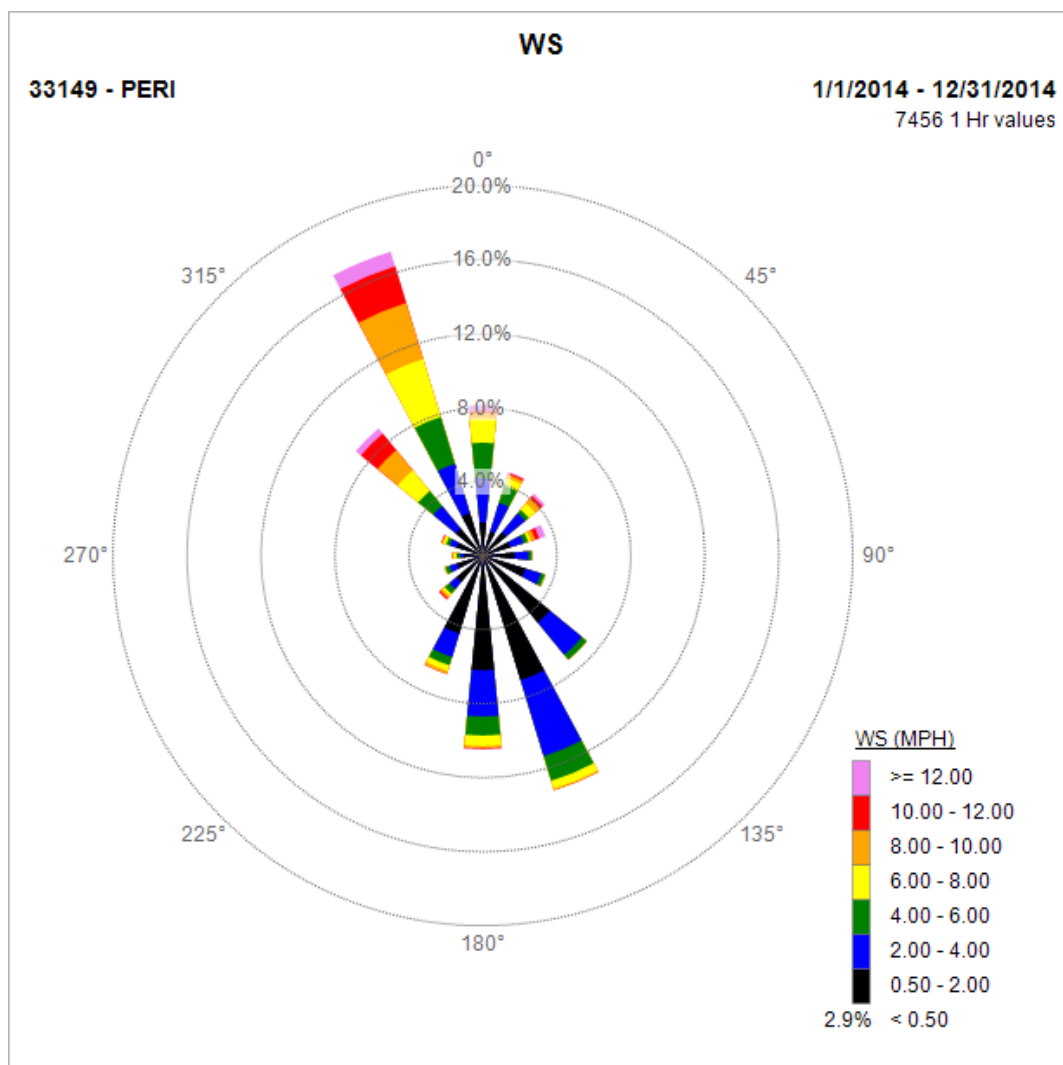
Fontana Wind Data 2014



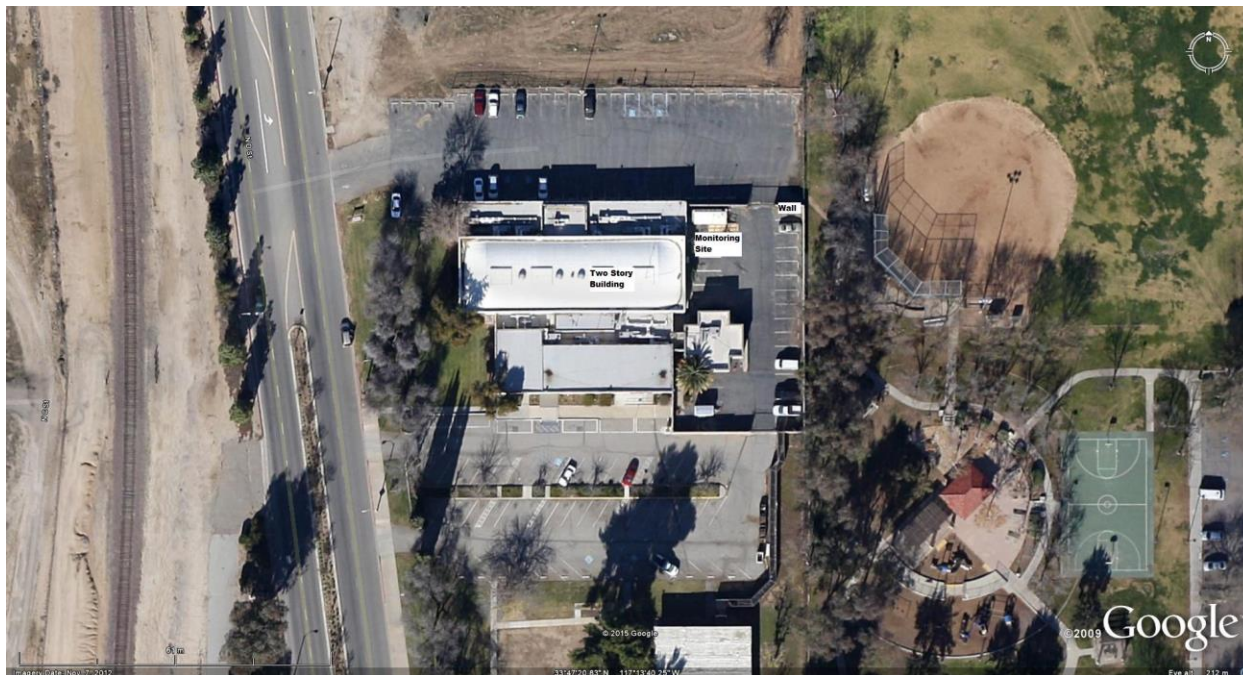
Fontana Satellite View

Perris

The Perris air monitoring site has been in operation since August, 1981. Since the time of inception it was noted the nearby building and new fences have become an obstruction. While the nearby fences and building are an obstruction, A waiver is requested based on 40 CFR 58 Appendix E 10.1.2 which states a waiver can be granted if, “The monitor or probe cannot reasonably be located so as to meet the siting criteria because of physical constraints (e.g., inability to locate the required type of site the necessary distance from roadways or obstructions).” Furthermore, the current site maintains a historical trend dating back to August, 1981 which adds support to the waiver request. It is requested a waiver be granted for siting at Perris to continue monitoring until a new site is located to represent the Perris community which will be selected in consultation with EPA Region IX representatives.



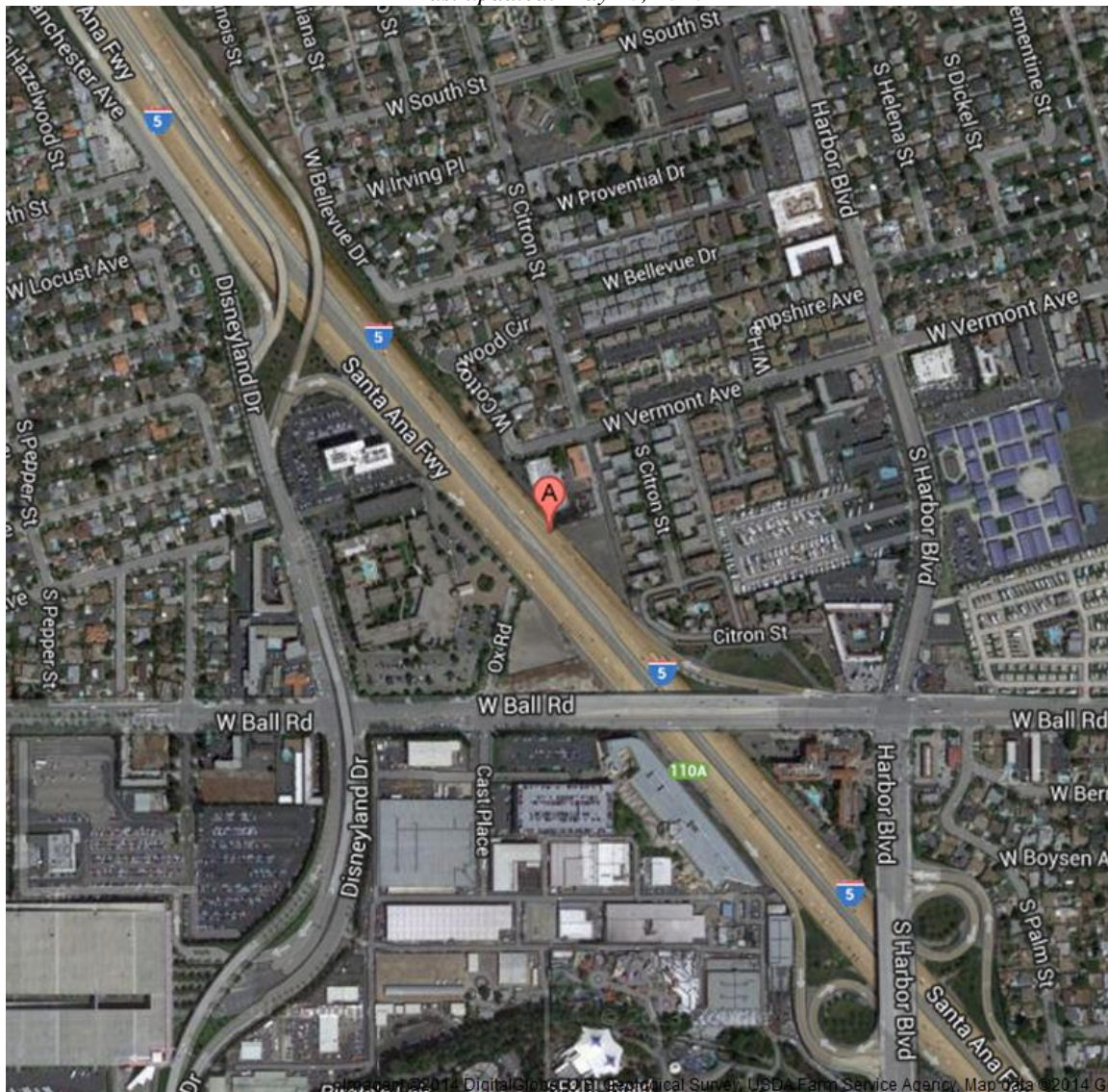
Perris Wind Data 2014



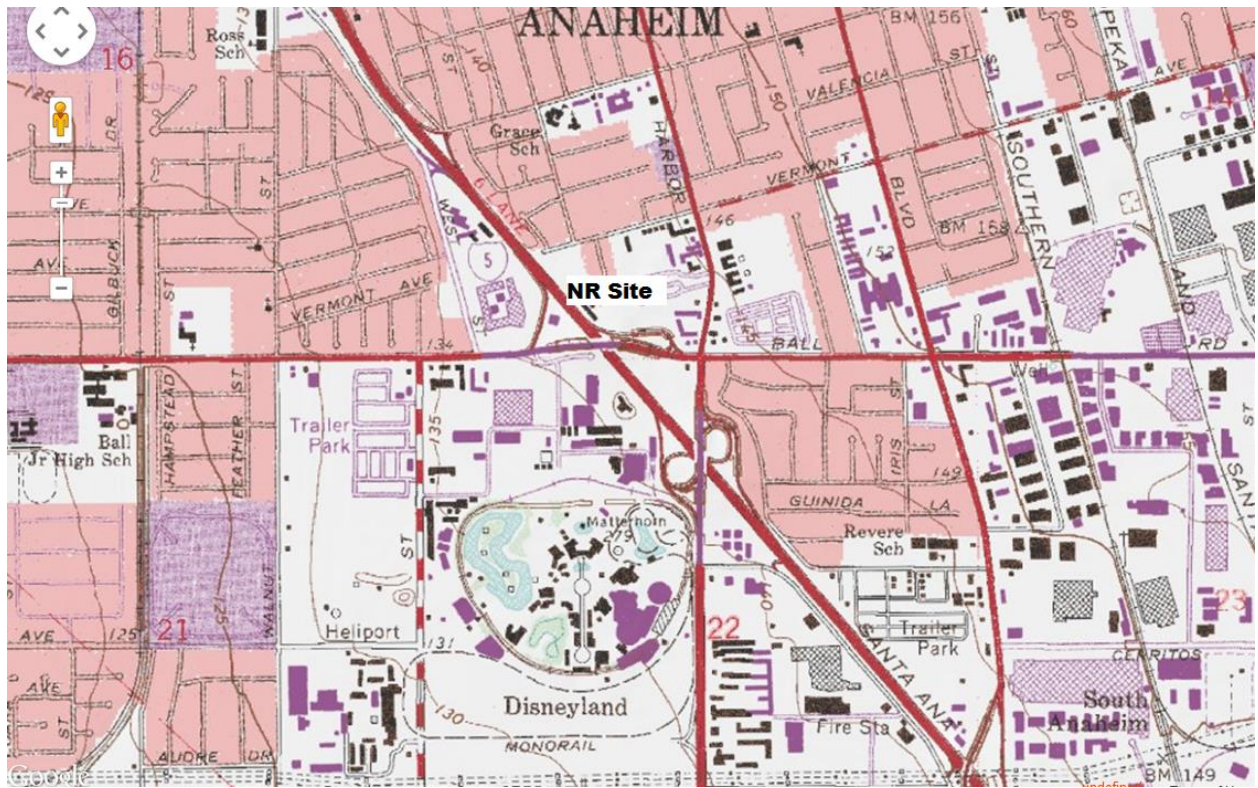
Perris Satellite View

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

Last updated: May 10, 2016



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		
Parameter code	42602	42101		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS\Near Road	SLAMS\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)	1.9	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)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between colocated 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)	05/27/2015	05/27/2015		
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.

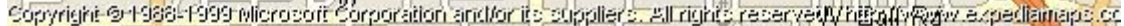


Looking at the probe from the South.

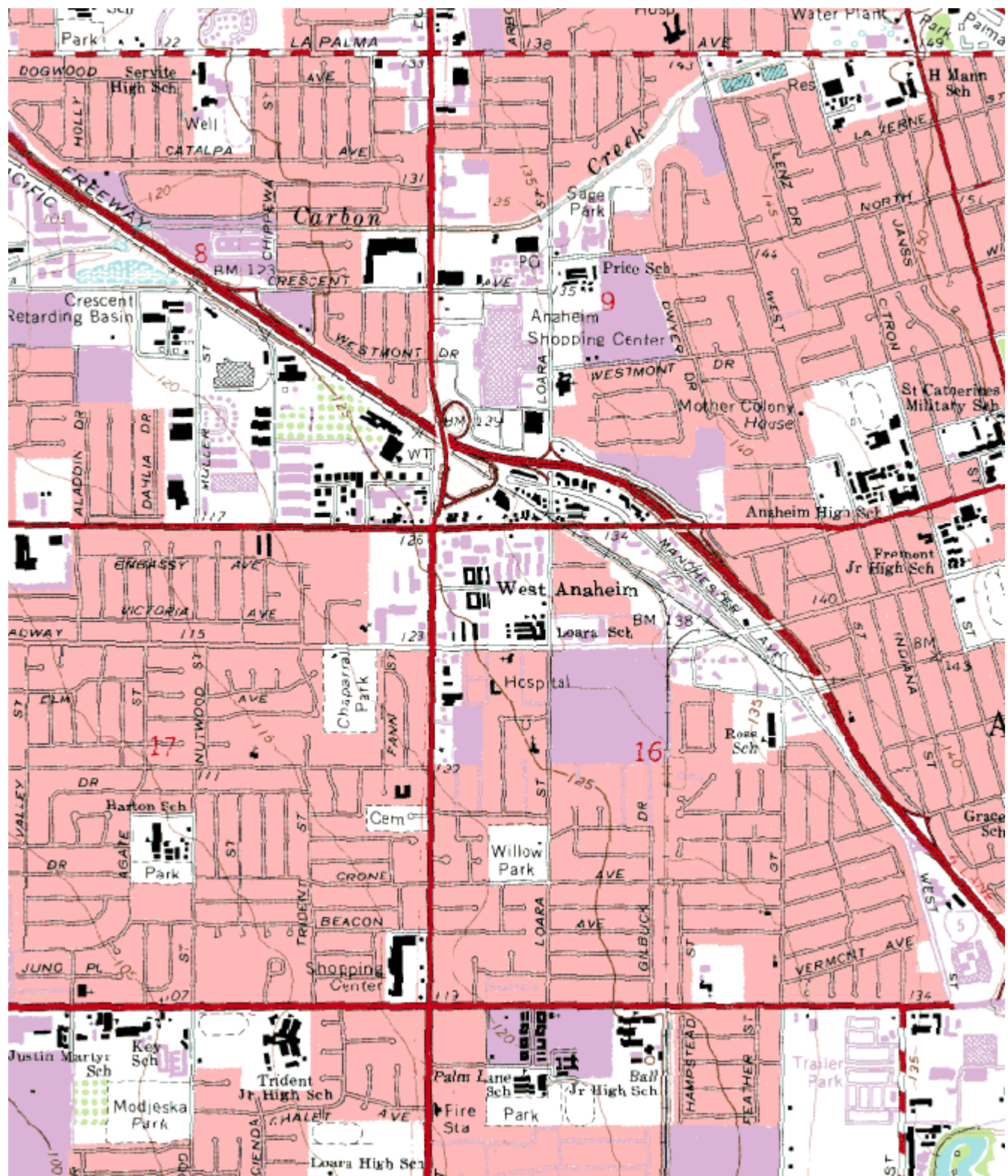
Unavailable due to freeway

Looking at the probe from the West.

Last updated: May 10, 2016



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
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
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	2.5
Distance from supporting structure (meters)	1.9	1.9	1.9	1.5
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)	05/22/2015	05/22/2015	05/22/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	6/4/2015, 11/19/2015

Pollutant, POC	Continuous PM10, 3	Continuous PM2.5, 3	Speciated PM2.5, 11	24 Hour PM2.5, 1
Parameter code	81102	88101	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

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	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)	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)	06/27/2015, 12/10/2015	06/27/2015, 12/10/2015	06/27/2015, 12/10/2015	06/04/2015, 11/19/2015

**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.

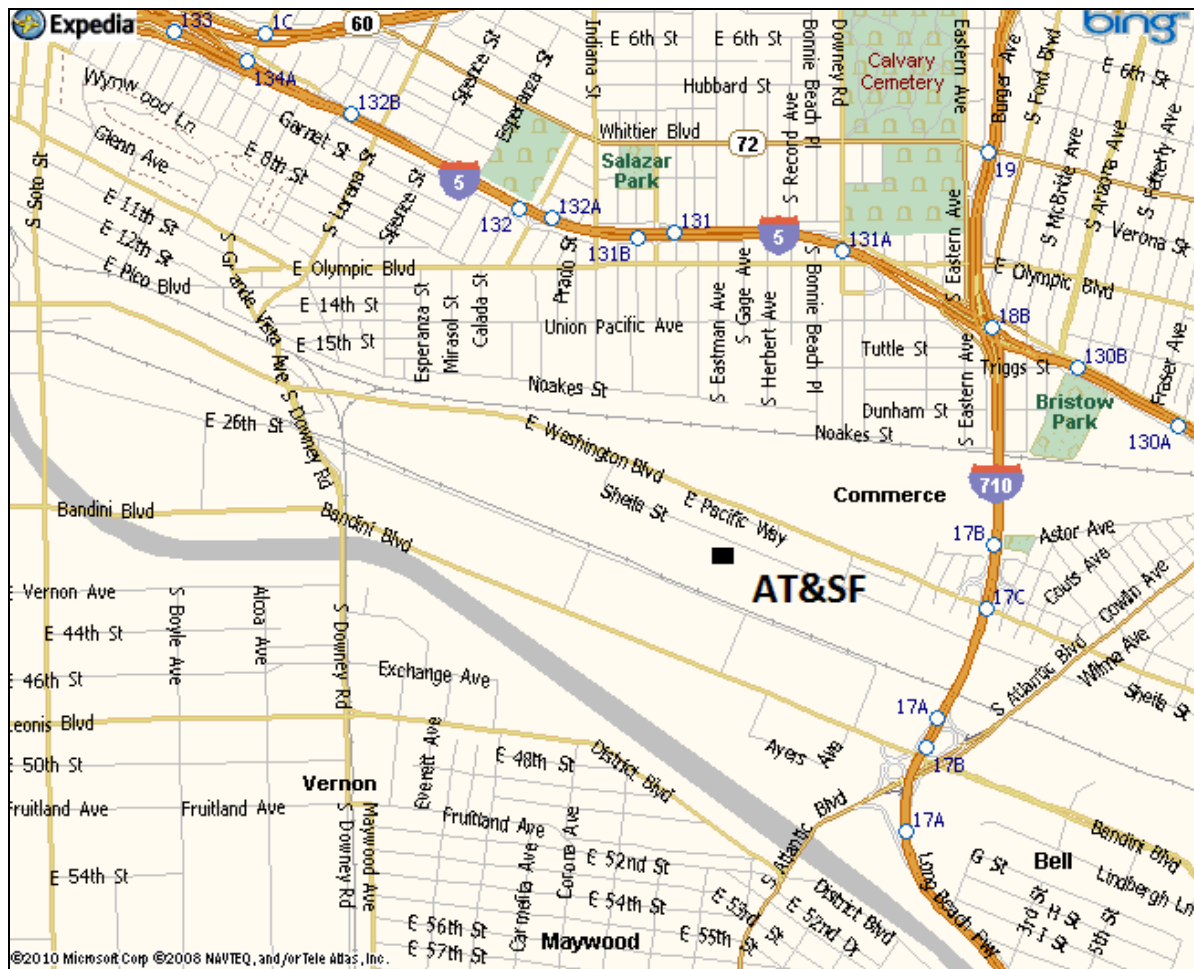


Looking at the probe from the West.

Quality Assurance

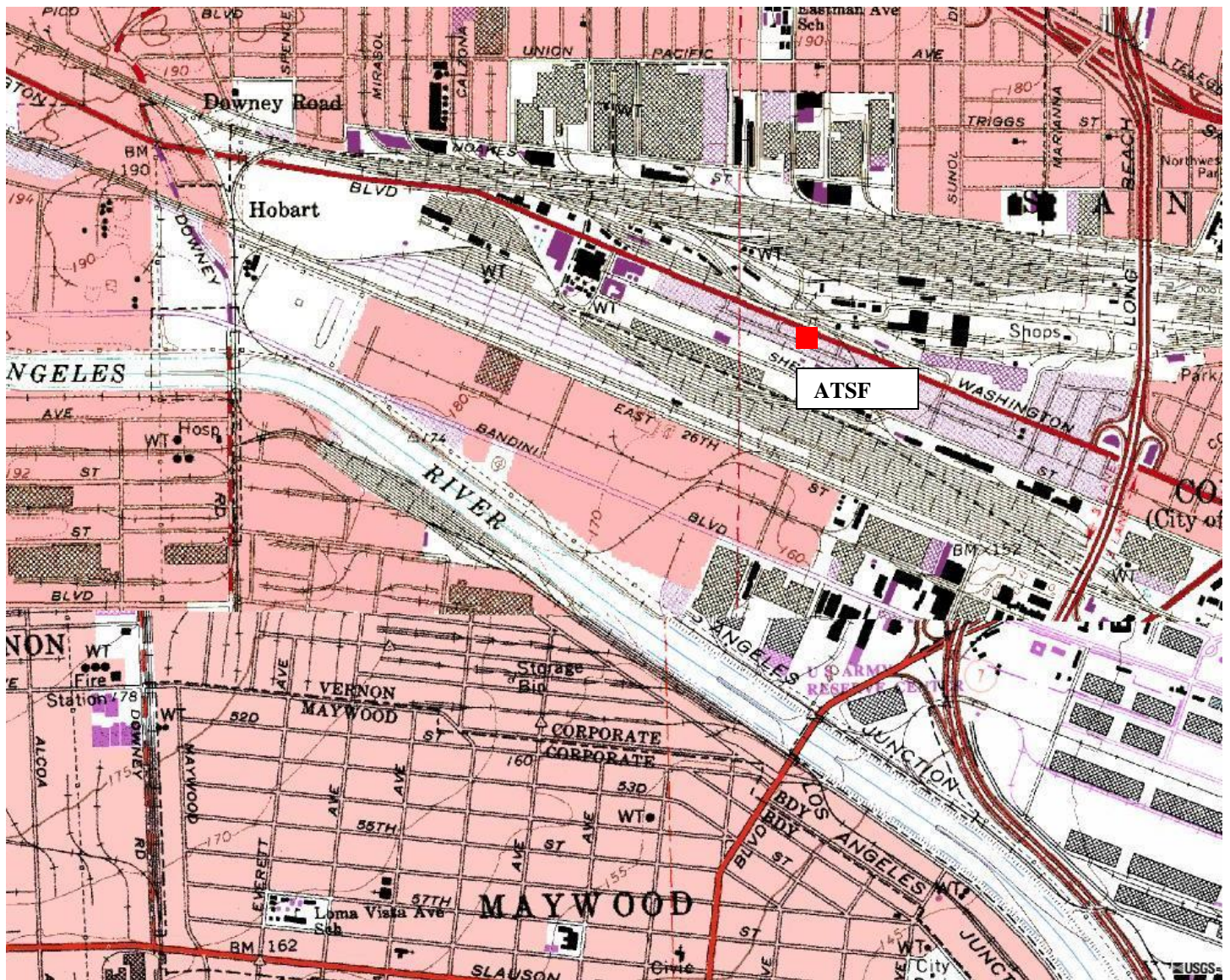
Site Survey Report for AT&SF (Exide)

Last updated May 10, 2016



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			
Parameter code	14129			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Source Oriented			
Monitor (type)	SLAMS			
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)	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 colocated 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)	06/3/2015; 11/25/2015			

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



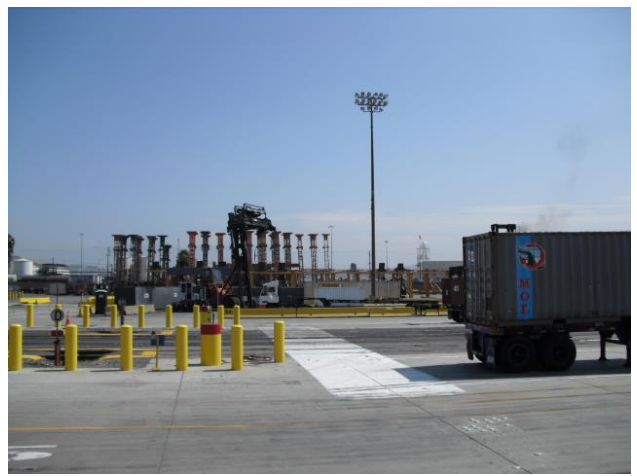
Looking at the probe to the West.



Looking from the probe to the East.



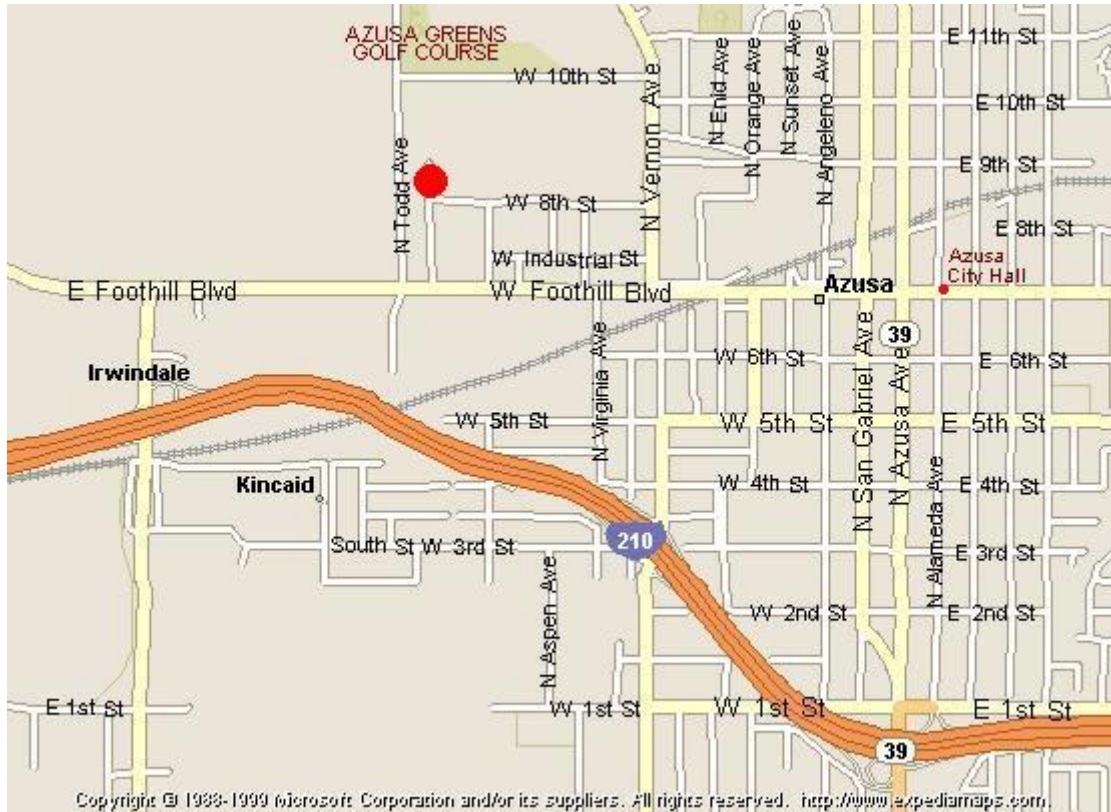
Looking from the probe to the South.



Looking from the probe to the North.

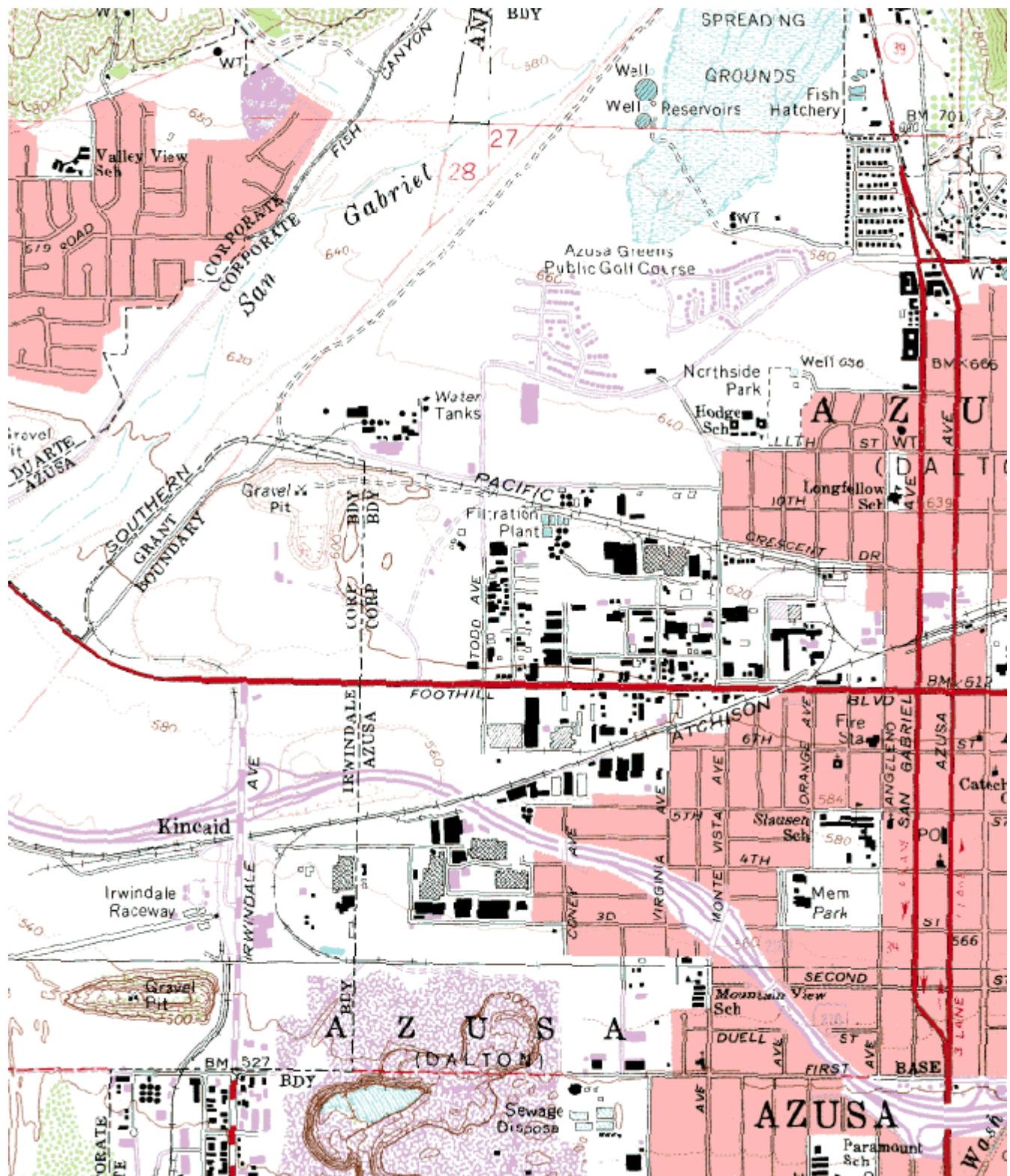
South Coast AQMD Site Survey Report for Azusa

Last updated: May 10, 2016



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
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/PAMS	SLAMS/PAMS	SLAMS
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)	02/25/2015	02/25/2015	02/25/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	04/17/2015, 11/6/2015

Pollutant, POC	24 Hour PM2.5, 1	Metals Cr-6, Carbonyls, 4	VOCs 8x3, 1	VOCs 24 hour, 2
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	CA Air Toxics	SLAMS/PAMS	SLAMS/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 colocated 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	1/29/15	1/29/15
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	04/17/2015, 11/06/2015	N/A	N/A	N/A

Pollutant, POC	VOCs, N/A			
Parameter code	N/A			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	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)	1.55			
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 PM _{2.5} ? (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.

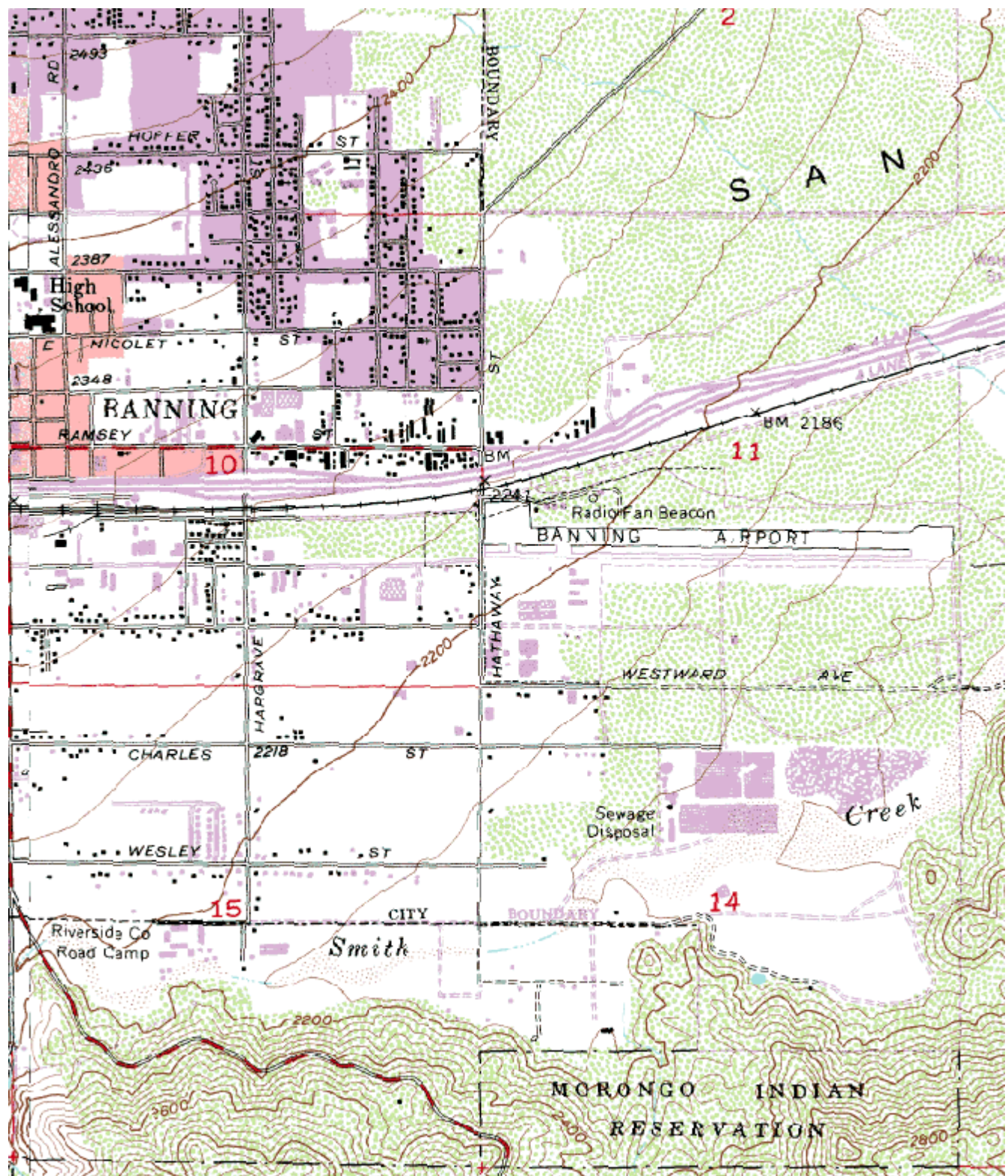
South Coast AQMD Site Survey Report for Banning-Airport

Last updated: May 10, 2016



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
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
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 PM _{2.5} ? (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)	09/18/2014	09/18/2014	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	05/14/2015, 10/23/2015	05/14/2015, 10/23/2015

**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.



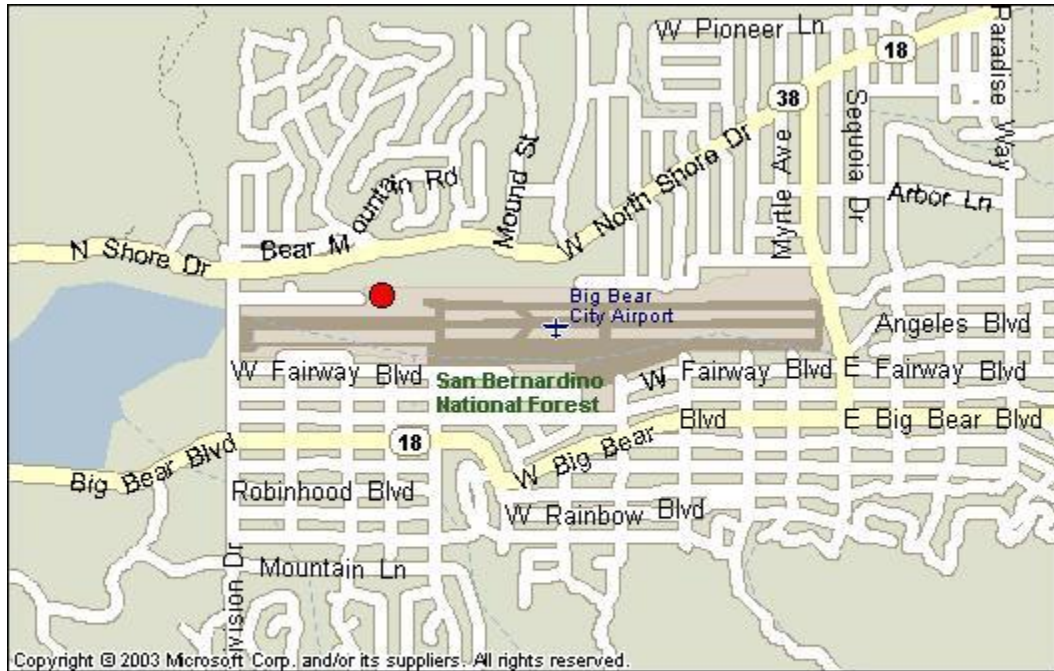
Looking at the probe from the South.



Looking at the probe from the West.

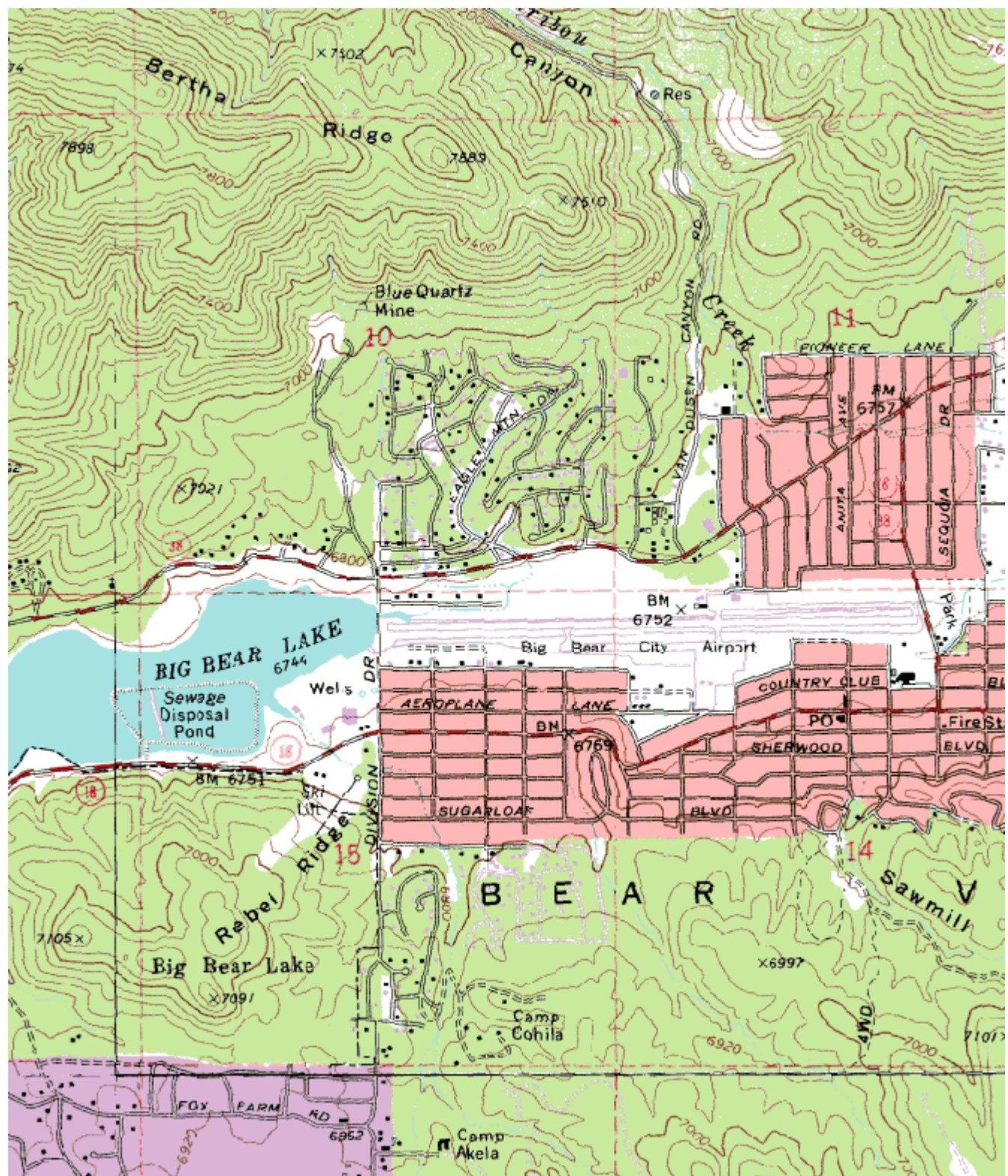
South Coast AQMD Site Survey Report for Big Bear

Last updated May 10, 2016



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			
Parameter code	See Table 26			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			
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)	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)	2.9			
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)	36			
Distance to furnace or incinerator flue (meters)	N/A			
Distance between colocated 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)	05/21/2014, 11/06/2014			

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.



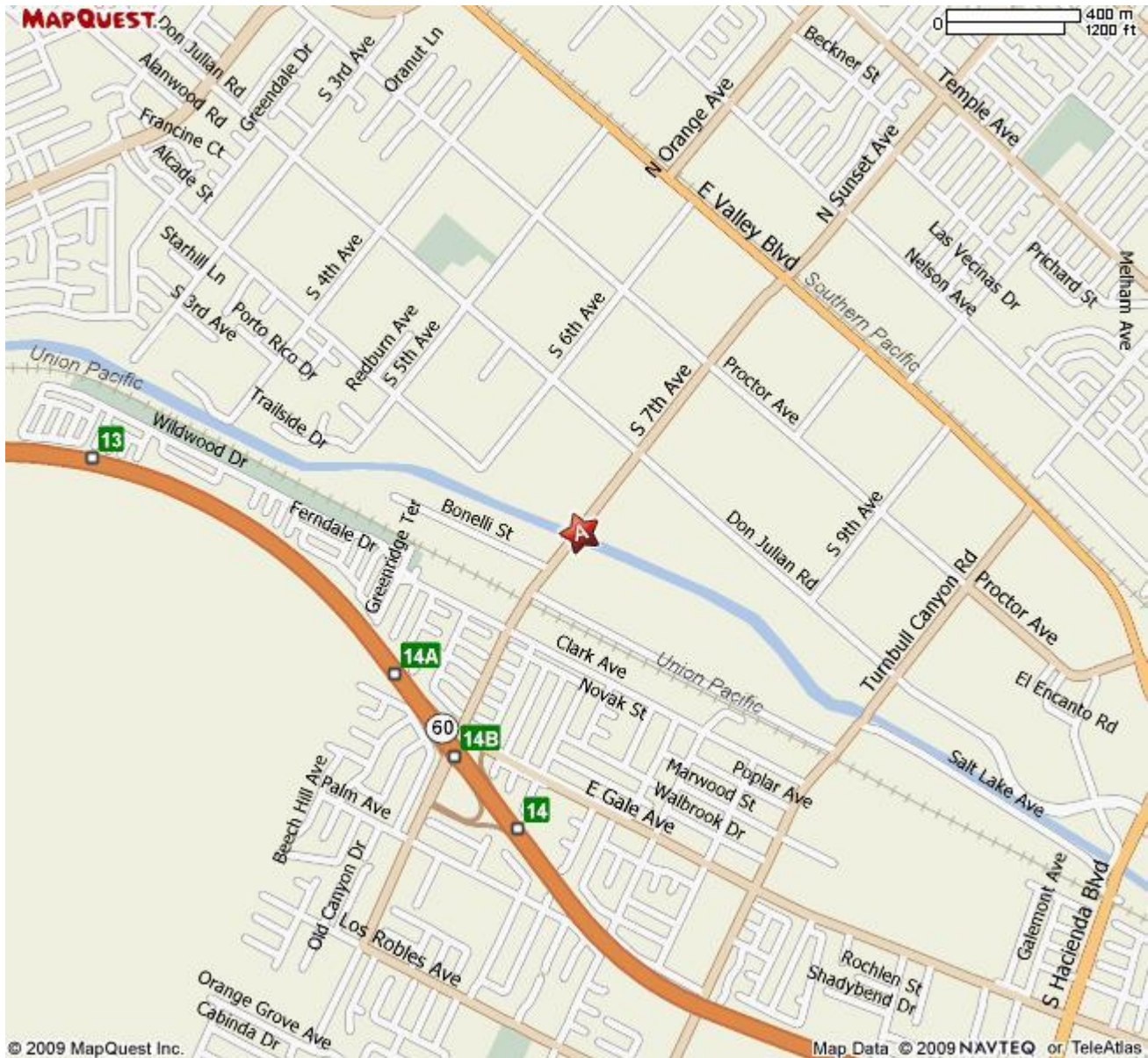
Looking at the probe from the South.



Looking at the probe from the West.

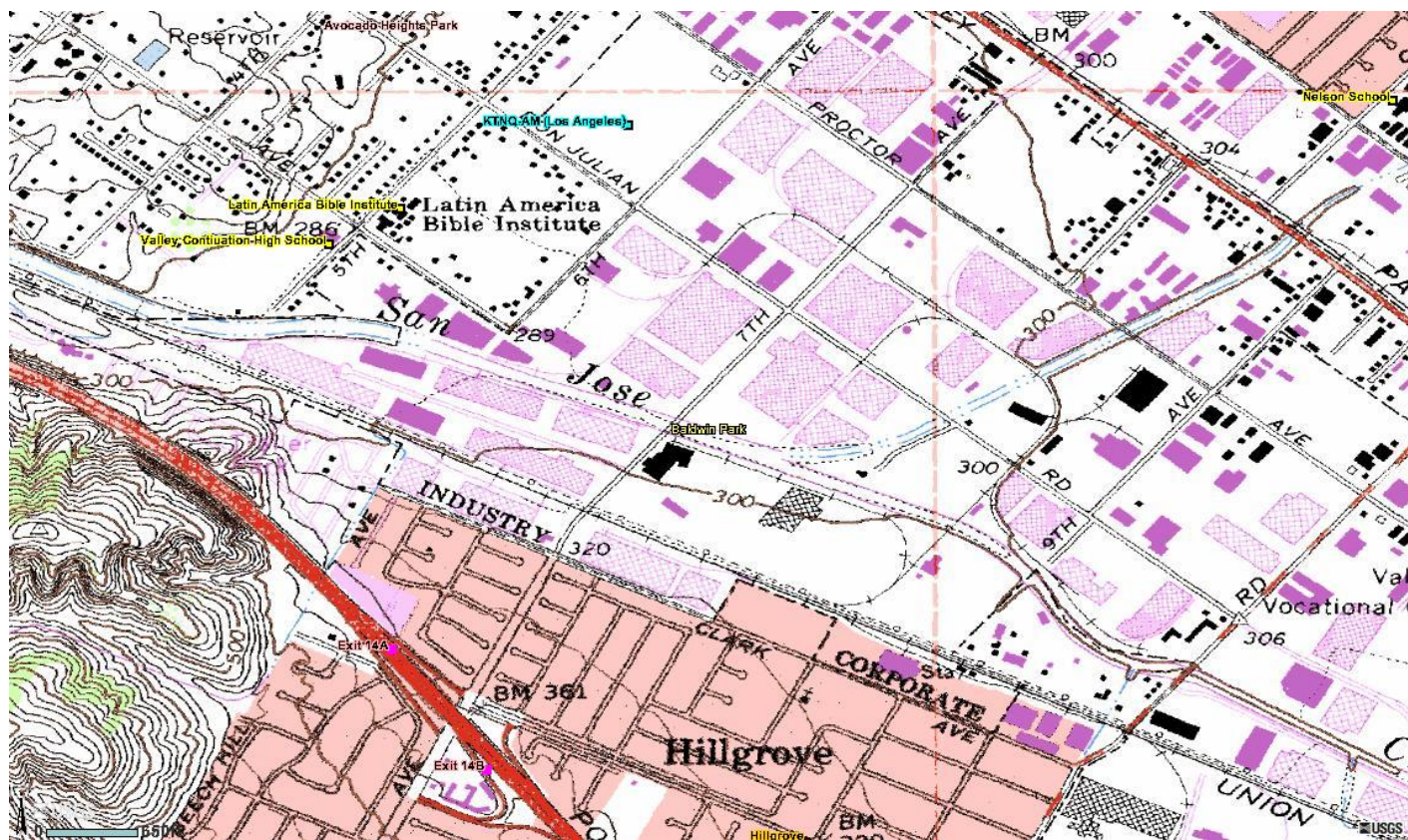
Quality Assurance
Site Survey Report for Closet World (Quemetco)

Last updated May 10, 2016



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			
Parameter code	14129			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Source Oriented			
Monitor (type)	SLAMS			
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)	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)	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)	06/03/2015, 11/19/2015			

**Quemetco – Closet World
Site Photos**



Looking North from the probe



Looking East from the probe.



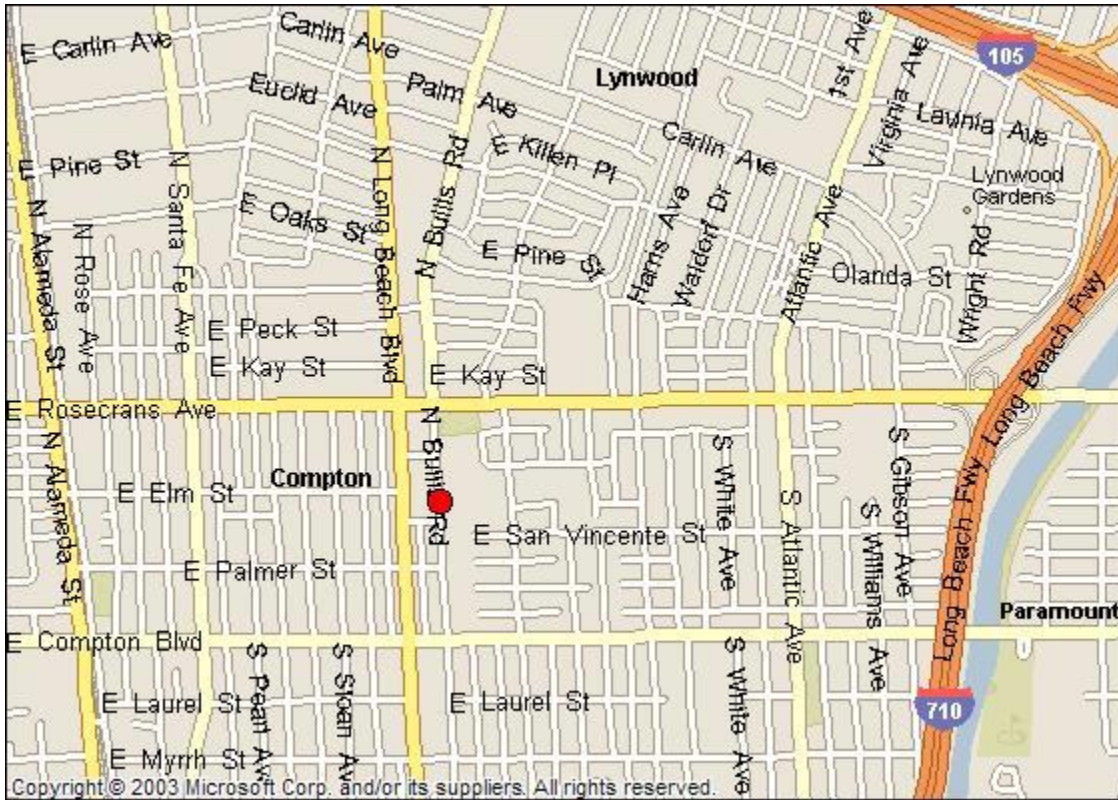
Looking South toward the probe.



Looking West from the probe

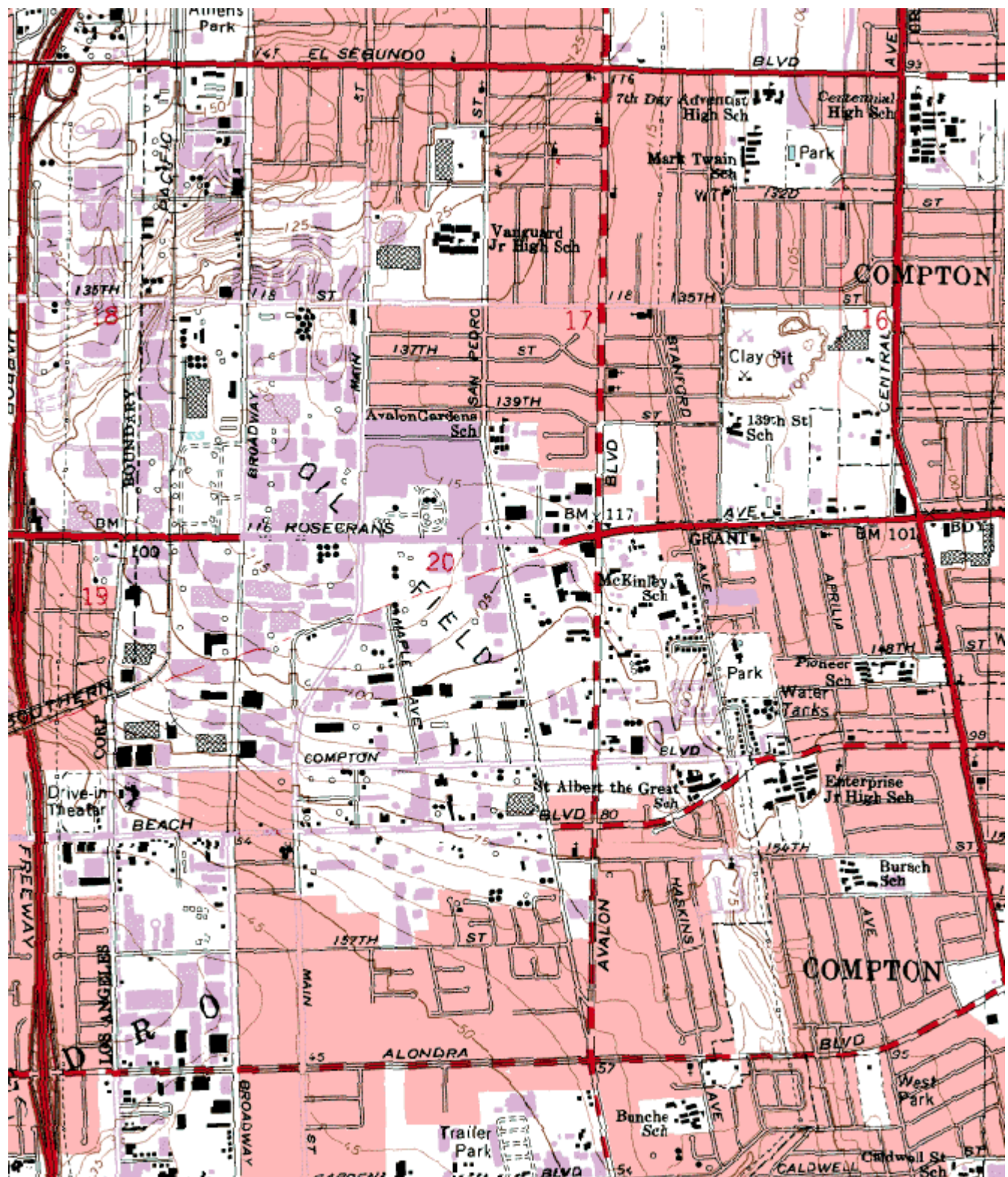
South Coast AQMD Site Survey Report for Compton

Last updated: May 10, 2016



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
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/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)	1.5	1.5	1.5	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	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)	6/9/2015	6/9/2015	6/9/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/22/2015, 11/7/2015

Pollutant, POC	24 Hour PM2.5, 1	Lead, 2		
Parameter code	See Table 26	14129		
Basic monitoring objective(s)	NAAQS	NAAQS		

Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS	SLAMS/Pb/QA Collocated		
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)	1.0	1.1		
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	No	No		

months? (Y/N)				
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)	05/22/2015, 11/7/2015	5/22/2015, 11/7/2015		

**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.



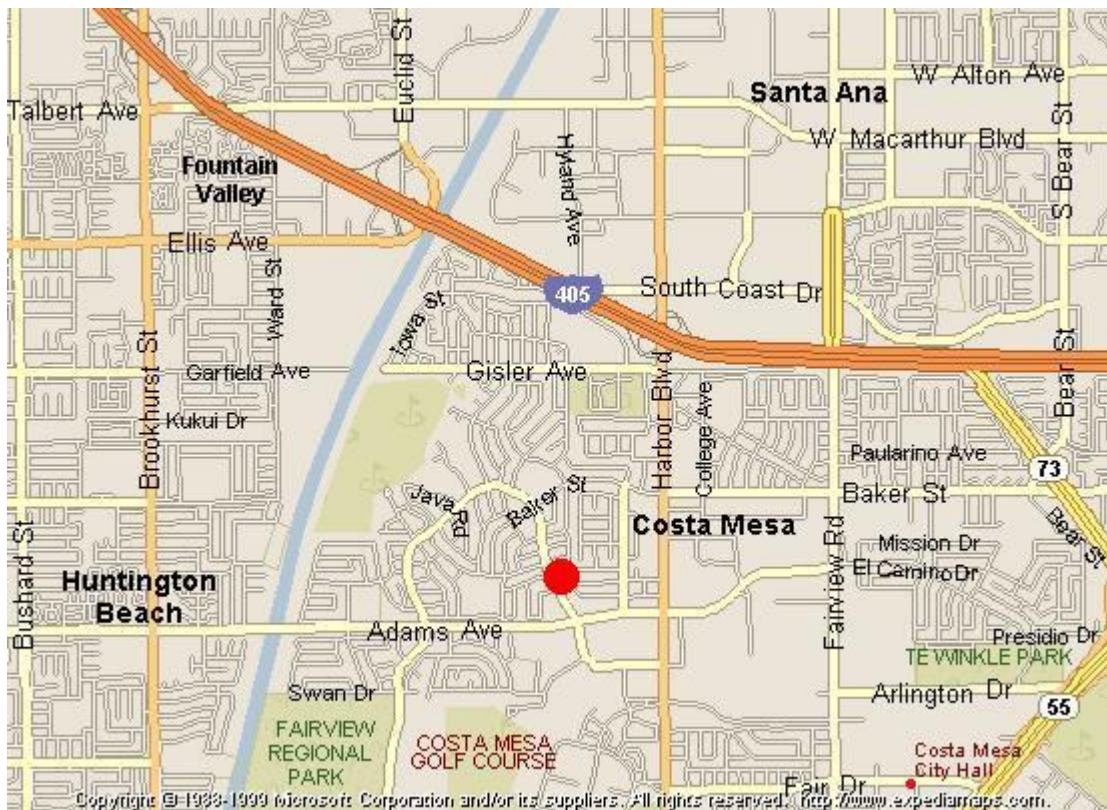
Looking at the probe from the South.



Looking at the probe from the West.

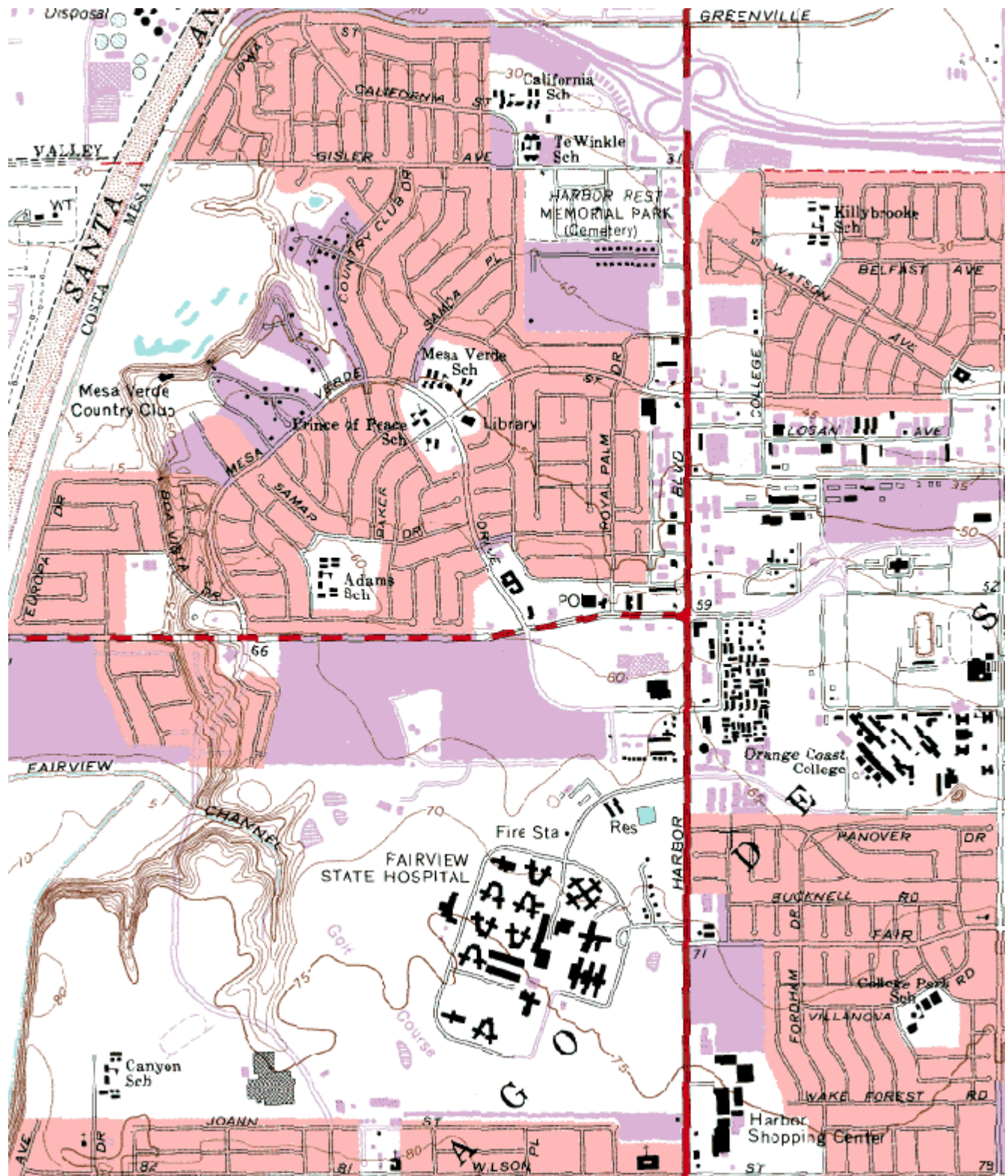
South Coast AQMD Site Survey Report for Costa Mesa-Mesa Verde Drive

Last updated: May 13, 2016



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
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
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	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)	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 PM _{2.5} ? (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)	05/20/2015	05/20/2015	05/20/2015	05/20/2015
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.

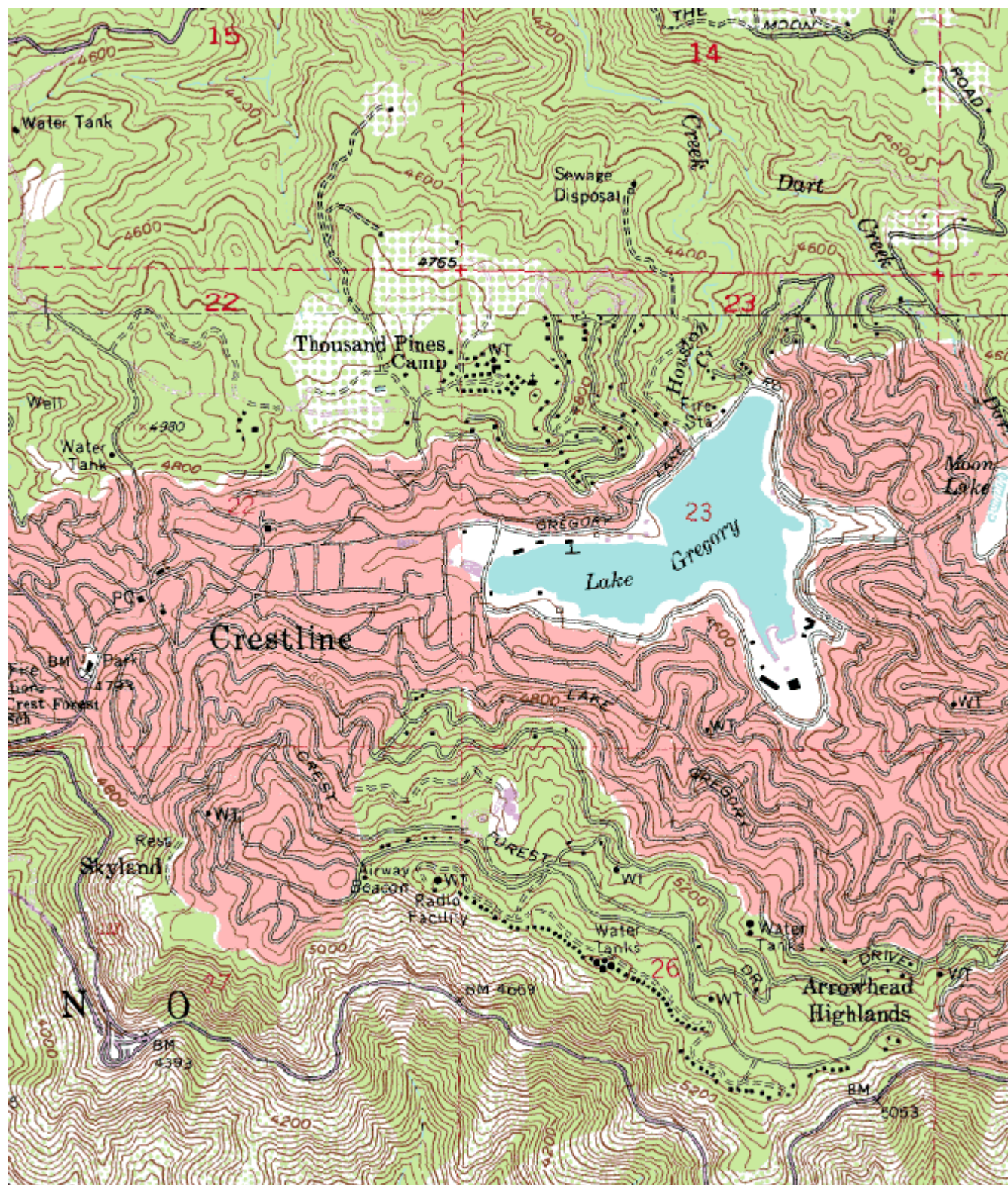
South Coast AQMD
Site Survey Report for Crestline (Lake Gregory)

Last updated: 5/20/2016



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

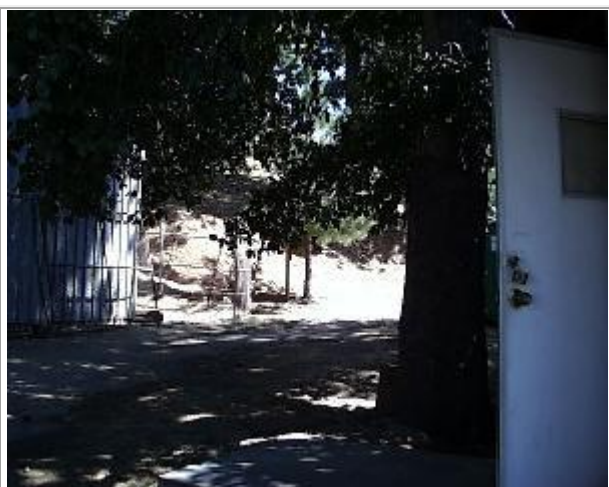
Local site name	Crestline (Lake Gregory)			
AQS ID	060710005			
GPS coordinates (decimal degrees)	Latitude: 34° 14' 35" Longitude: 117° 16' 20"			
Street Address	24171 Lake Dr, Crestline, CA 92325			
County	San Bernardino			
Distance to roadways (meters)	55			
Traffic count (AADT, year)	< 8,000 / 2012			
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	
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	
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)	1.0	1.9	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)	06/17/2015	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/16/2015, 10/31/2015	06/17/2015 12/06/2015	

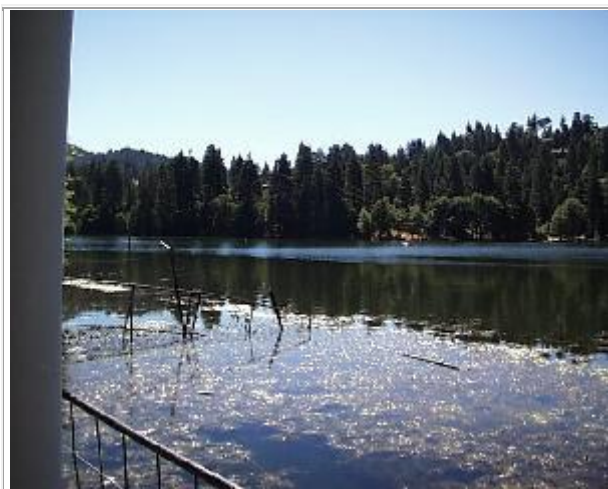
**Crestline (Lake Gregory)
Site Photos**



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.

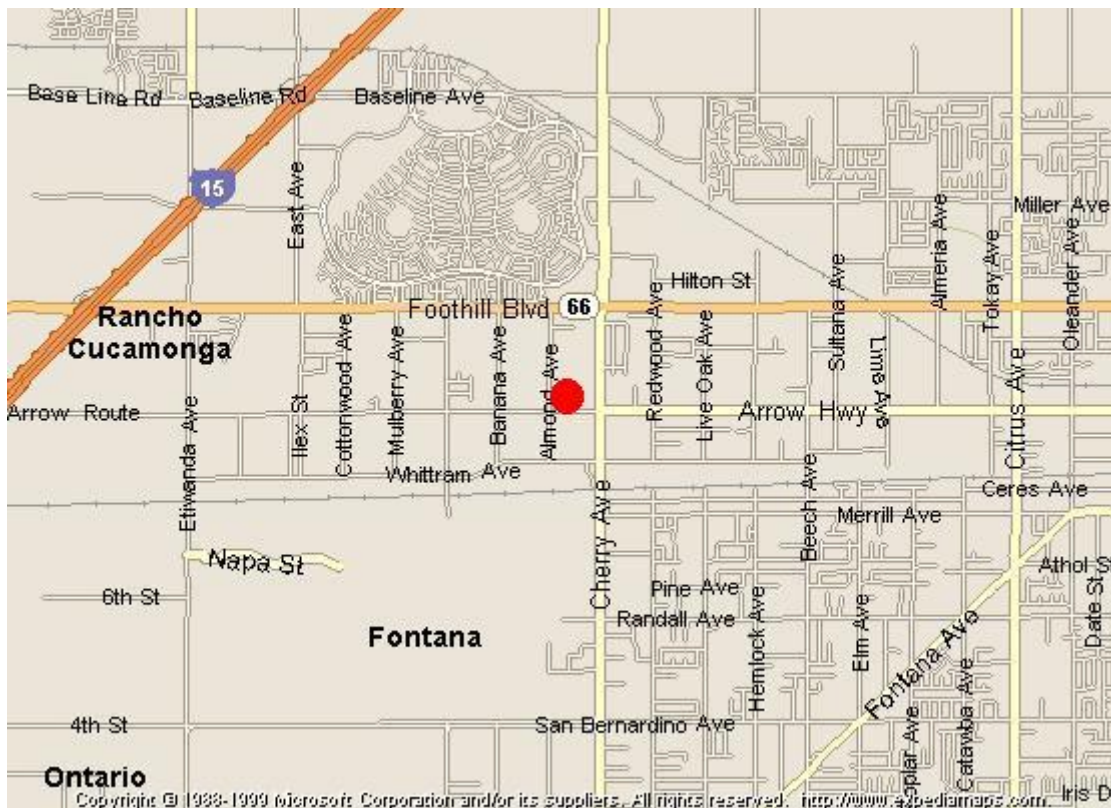


Looking at the probe from the South.

photo not available

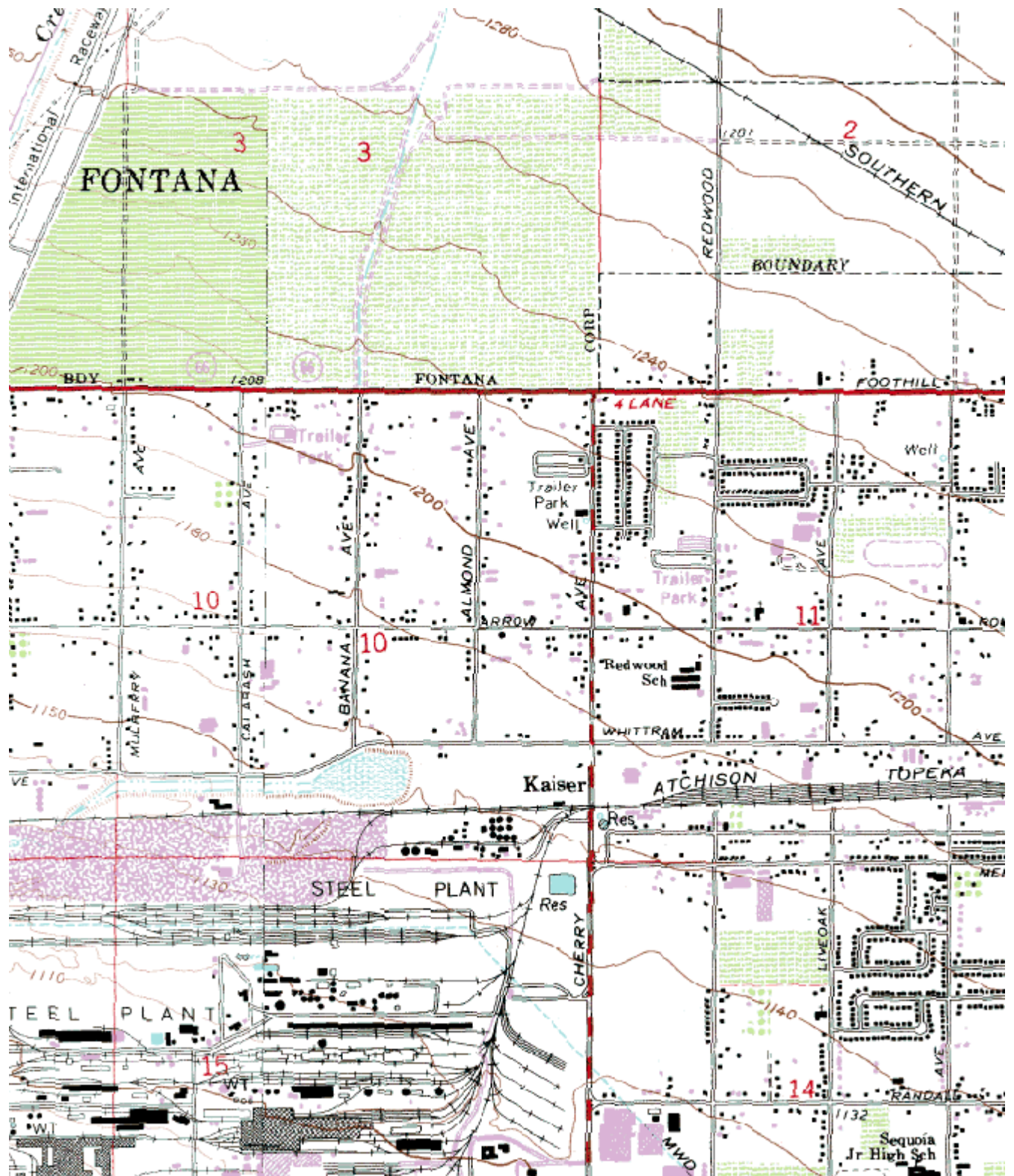
South Coast AQMD Site Survey Report for Fontana-Arrow Highway

Last updated: May 15, 2016



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
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
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)	3/10/2015	3/10/2015	3/10/2015	3/10/2015
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	
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	
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/	FRM	Other	FRM	

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)	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	Monthly	Monthly	Monthly	

manual PM samplers				
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)	04/16/2015, 11/06/2015	04/16/2015, 11/06/2015	04/16/2015, 11/06/2015	

**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.

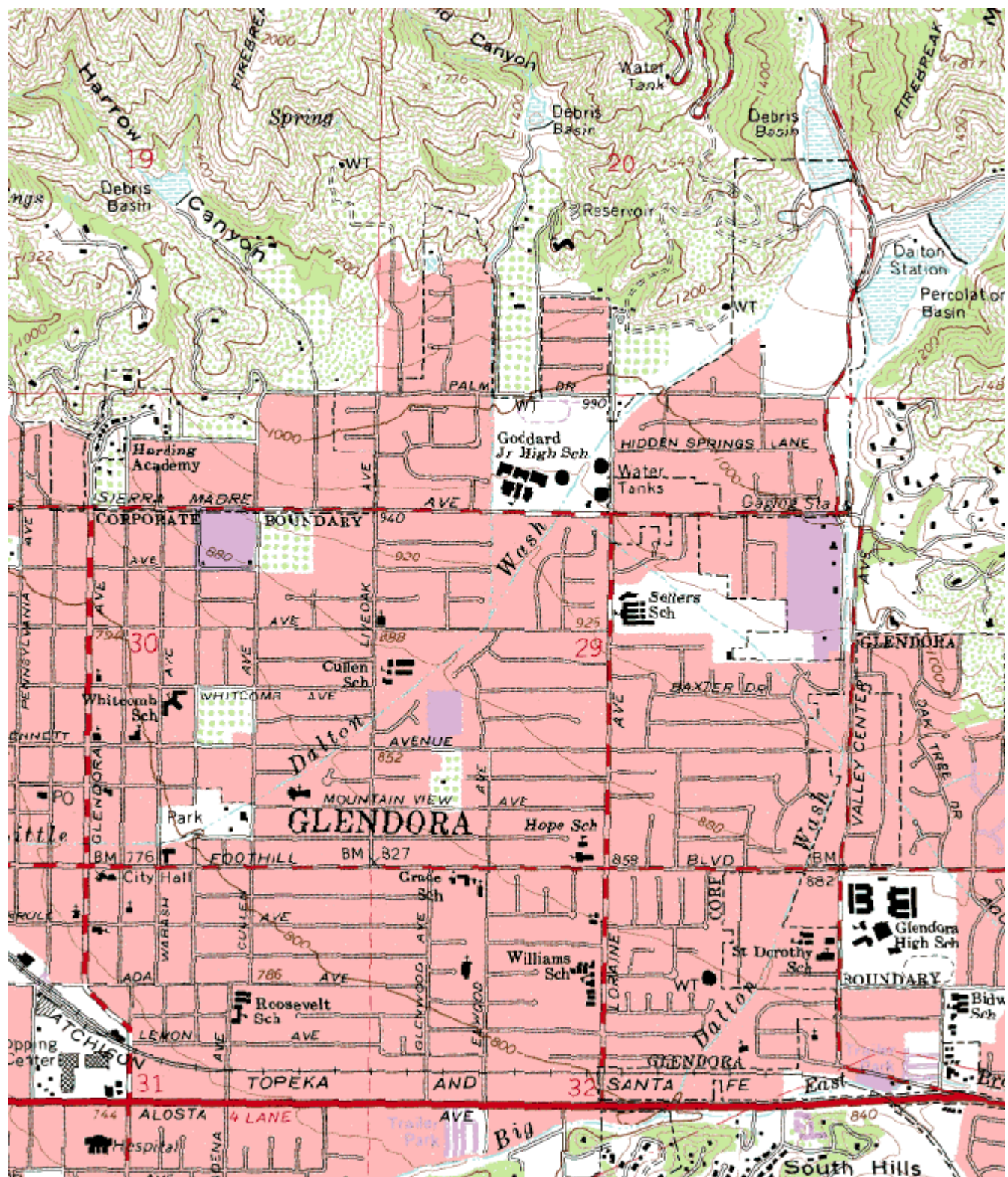
South Coast AQMD Site Survey Report for Glendora-Laurel

Last updated: May 15, 2016



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
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
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	1.85
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)	09/21/2015	09/21/2015	09/21/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/27/2015, 12/05/2015

Pollutant, POC	Continuous PM2.5, 3			
Parameter code	88502			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			

Monitor (type)	SLAMS			
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)	1.8			
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)	06/27/2015, 12/05/2015			

**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.

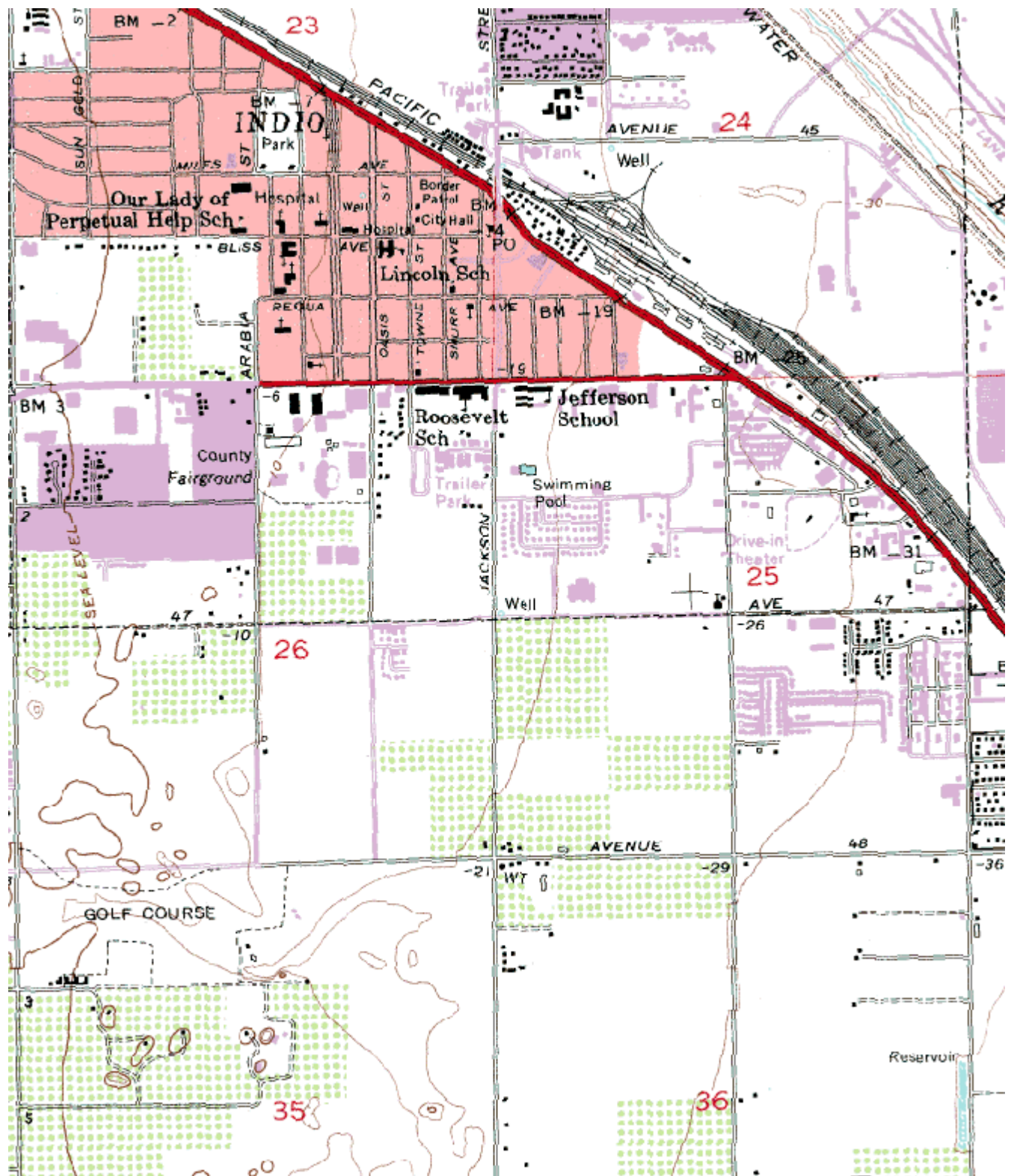
South Coast AQMD Site Survey Report for Indio-Jackson Street

Last updated: May 15, 2016



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
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
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	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	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)	11/12/2014	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	05/14/2015, 10/23/2015	05/14/2015, 10/23/2015	05/14/2015, 10/23/2015

Pollutant, POC	Continuous PM10, 3	24 Hour PM2.5, 1		
Parameter code	81102	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		

Site type(s)	Highest Concentration	Population Exposure		
Monitor (type)	SLAMS	SLAMS		
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)	1.8	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)	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 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)	06/30/2015, 12/01/2015	05/14/2015, 10/23/2015		

**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.



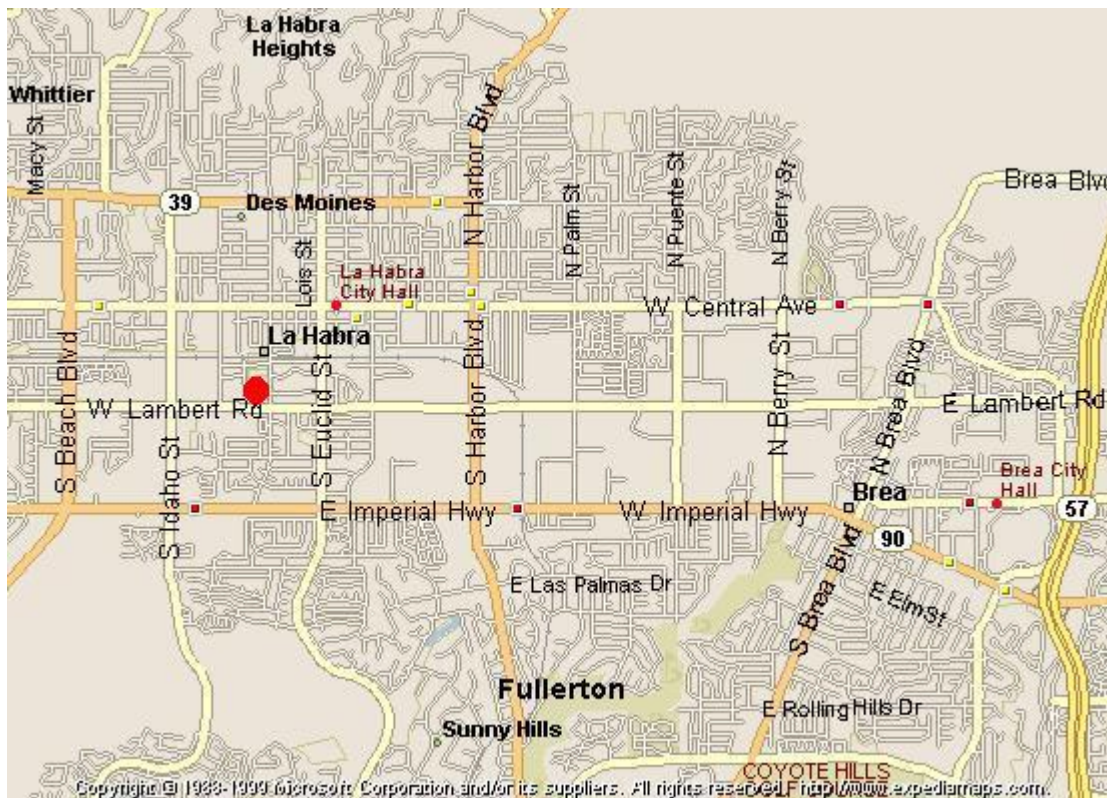
Looking at the probe from the South.



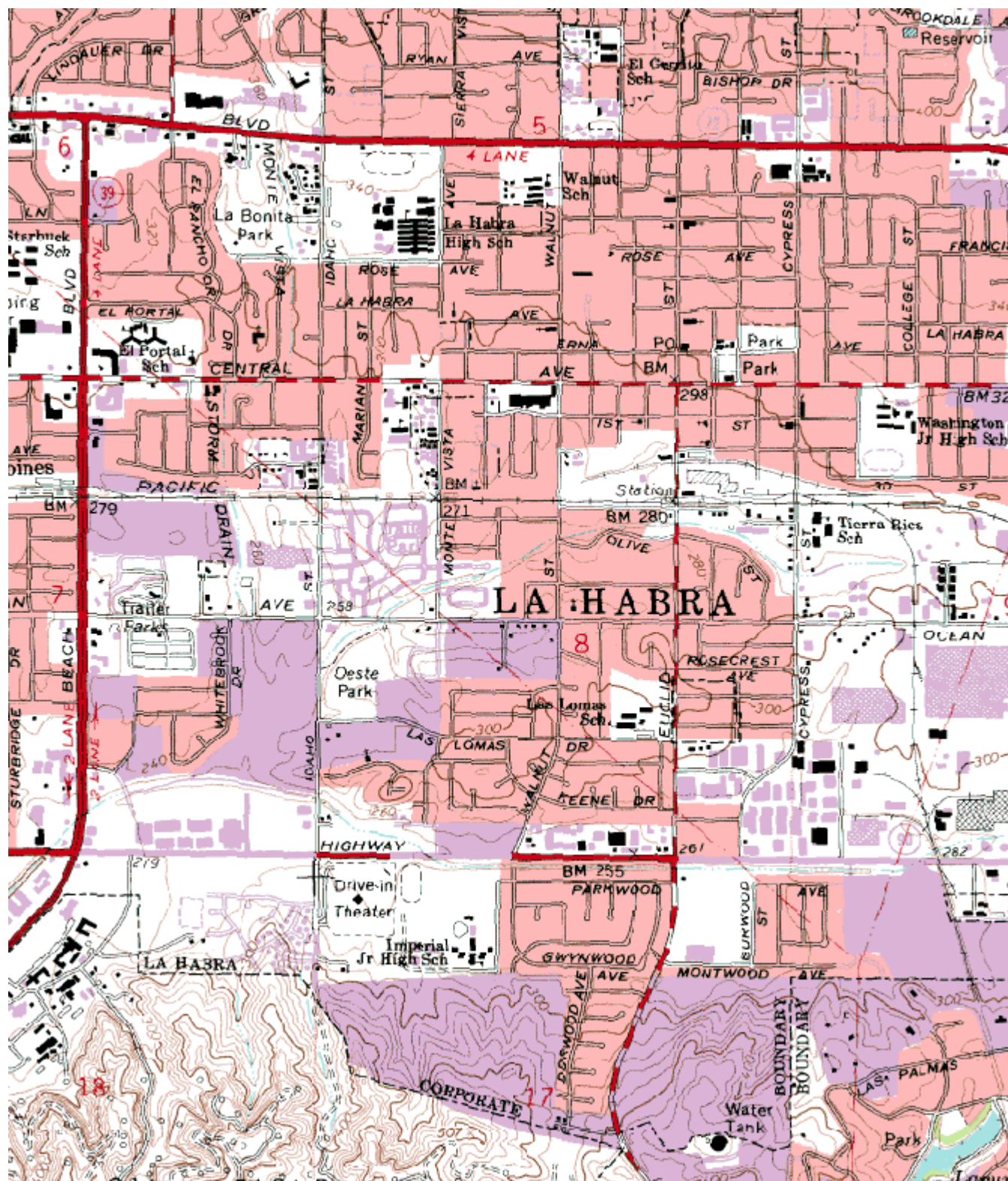
Looking at the probe from the West.

South Coast AQMD Site Survey Report for La Habra

Last updated: May 15, 2016



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	
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	
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)	06/3/2015	06/3/2015	06/3/2015	
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.

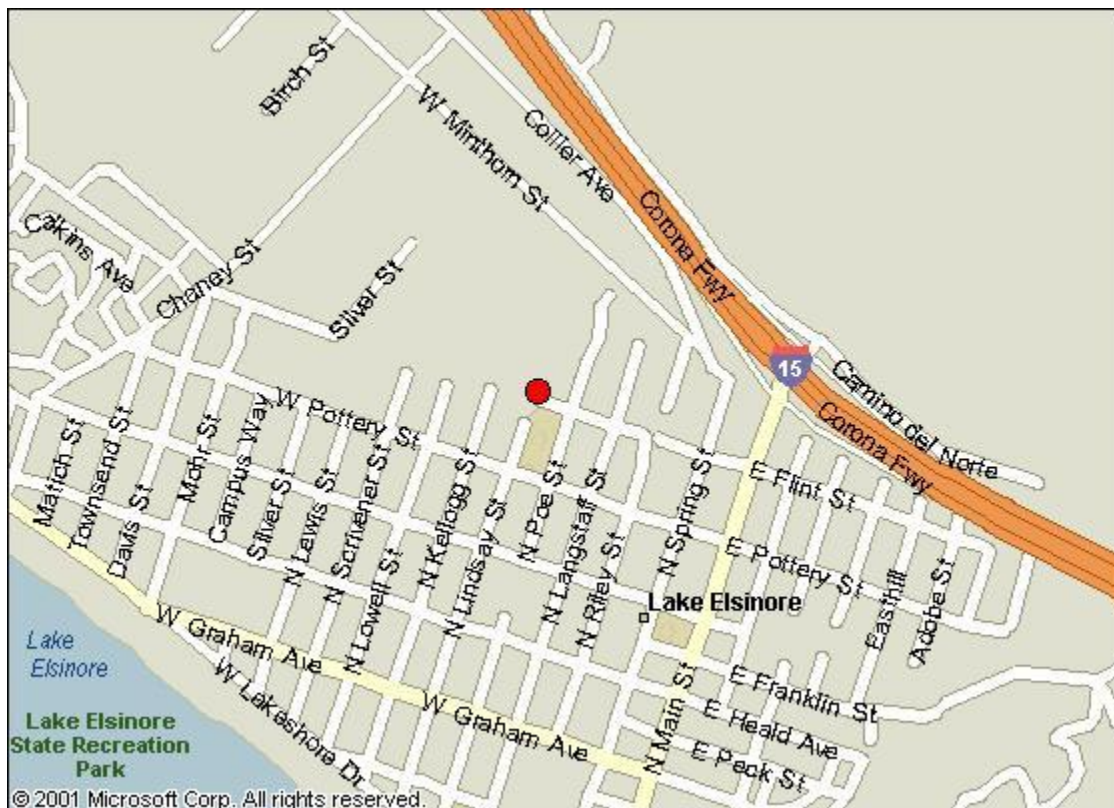


Looking at the probe from the West.

South Coast AQMD

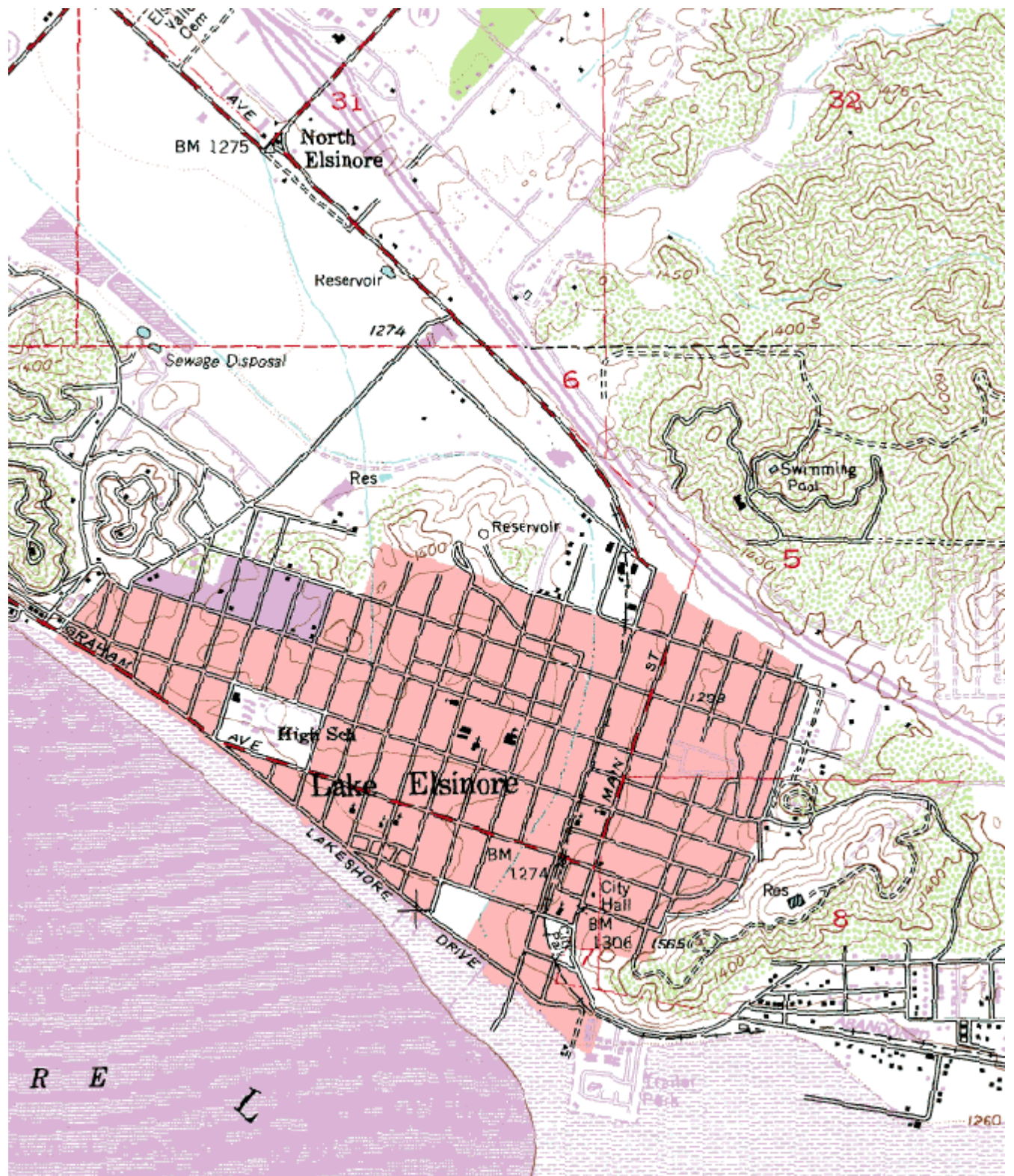
Site Survey Report for Lake Elsinore-W Flint Street

Last updated: May, 15, 2016



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
Parameter code	42101	42602	44201	81102
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
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	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)	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)	06/19/2015	06/19/2015	06/19/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/19/2015, 12/09/2015

Pollutant, POC	Continuous PM2.5, 3			
Parameter code	88502			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			

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)	N/A			
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)	06/19/2015, 12/09/2015			

**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.



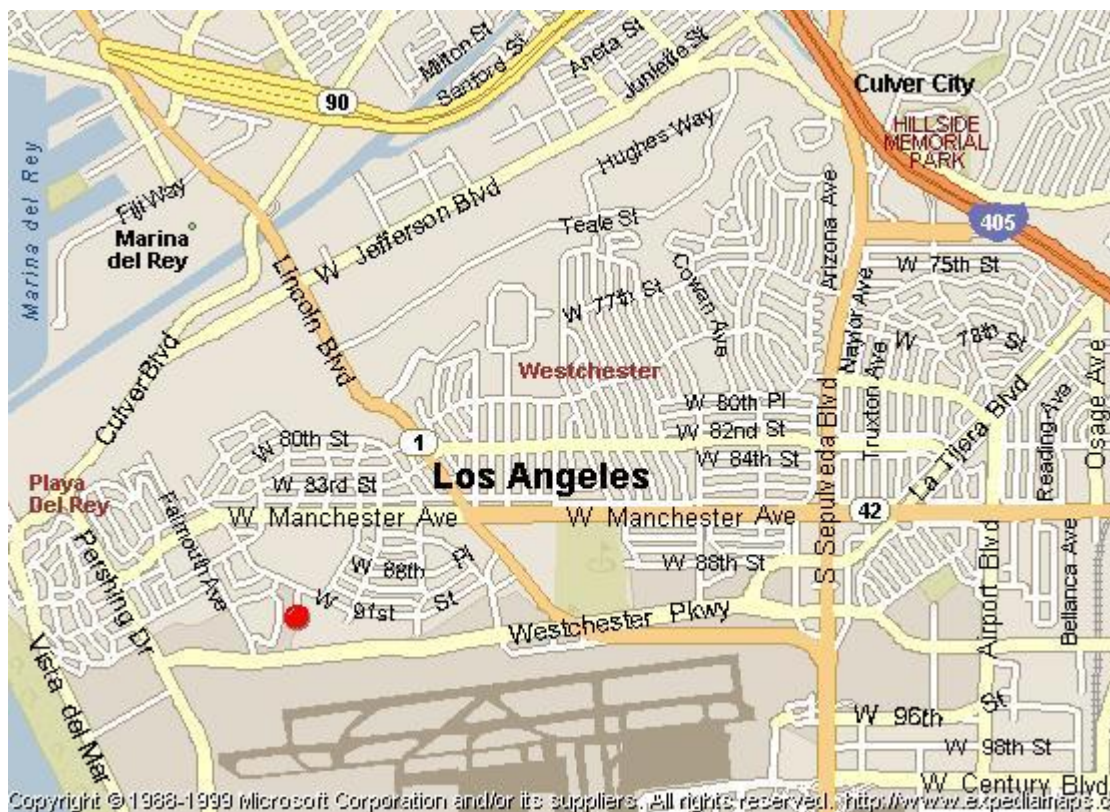
Looking at the probe from the South.



Looking at the probe from the West.

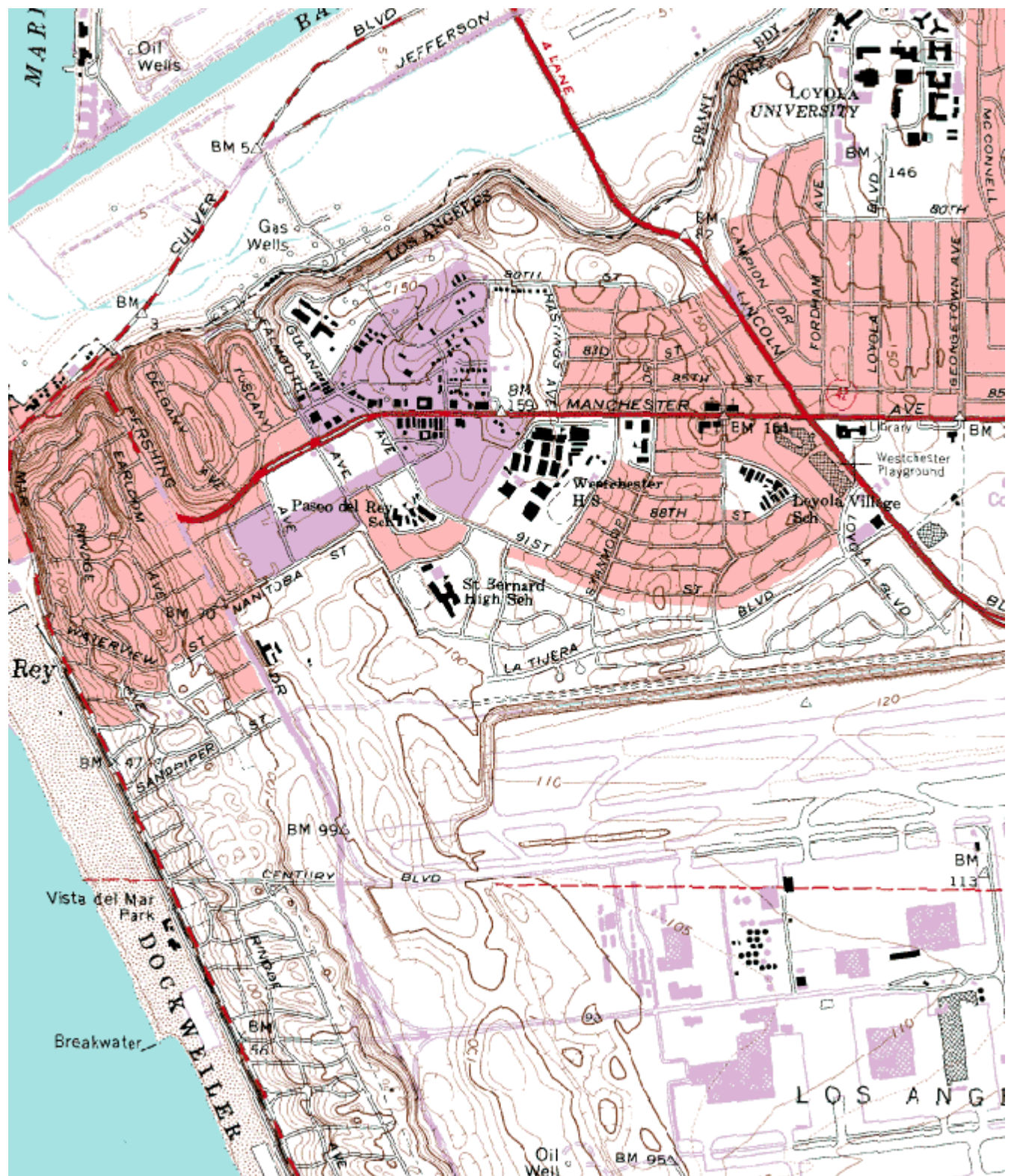
Quality Assurance Site Survey Report for LAX - Hastings

Last updated: May 15, 2016



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
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
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 roof (meters)	N/A	N/A	N/A	N/A

Distance from trees (meters)	20 (height 10)	20 (height 10)	20 (height 10)	20 (height 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	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 PM _{2.5} ? (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)	09/24/2015	09/24/2015	09/24/2015	09/24/2015
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	PM ₁₀ , 1
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/Background	Population Exposure/Background	Population Exposure/Background	Population Exposure/Background
Monitor (type)	SLAMS	PAMS	PAMS	SLAMS

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	N/A	N/A	N/A	N/A

the annual PM2.5? (Y/N)				
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	2/5/15	2/5/15	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/22/2015, 11/25/2015	N/A	N/A	05/22/2015, 11/25/2015

**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.



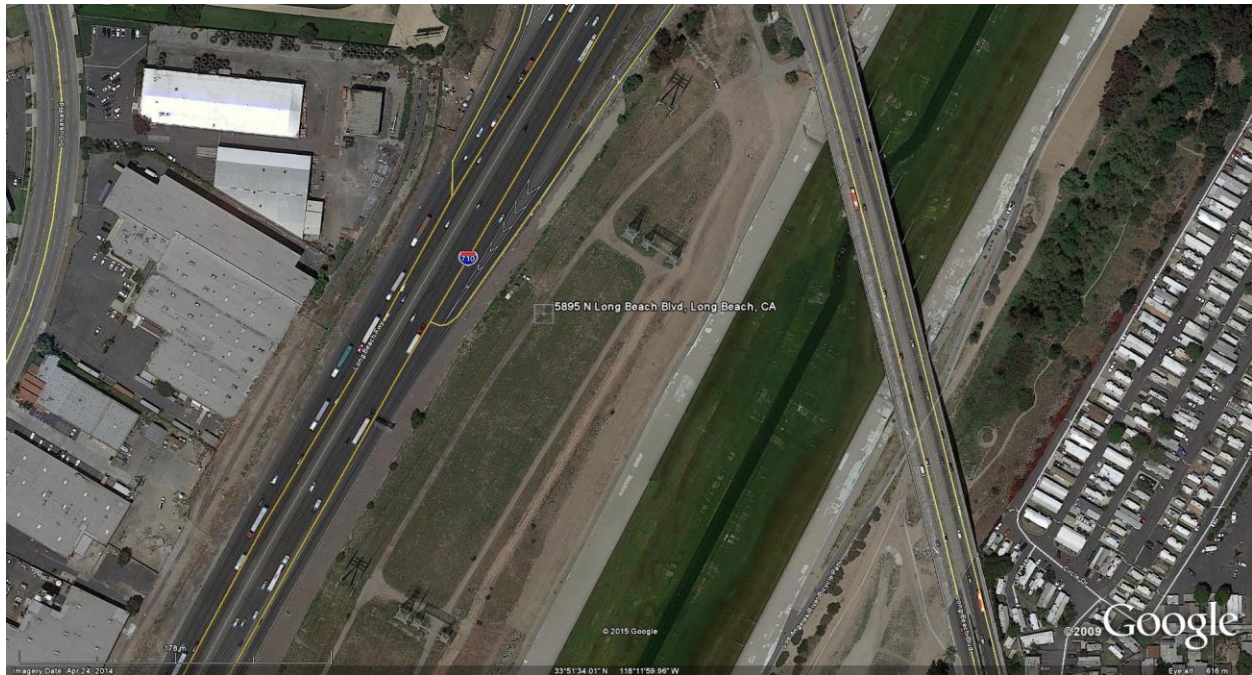
Looking at the probe from the South.



Looking at the probe from the West.

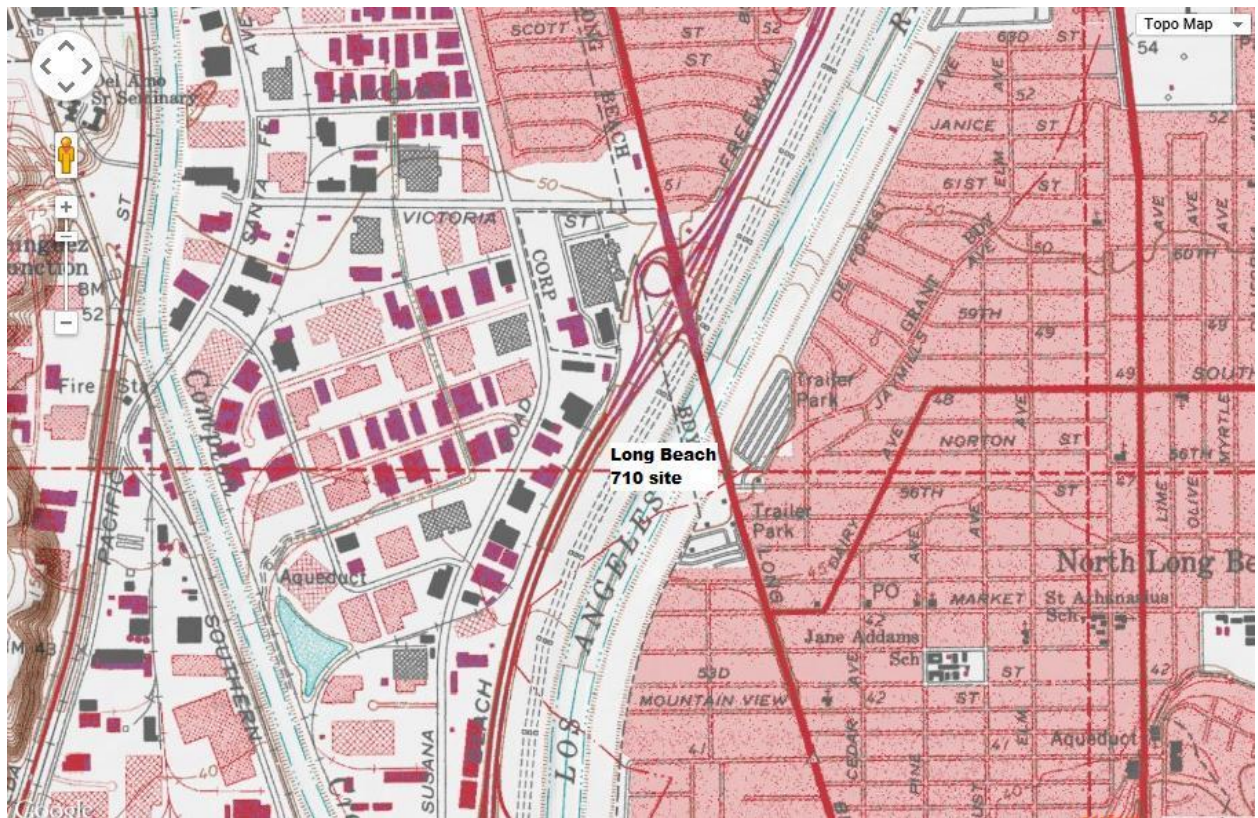
Quality Assurance
Site Survey Report for Long Beach Route 710 Near Road

Last updated: May 15, 2016



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	
Parameter code	42602	See Table 26	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	
Monitor (type)	SLAMS\Near Road	SLAMS\Near Road	SLAMS\Near Road	
Instrument manufacturer and model	Thermo 42i	Thermo 2025i	Thermo 5014	
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)	10/01/2015	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	11/07/2015	Scheduled for 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.



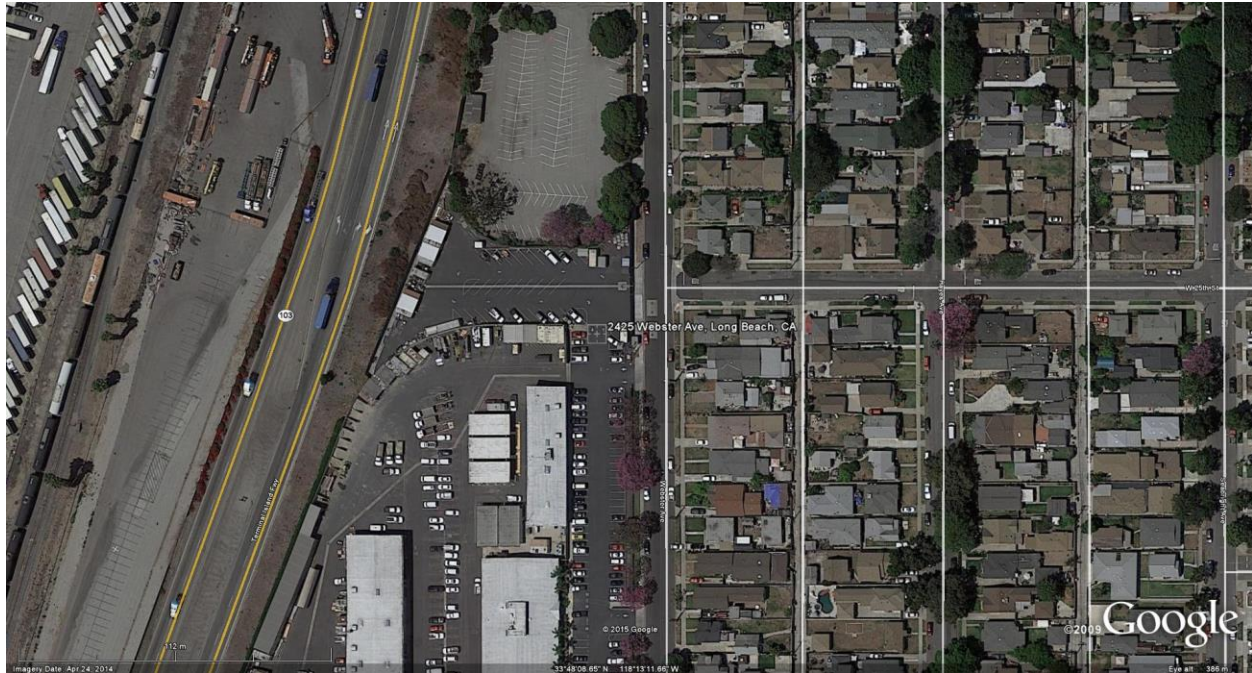
Looking at the probe from the South.



Looking at the probe from the West.

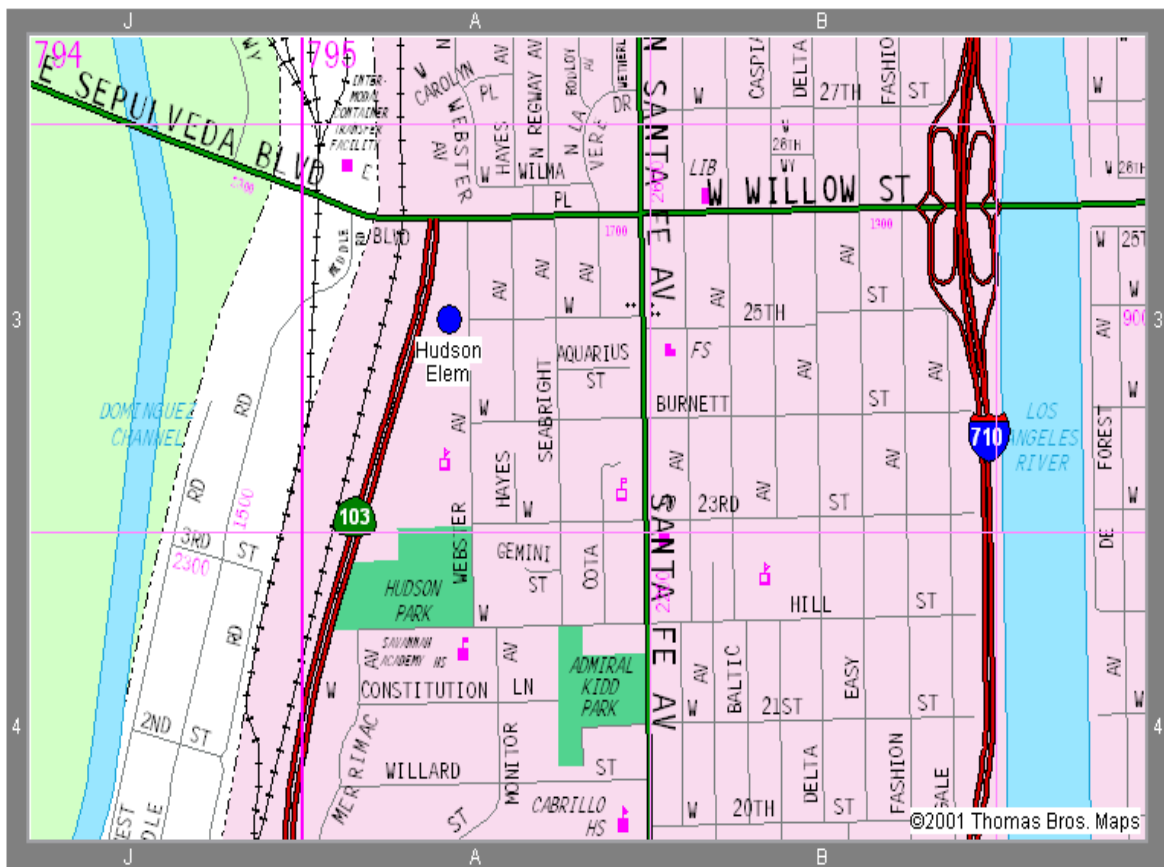
South Coast AQMD
Site Survey Report for Long Beach (Hudson)

Last updated: May 15, 2016



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
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
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)	03/24/15	05/22/15	03/24/15	03/24/15
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			
Parameter code	See Table 26			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS/NATTS/NCore			
Instrument	GMW 1200 SSI, A			

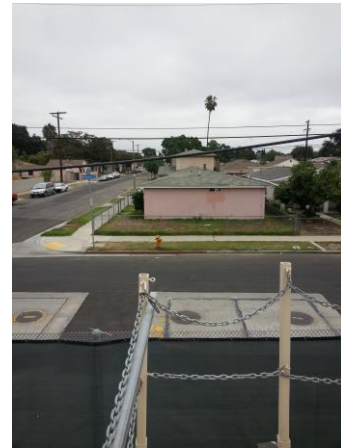
manufacturer and model	Sampler			
Method code	063,102			
FRM/FEM/ARM/ other	FRM			
Collecting Agency	SCAQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	SCAQMD			
Reporting Agency	SCAQMD			
Spatial scale (e.g. micro, neighborhood)	Neighborhood			
Monitoring start date (MM/DD/YYYY)	01/10			
Current 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)	1.5			
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?	N/A			

(Y/N)				
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)	05/22/2015, 11/07/2015			

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.



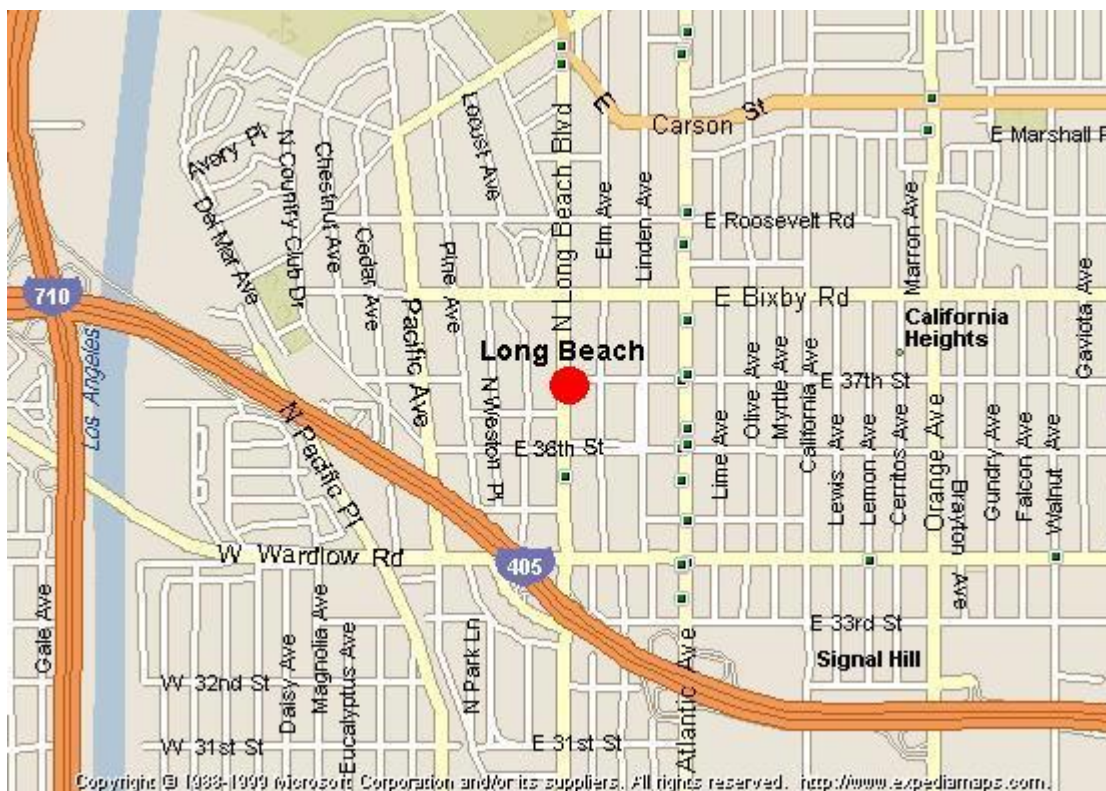
Looking at the probe from the South.



Looking at the probe from the West.

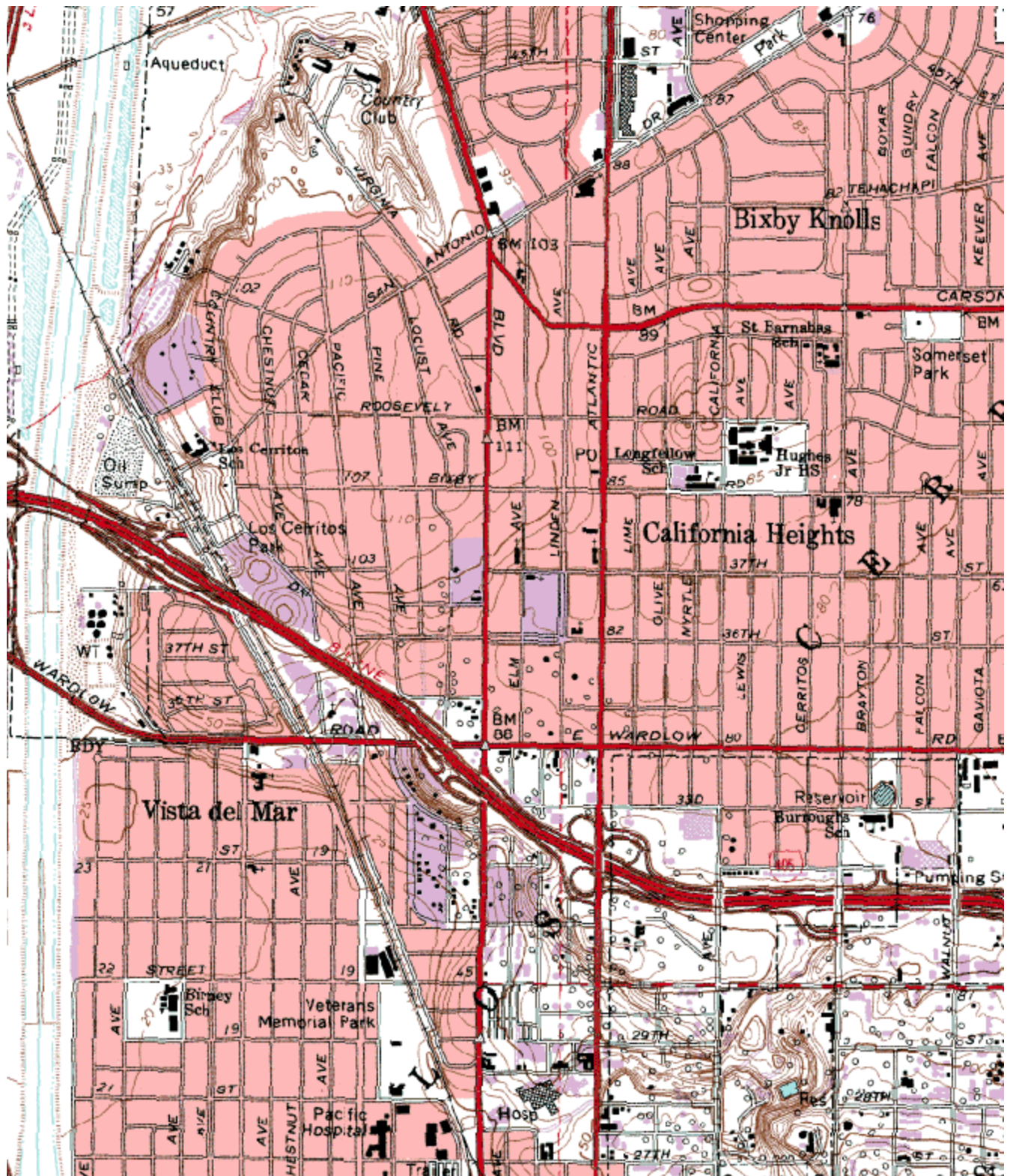
South Coast AQMD Site Survey Report for Long Beach (North)

Last updated: May 15, 2016



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)	8 – 55 (Two separate monitoring compounds); 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			
Parameter code	See Table 26			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Highest Concentration			
Monitor (type)	SLAMS			
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)	1.8			
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 PM _{2.5} ? (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)	05/25/2015, 11/25/2015			

**Long Beach (North)
Site Photos**



Looking North from the probe.



Looking East from the probe.



Looking South from the probe.

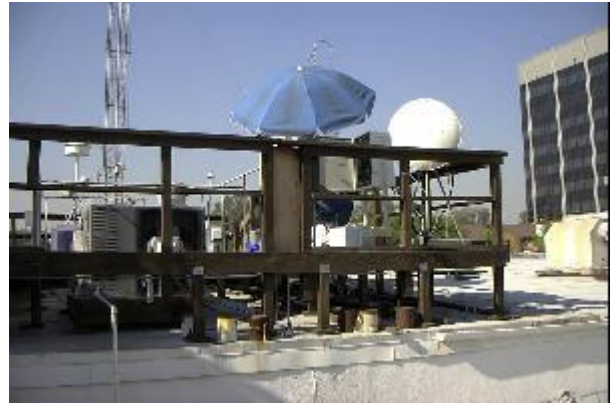


Looking West from the probe.

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



Looking at the probe from the North.



Looking at the probe from the East.



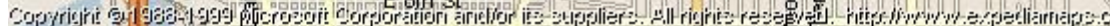
Looking at the probe from the South.



Looking at the probe from the West.

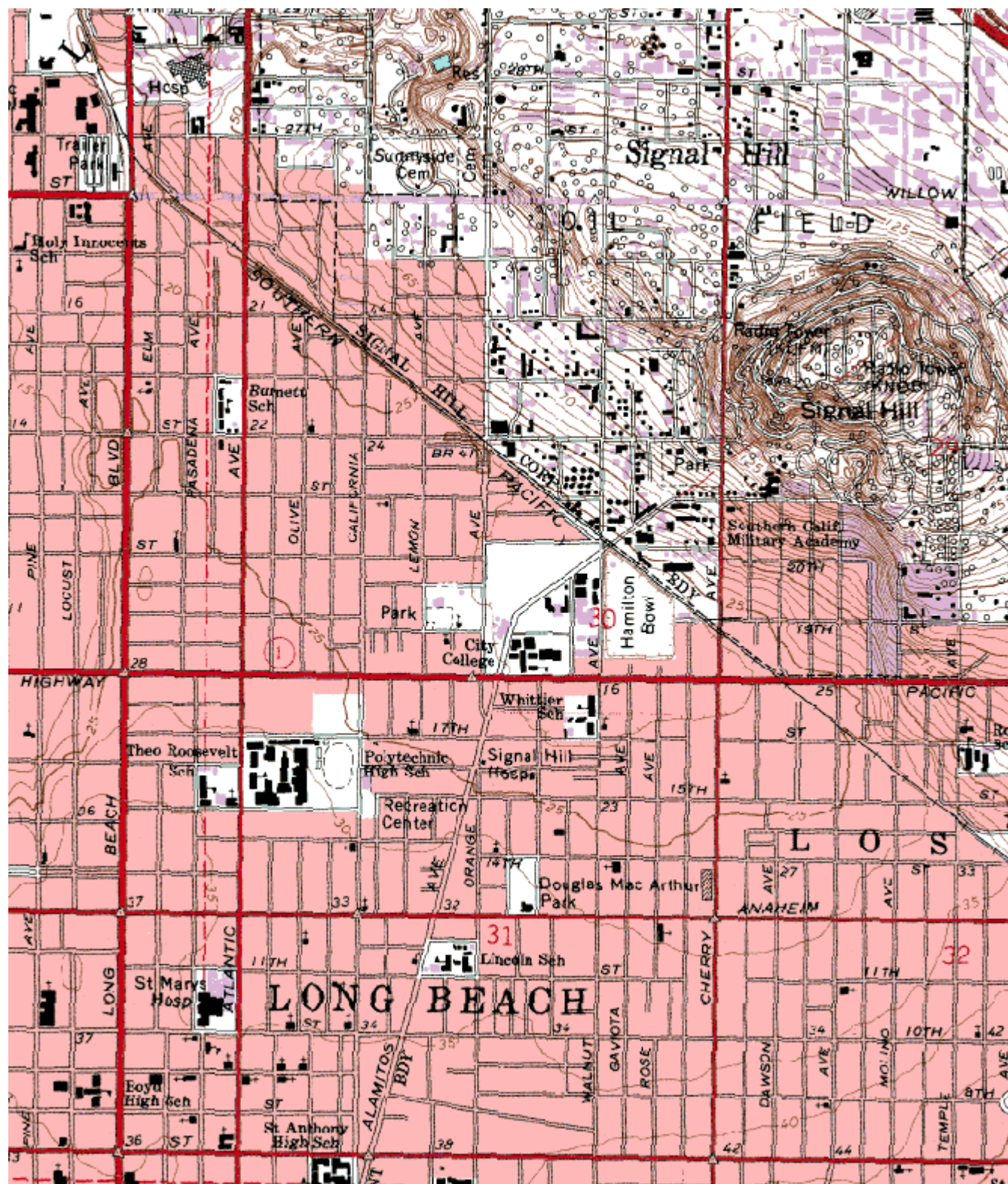
Last updated: May 15, 2016

Last updated: May 15, 2016



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
Parameter code	See Table 26	14129	88101	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
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)	2.44	2.11	2.64	2.84
Distance from supporting structure (meters)	1.5	1.12	2.64	1.83
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)	05/25/2015, 11/07/2015	04/25/2015, 11/07/2015	05/25/2015, 11/07/2015	05/25/2015, 11/07/2015

**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.



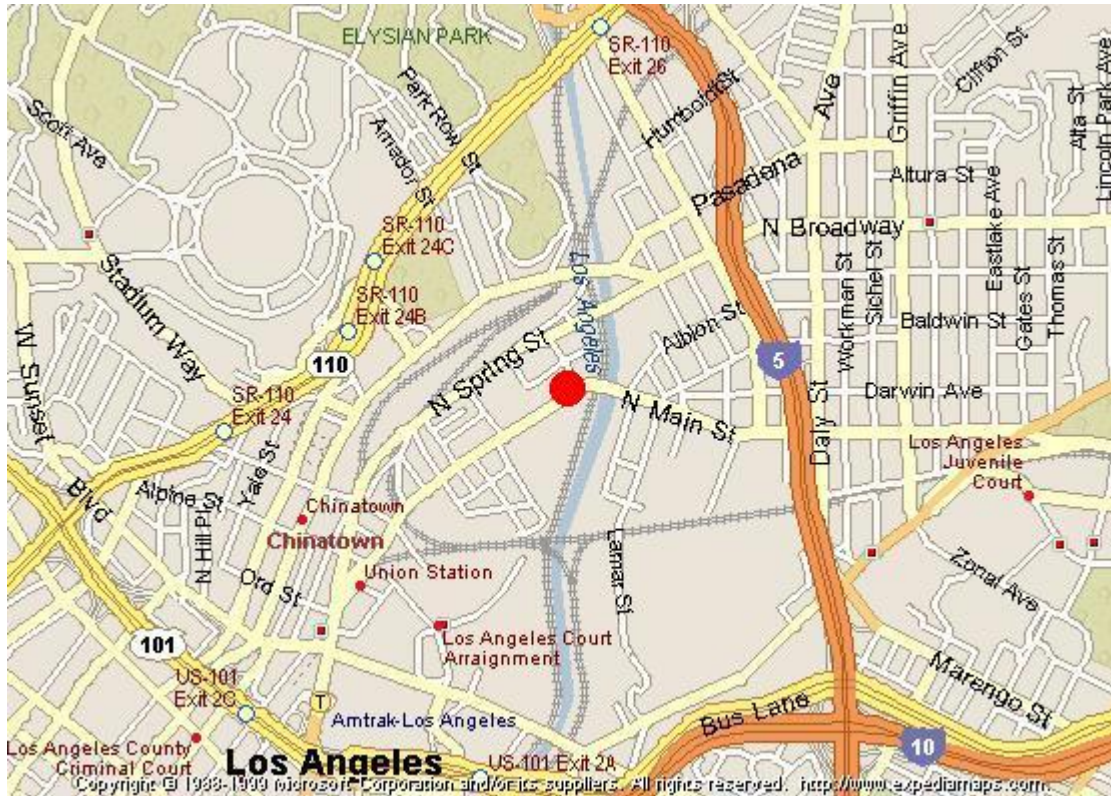
Looking at the probe from the South.



Looking at the probe from the West.

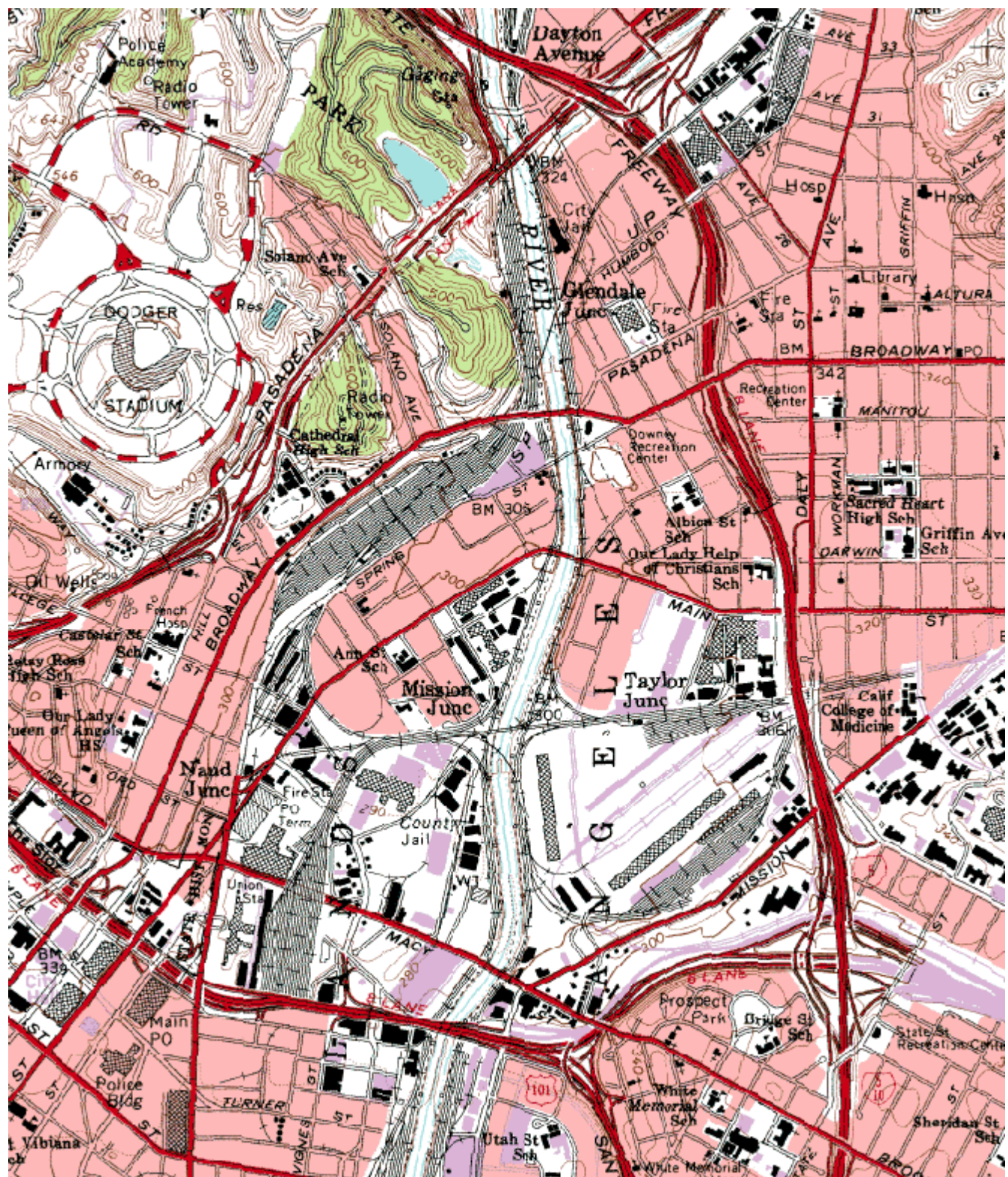
South Coast AQMD
Site Survey Report for Los Angeles (Central)-North Main Street

Last updated: May 15, 2016



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
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\PAMS\NCore	SLAMS\PAMS\NCore	SLAMS\PAMS\NCore	SLAMS\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)	09/17/2015	09/17/2015	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	N/A	N/A

Pollutant, POC	PM10, 2	PM10, 4	Lead, 3	Lead, 2
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/NATTS/ NCore	SLAMS/NATTS/ NCore/QA Collocated	SLAMS/Pb/QA Collocated	SLAMS/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)	1.5	1.5	1.1	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)	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)	05/20/2015, 11/18/2015	05/20/2015, 11/18/2015	05/20/2015, 11/18/2015	05/20/2015, 11/18/2015

Pollutant, POC	Continuous PM10, PM Coarse, 9	Continuous PM2.5, PM Coarse, 9	Speciated PM2.5, 11	Speciated PM2.5, 12
Parameter code	85101	88101	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/NCore	SLAMS	SLAMS/QA Collocated
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,	1:1	1:1	1:6	1:6

continuous)				
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)	1.8	2.6	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)	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 PM _{2.5} ? (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
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Pollutant, POC	24 Hour PM2.5, 1	24 Hour PM2.5, 2	24 Hour VOCs, 2	3 Hour VOCs, 1
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/QA Collocated	Research Support/NATTS	Research Support/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)	1	1	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)	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	
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/NATTS	SLAMS/NATTS/QA Collocated	SLAMS/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	
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)	CA Air Toxics	CA Air Toxics	SLAMS/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 (MM/DD/YYYY)	01/1989	01/1989	06/01/2009	

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 PM _{2.5} ? (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
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)	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	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)	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 PM _{2.5} ? (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	NO _y , 9		
Parameter code	42101	42612		

Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Highest Concentration		
Monitor (type)	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.



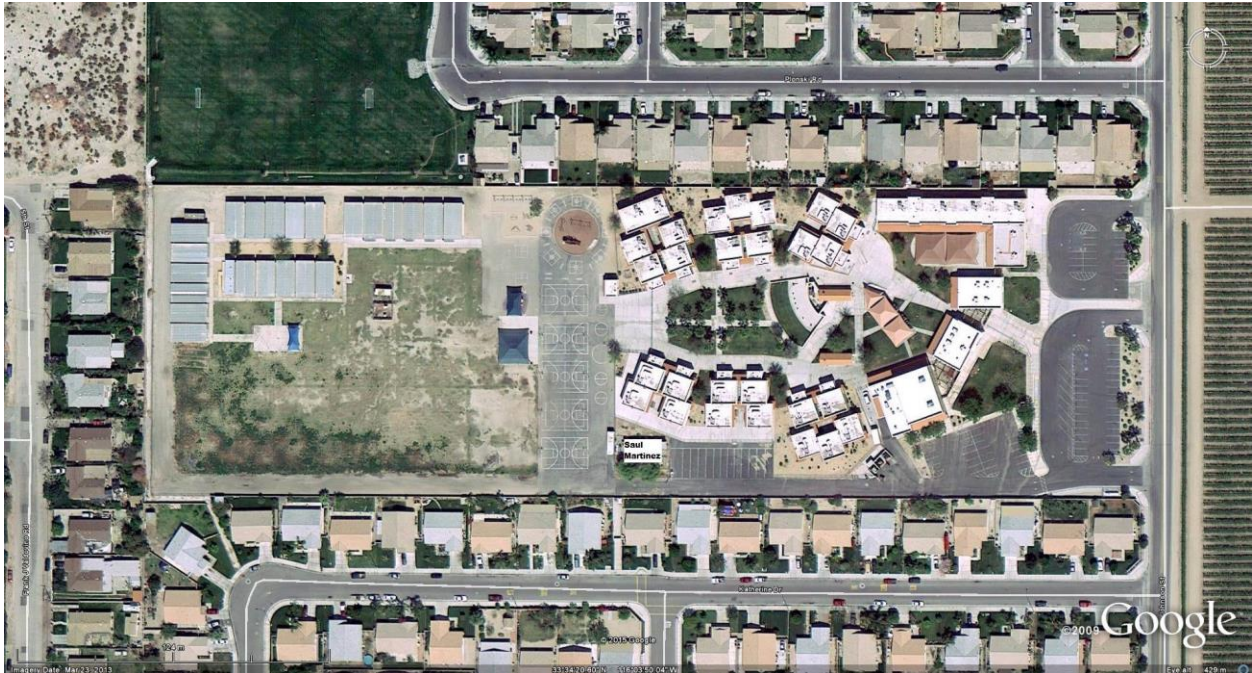
Looking at the probe from the South.



Looking at the probe from the West.

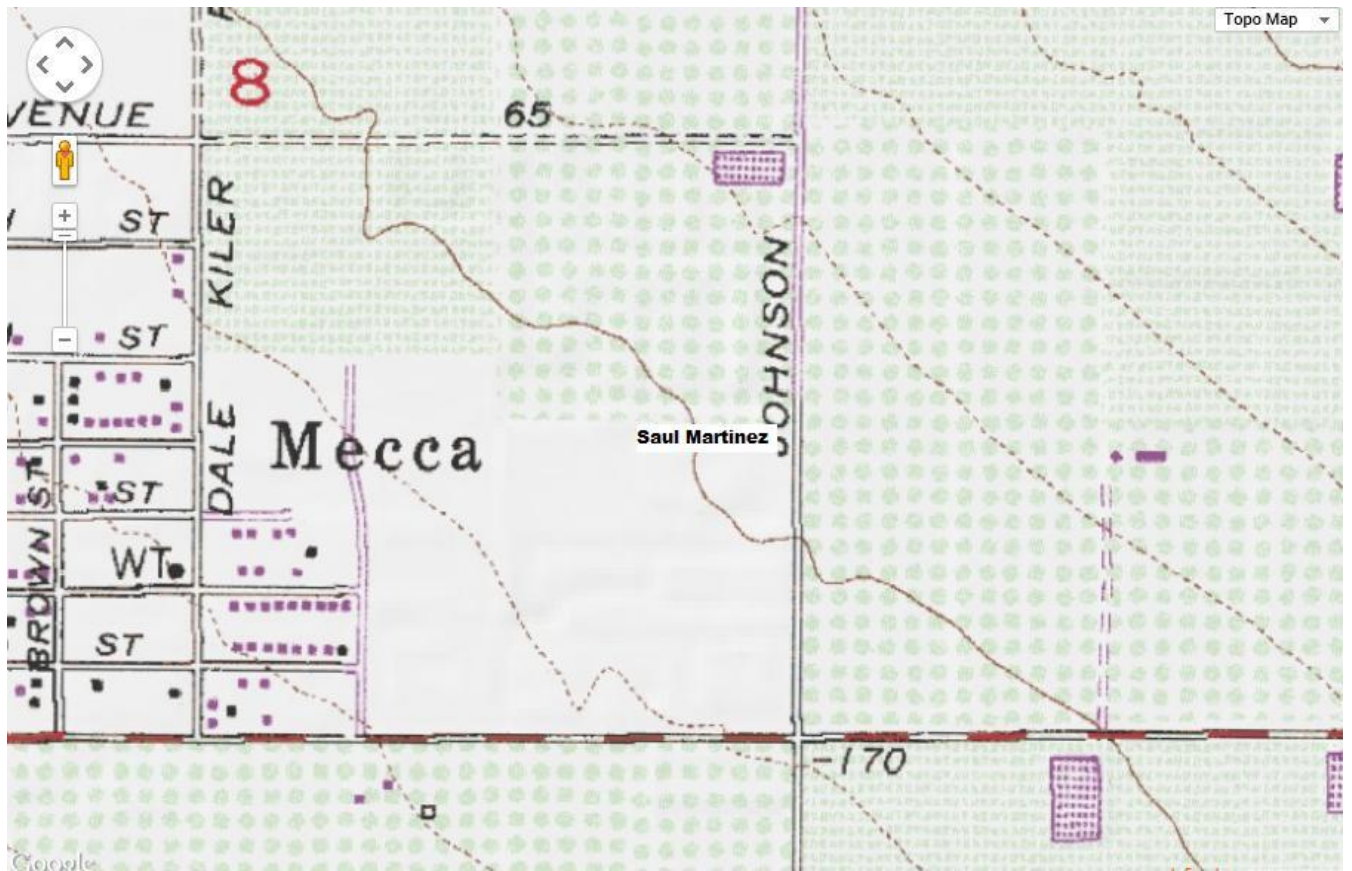
Quality Assurance
Site Survey Report for Mecca (Saul Martinez)

Last updated: May 15, 2016



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		
Parameter code	See Table 26	81102		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Highest Concentration		
Monitor (type)	SLAMS	SLAMS		
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	2.4		
Distance from supporting structure (meters)	1	1.4		
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)	Scheduled for 2016	Scheduled for 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.



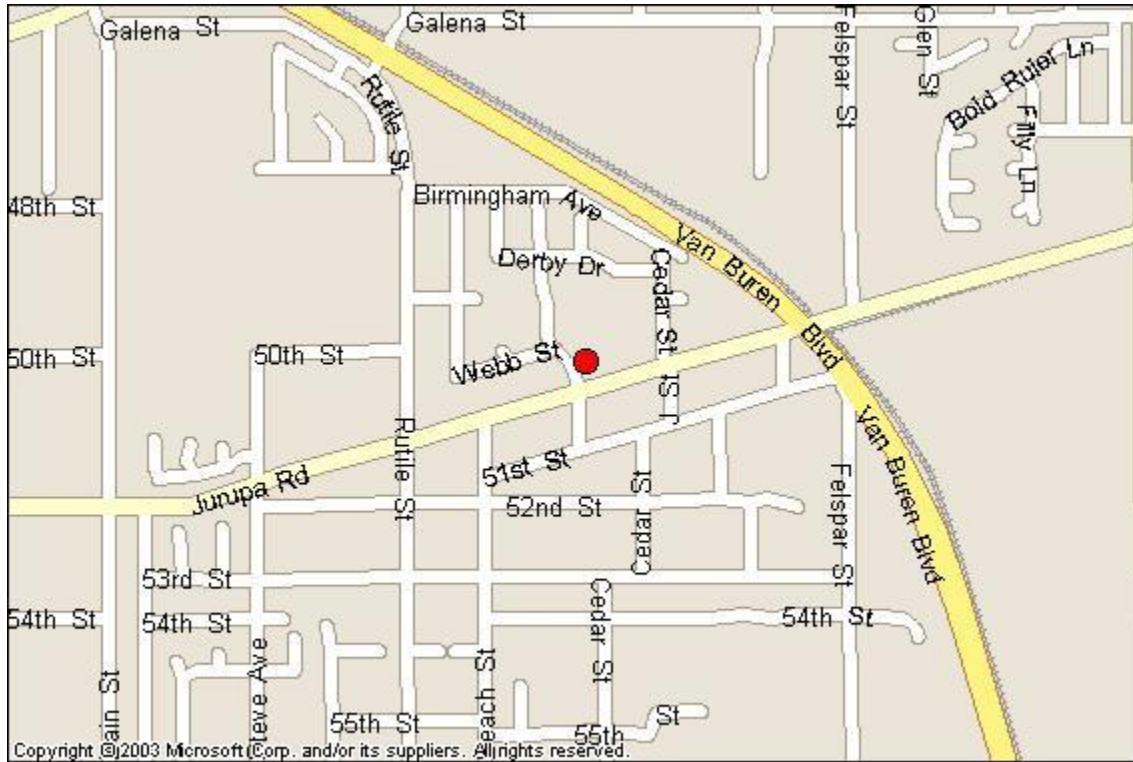
Looking at the probe from the South.



Looking at the probe from the West.

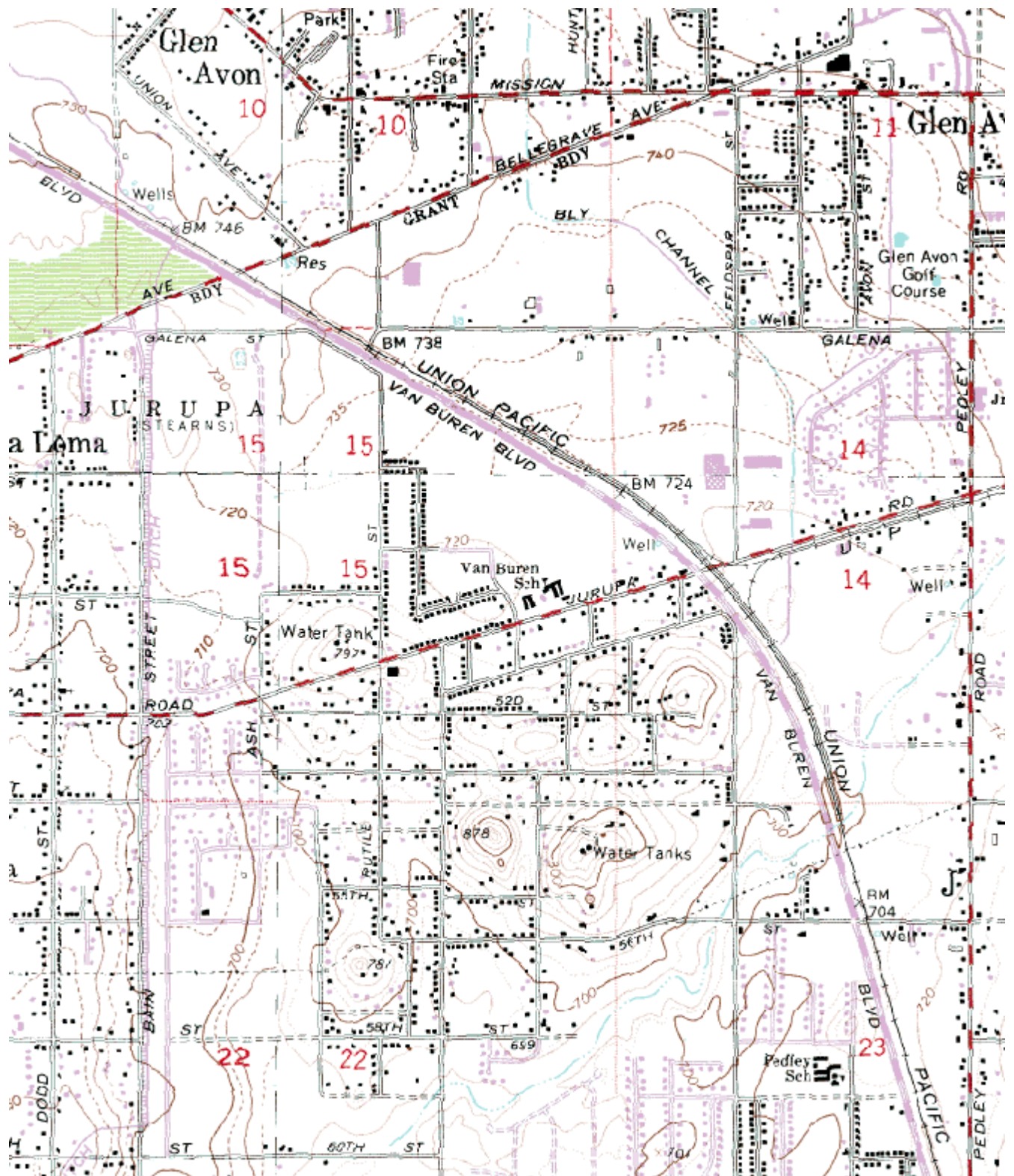
Quality Assurance Site Survey Report for Mira Loma (Van Buren)

Last updated: May 15, 2016



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
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
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)	1.8	1.8	1.8	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)	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)	11/13/2015	11/13/2015	11/13/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/19/2015, 11/13/2015

Pollutant, POC	Continuous PM2.5, 3	24 Hour PM2.5, 1	Continuous PM10, 3	24 Hour PM2.5, 2
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

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)	1.9	1.9	1.9	1.9
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	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	No, unless the manual sampler has missing	Yes	No	Yes

the annual PM2.5? (Y/N)	data.			
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)	06/20/2015, 12/05/2015	05/19/2015, 11/13/2015	06/20/2015, 12/05/2015	06/04/2015, 11/13/2015

Pollutant, POC	PM10, 2	PM10, 4		
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		
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)	1.6	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)	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		

**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.

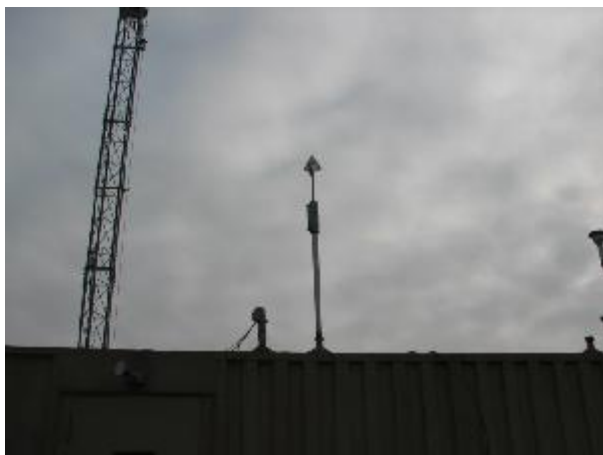
Mira Loma (Van Buren)
Site Photos (Cont.)



Looking at the probe from the North.



Looking at the probe from the East.



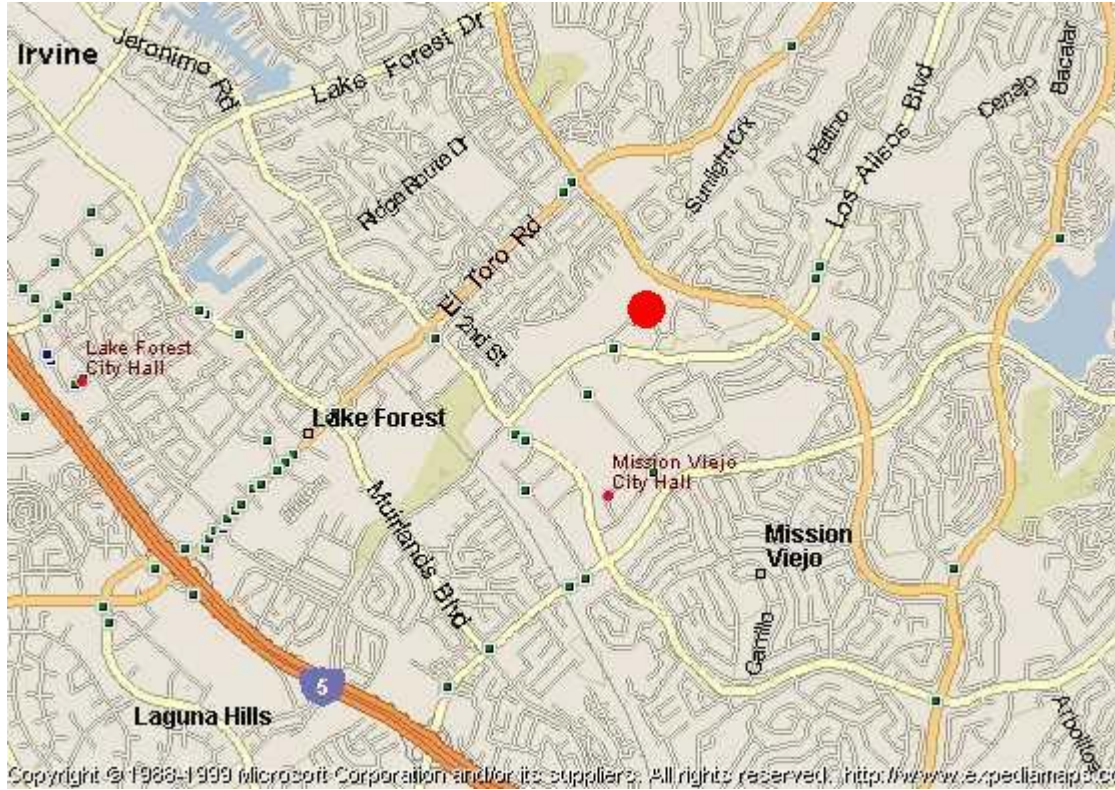
Looking at the probe from the South.



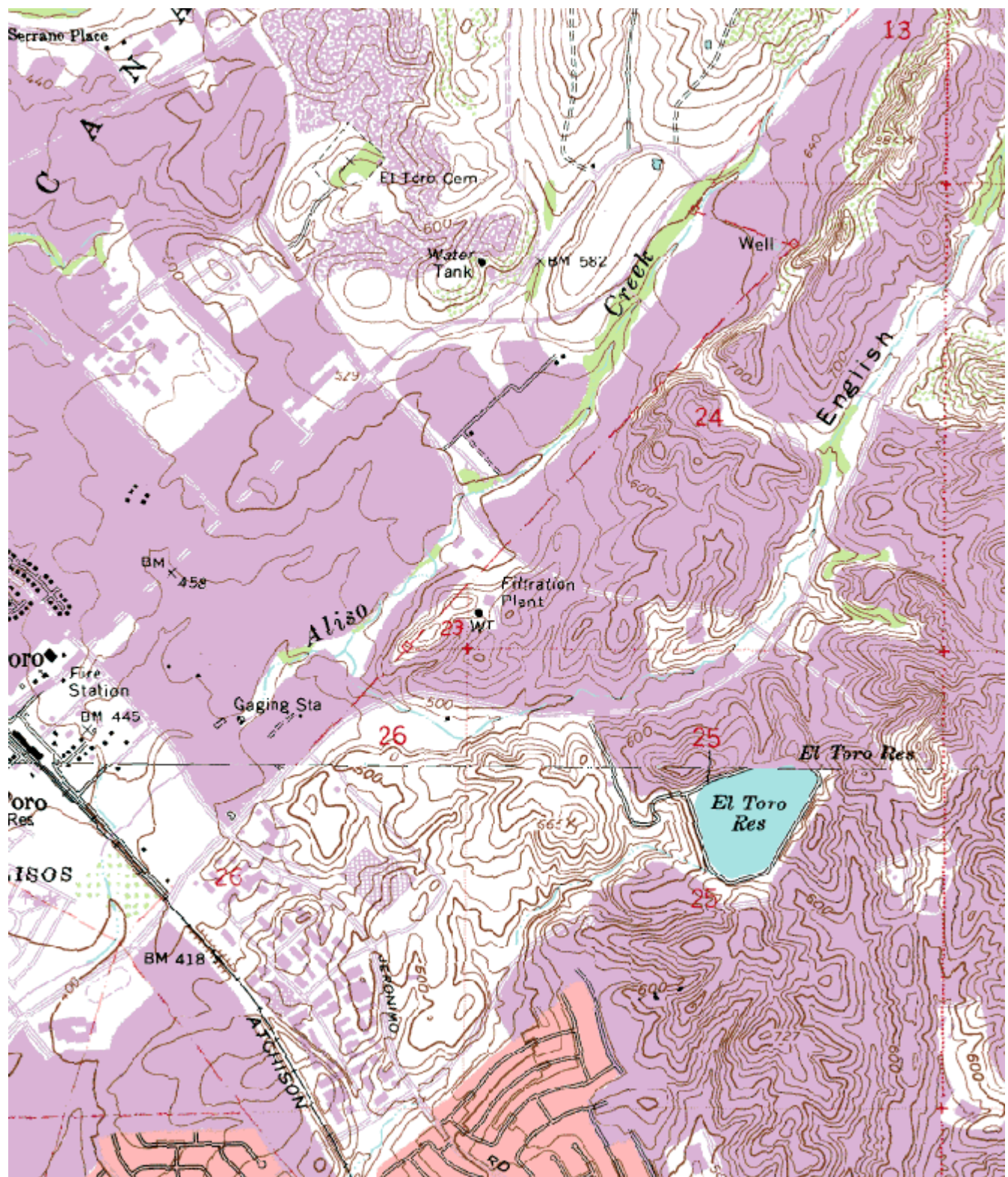
Looking at the probe from the West.

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
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
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 PM _{2.5} ? (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)	03/05/2015	03/05/2015	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	05/25/2015, 11/07/2015	05/25/2015, 11/07/2015

**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.



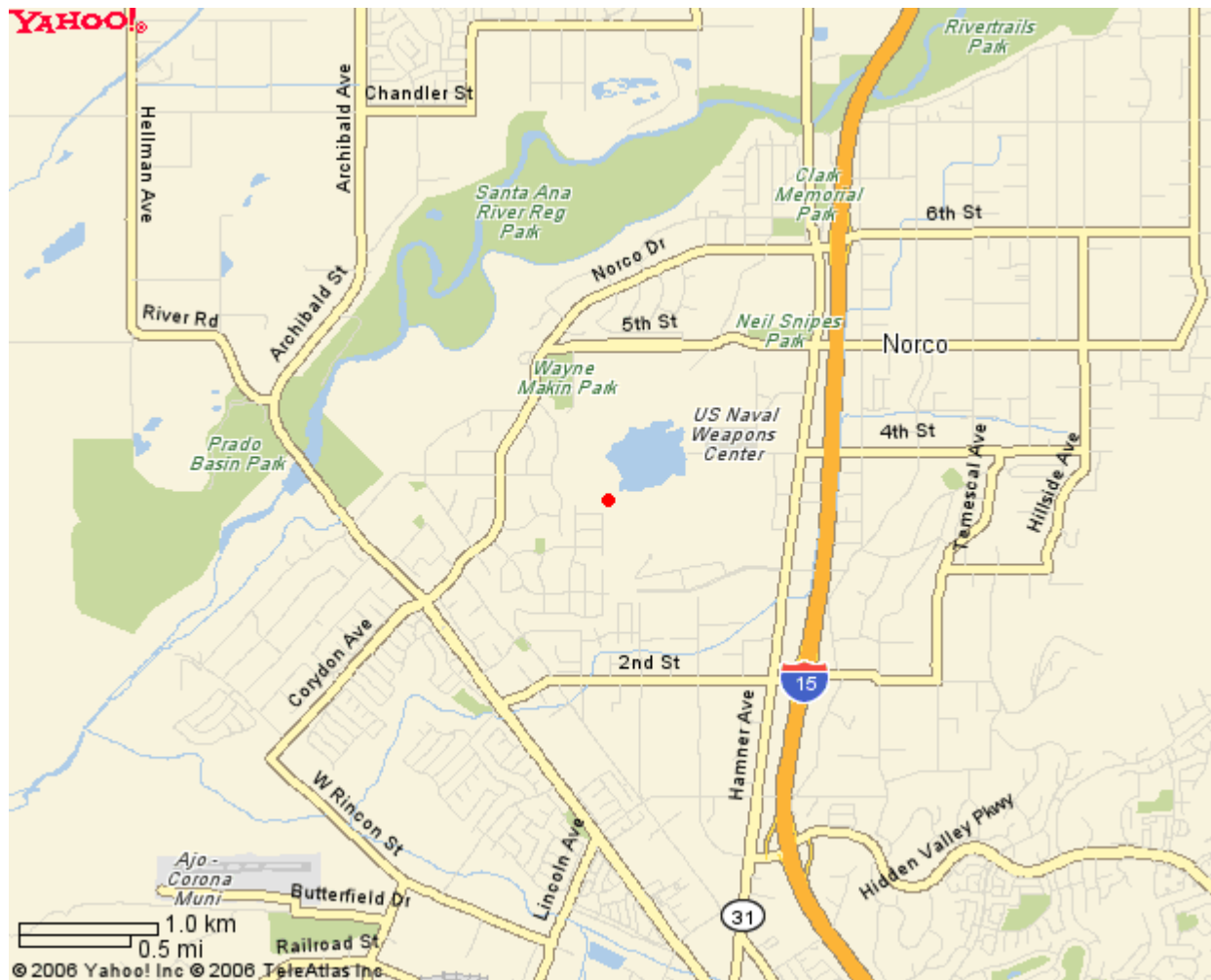
Looking at the probe from the South.



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

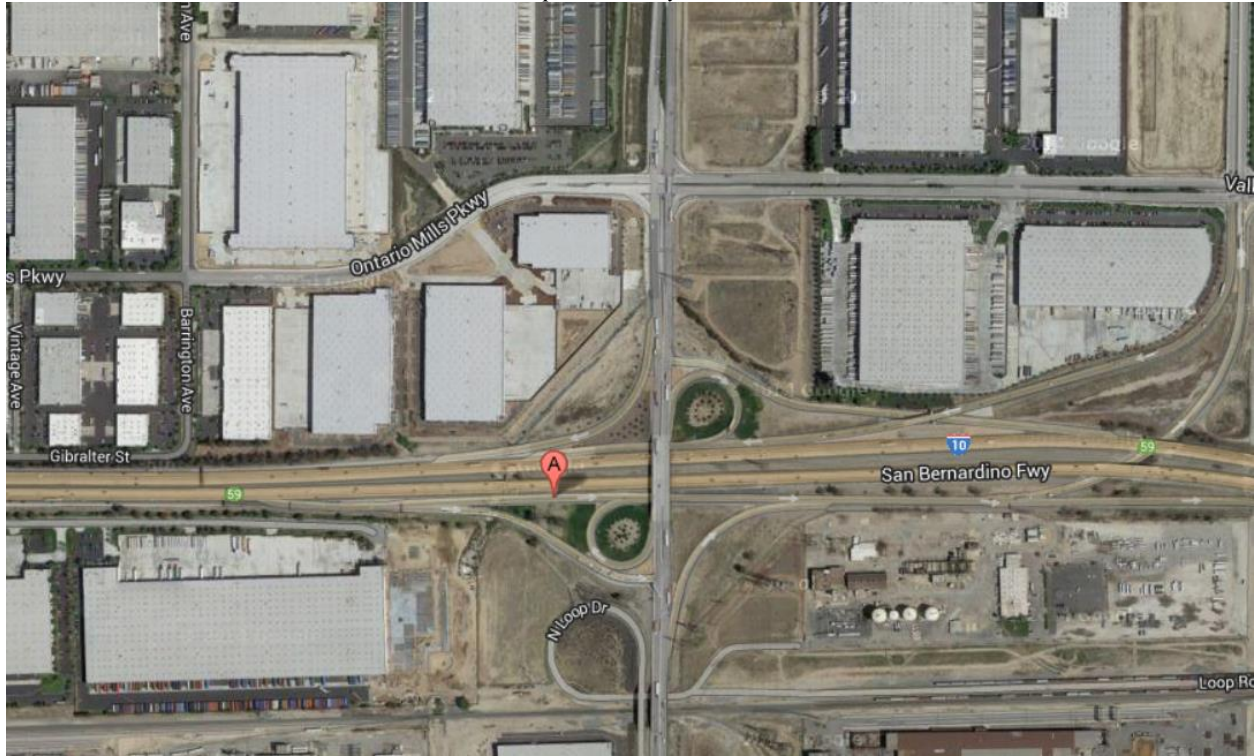
Detailed Site Information

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			
Parameter code	See Table 26			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Population Exposure			
Monitor (type)	SLAMS			
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)	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 colocated 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)	06/04/2015, Out of service due to power issues.			

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

Last updated: May 15, 2016



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		
Parameter code	42603	42101		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS\Near Road	SLAMS\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	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)	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A		
Distance between colocated 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)	11/15/2015	11/15/2015		
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.



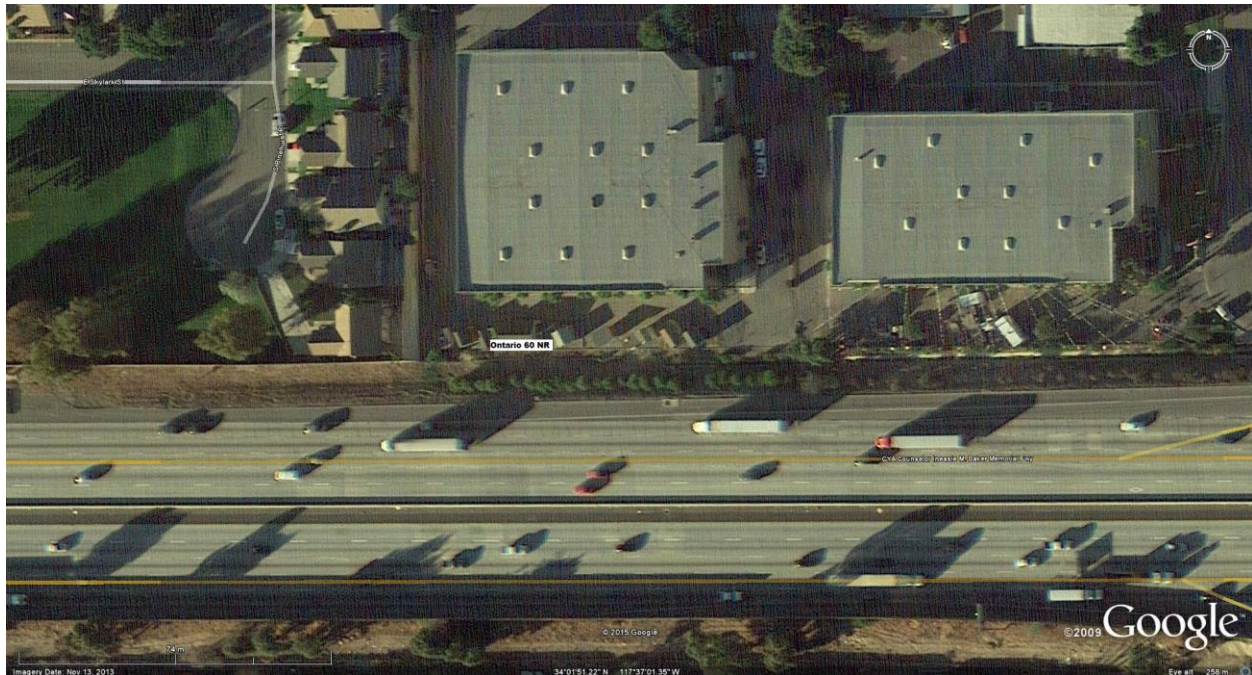
Looking at the probe from the South.



Looking at the probe from the West.

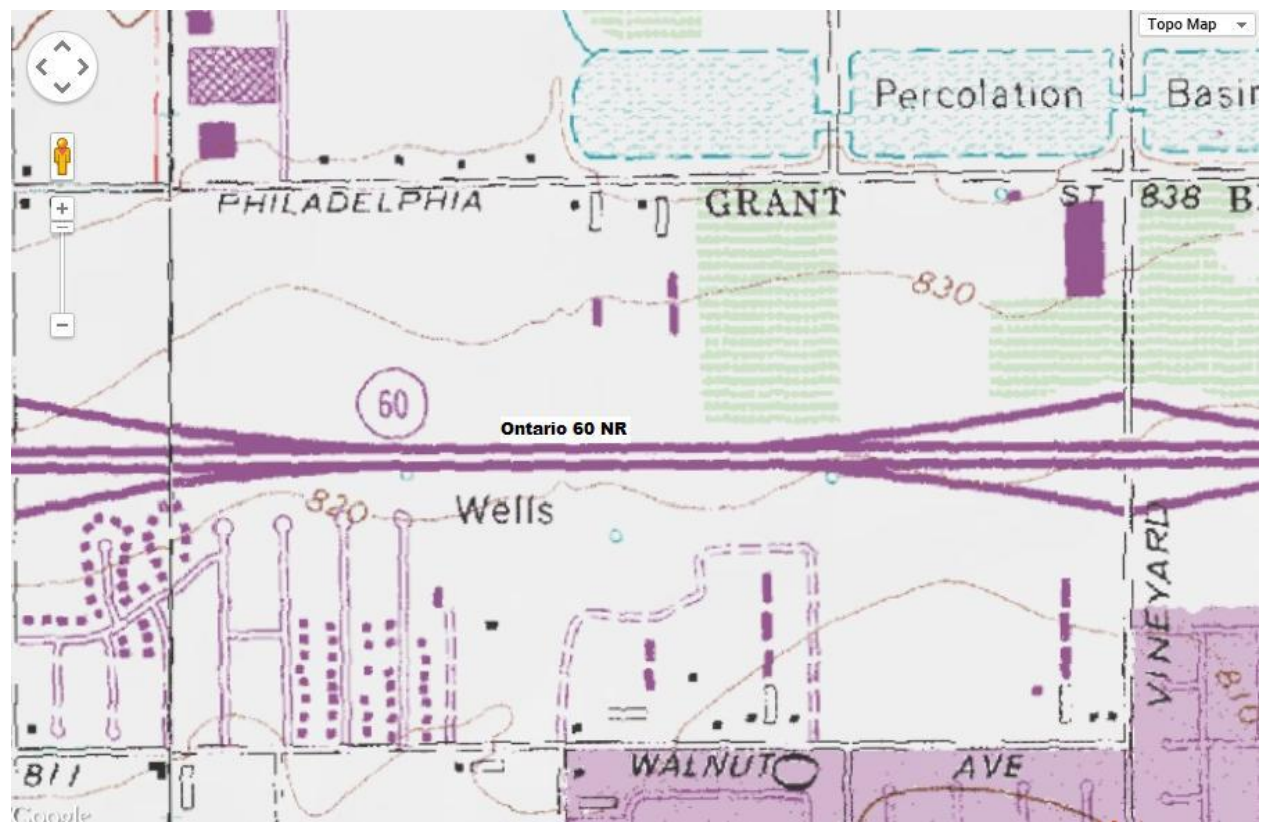
Quality Assurance Site Survey Report for Ontario-Route 60 Near Road

Last updated May, 2016



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	
Parameter code	42602	See Table 26	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SLAMS	
Instrument manufacturer and model	Thermo 42i	Thermo 2025i	Thermo 5014	
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 colocated 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)	10/01/2015	N/A	N/A	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	Unaudited first half, 11/19/2015	Unaudited	

**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.

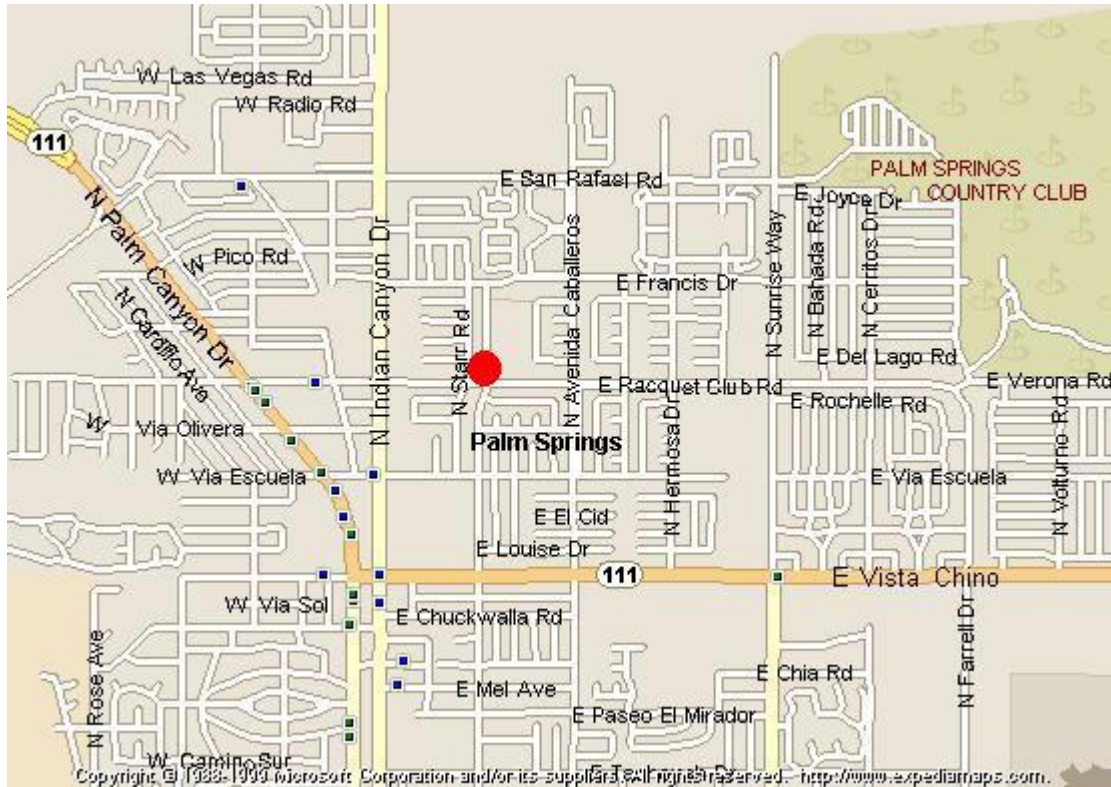


Looking at the probe from the South.



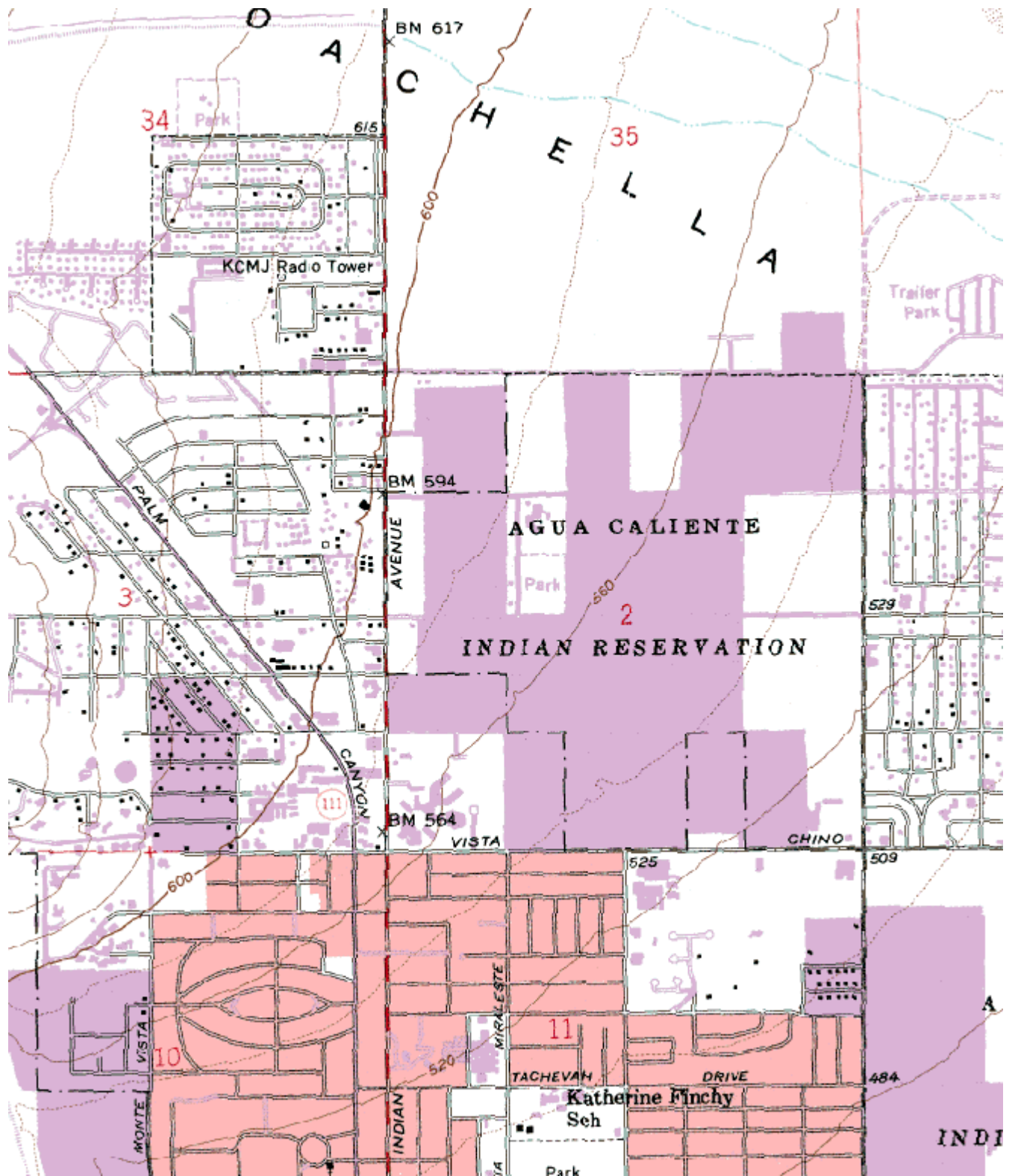
Looking at the probe from the West.

Last updated: May 15, 2016



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
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
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	2.46
Distance from supporting structure (meters)	2.0	2.0	2.0	1.5
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)	12/03/2015	12/03/2015	12/03/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	05/14/2015, 10/23/2015

Pollutant, POC	Continuous PM10, 3	24 Hour PM2.5, 1		
Parameter code	81102	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS	SLAMS		

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)	06/21/2015, 12/03/2015	05/14/2015, 11/24/2015		

**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.



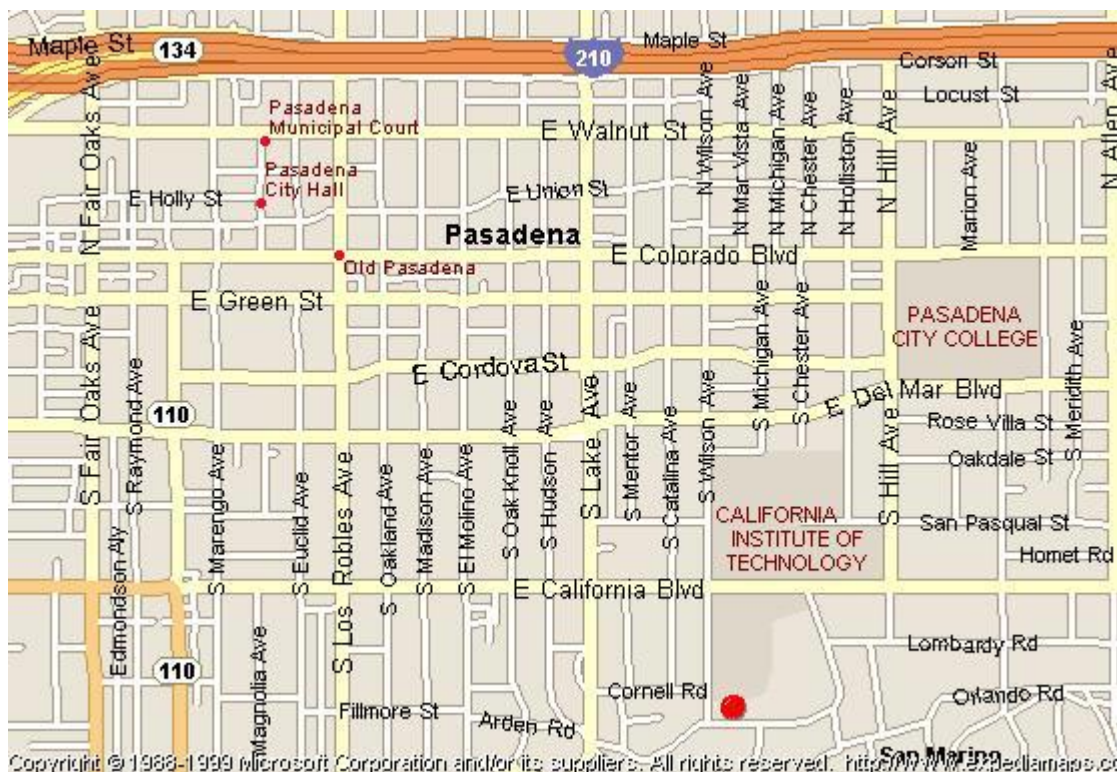
Looking at the probe from the West.



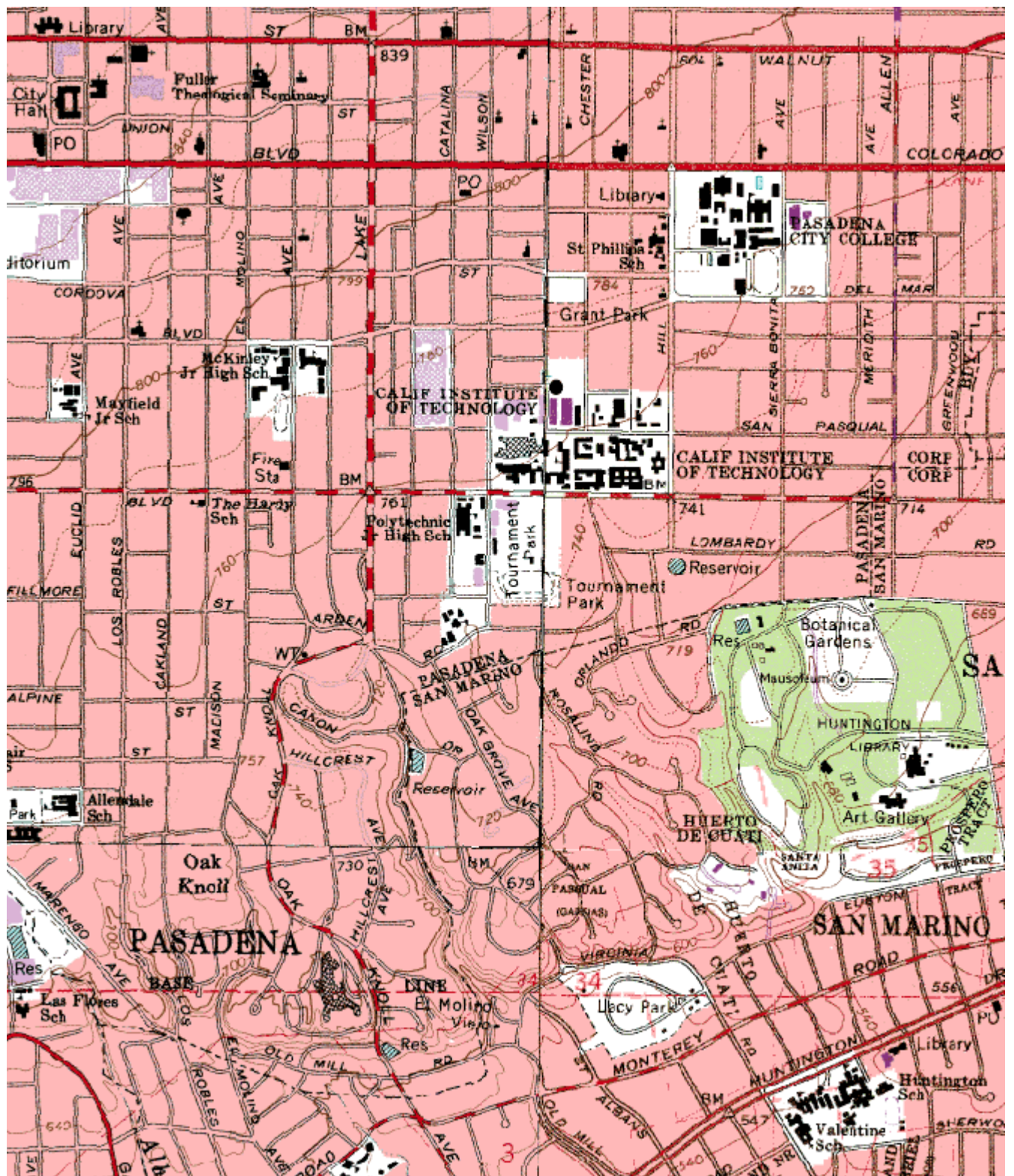
Looking at the probe from the North.

Quality Assurance Site Survey Report for Pasadena

Last updated: May 15, 2016



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
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
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 (Height 15)	13 (Height 15)	13 (Height 15)	13 (Height 15)

Distance from trees (meters)	6 (Height -1)	6 (Height -1)	6 (Height -1)	6 (Height -1)
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)	09/13/2015	09/13/2015	09/13/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	04/17/2015, 11/06/2015

**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.

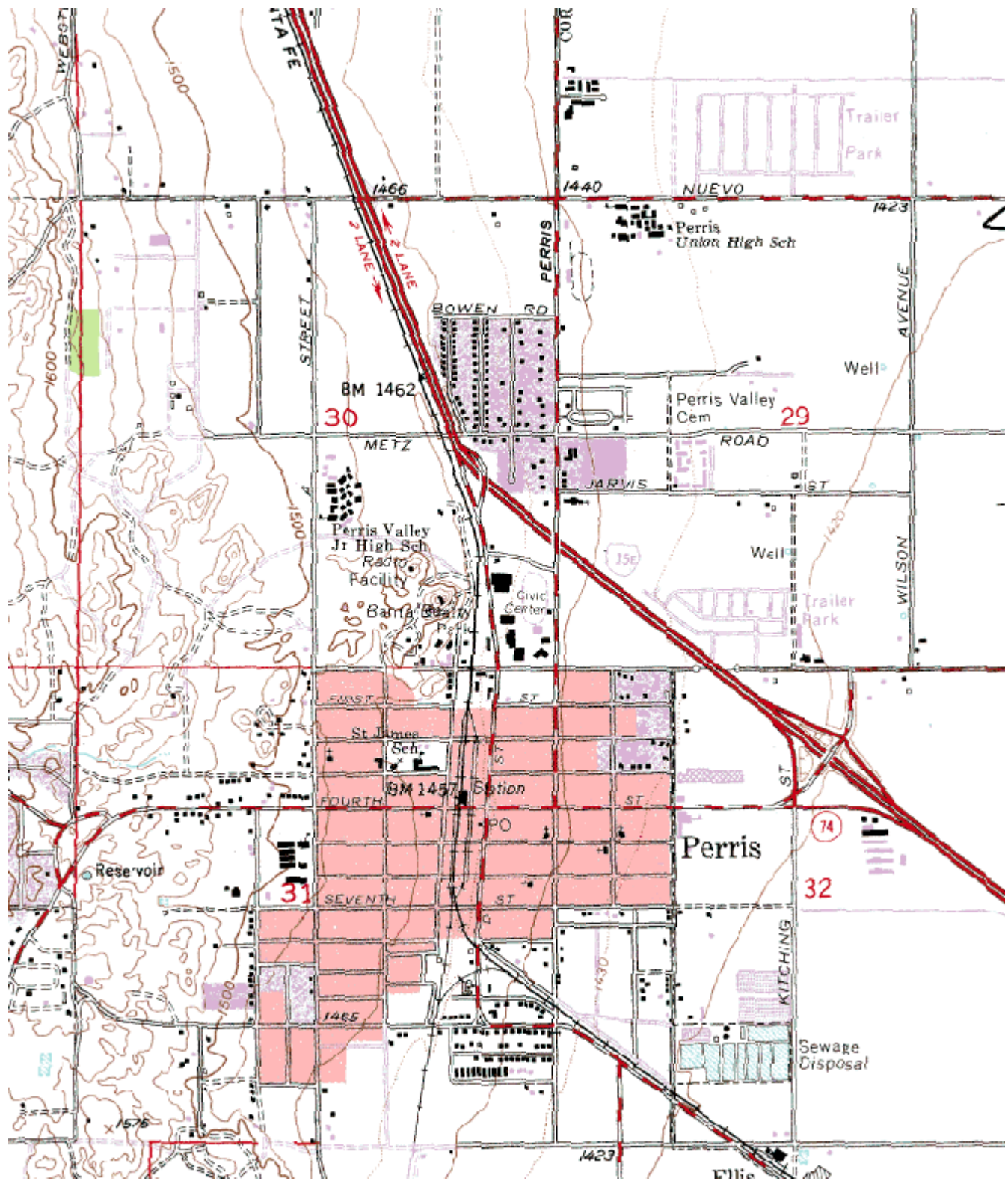
Quality Assurance Site Survey Report for Perris

Last updated: May 15, 2016



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		
Parameter code	44201	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS	SLAMS		
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	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 colocated 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)	09/08/2015	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	06/04/2015, 11/13/2015		

**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.



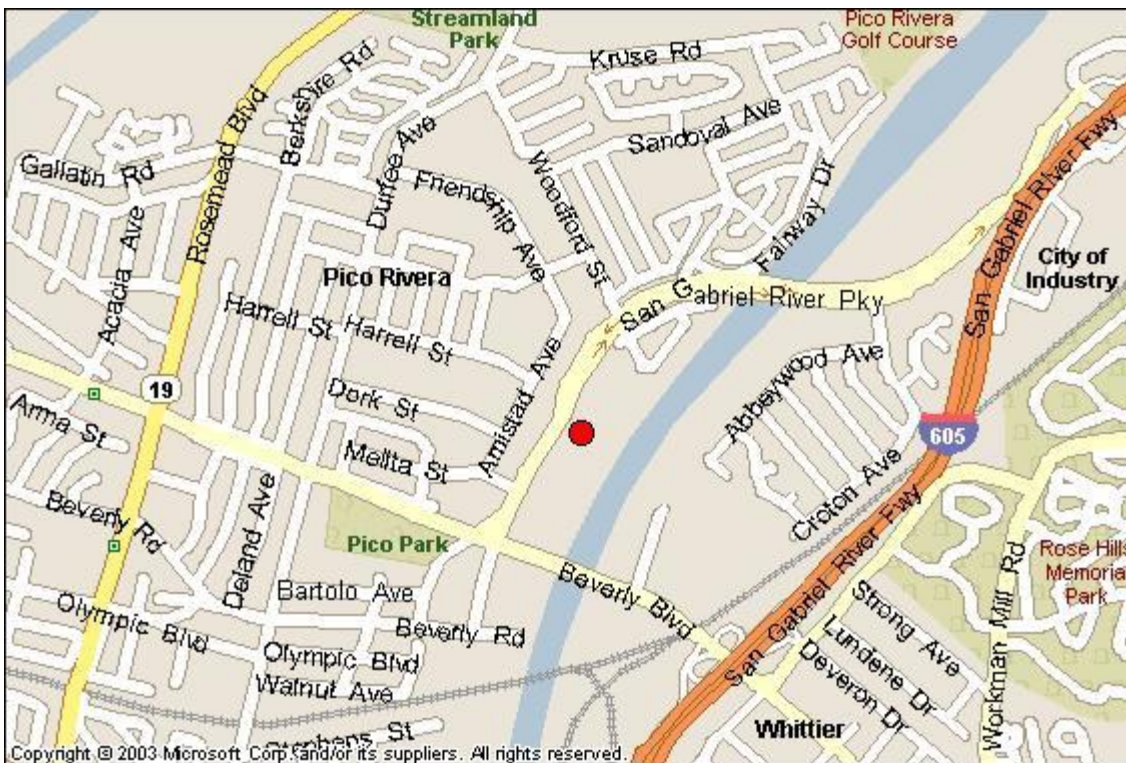
Looking at the probe from the South.



Looking at the probe from the West.

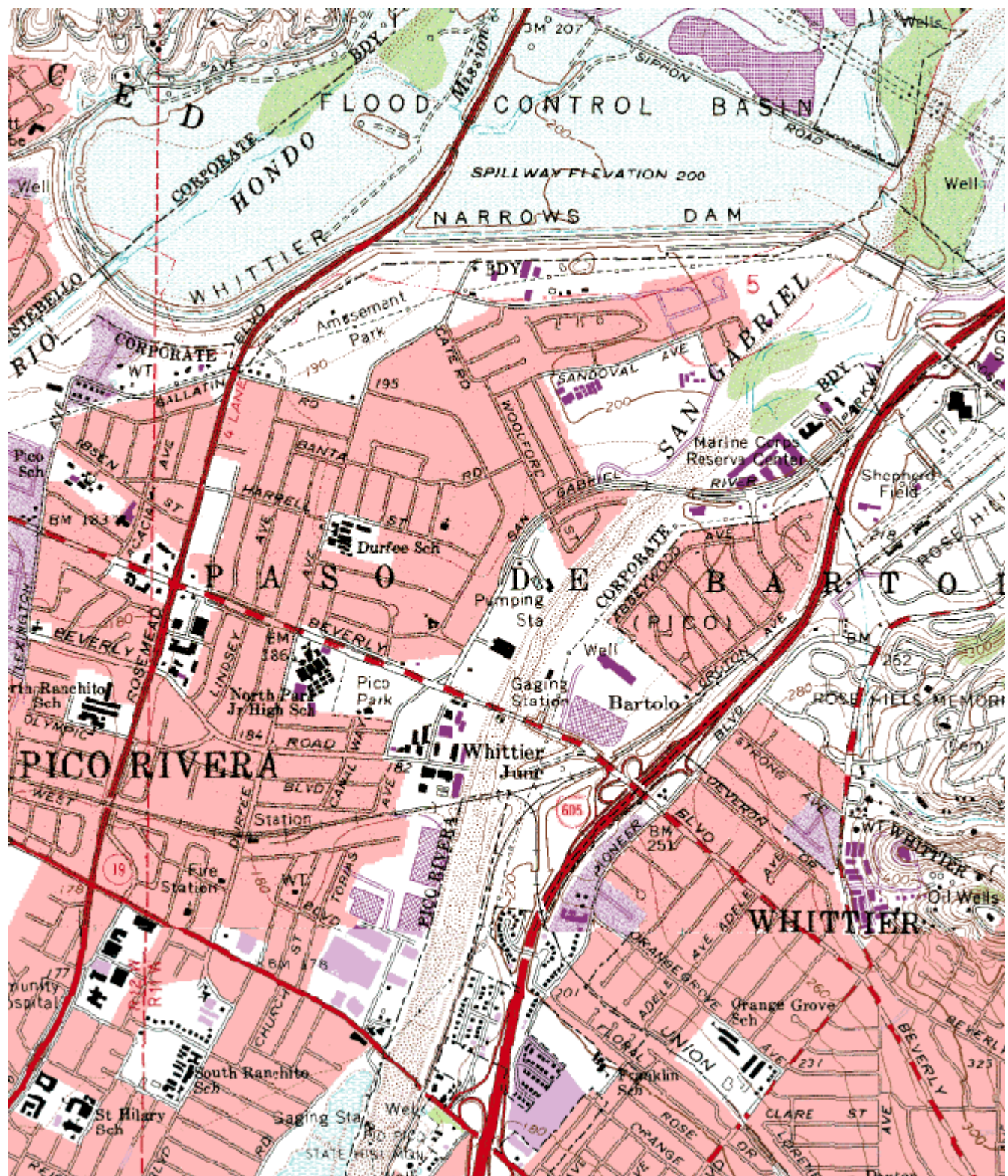
Quality Assurance Site Survey Report for Pico Rivera #2

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
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
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	2.11
Distance from supporting structure (meters)	1.8	1.8	1.8	1.12
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)	08/25/2015	08/25/2015	08/25/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/03/2015, 11/18/2015

Pollutant, POC	24 Hour PM2.5, 1	VOCs 24 hour, 2	VOCs 3 hour, 1	Carbonyls, 2
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	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)	1.83	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)	4	N/A	N/A	N/A
Distance between colocated 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	03/17/2015	03/17/2015
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/20/2015, 11/18/2015	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.



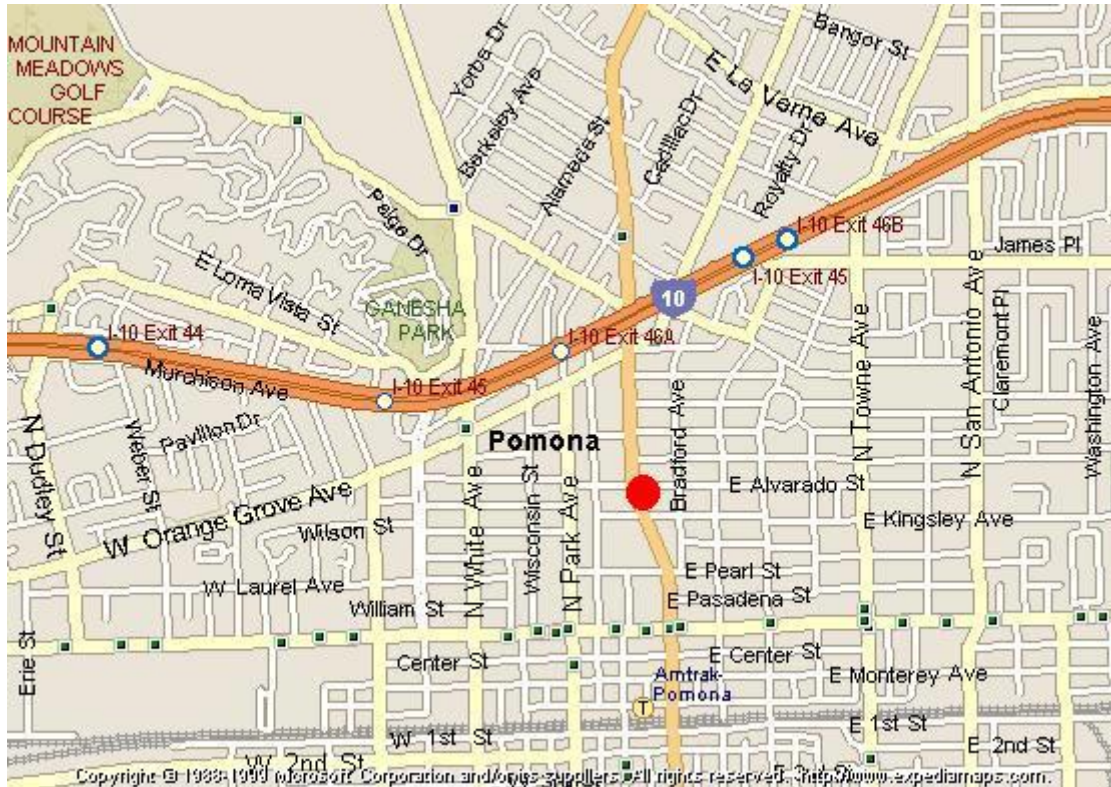
Looking at the probe from the South.



Looking at the probe from the West.

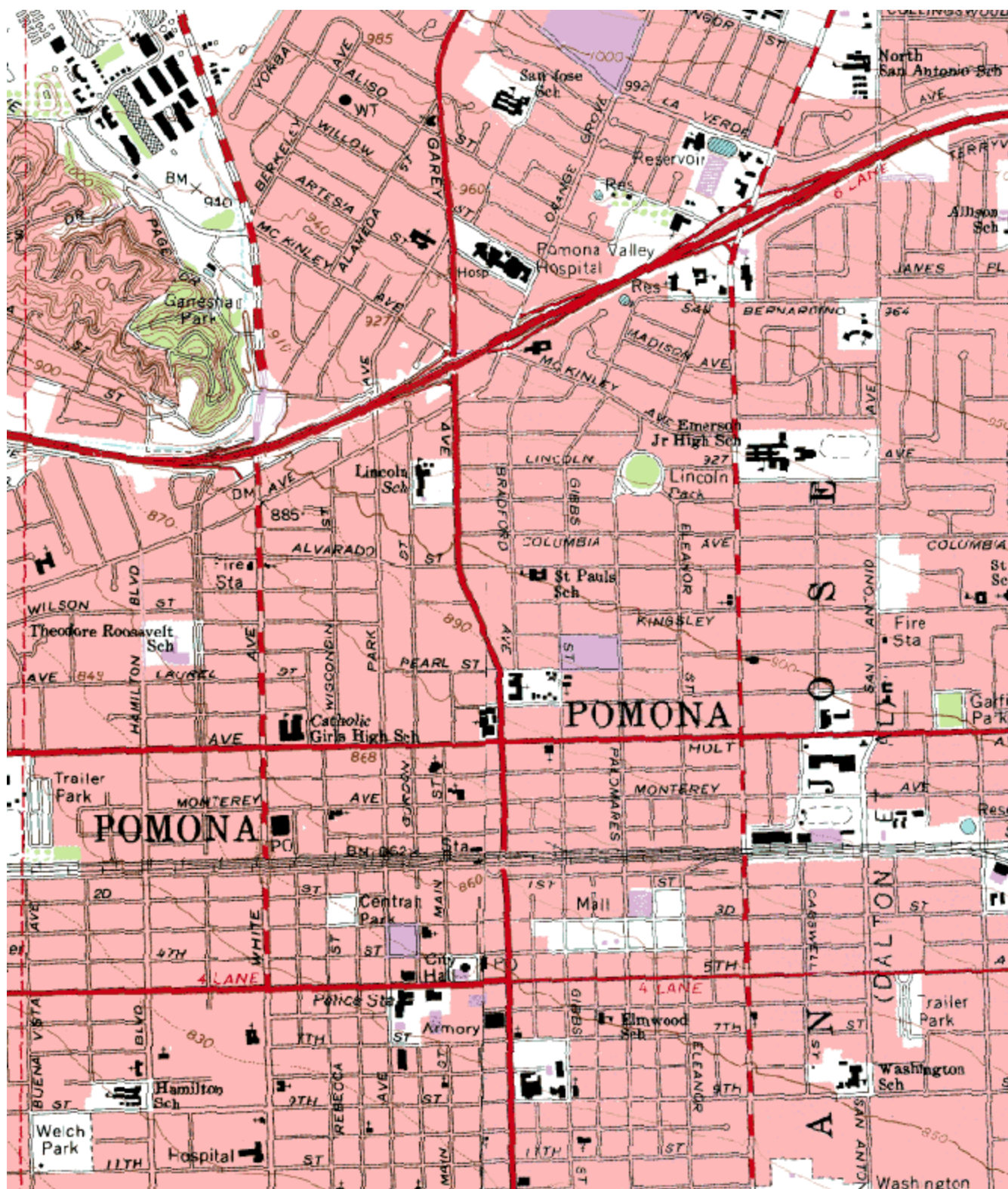
Quality Assurance Site Survey Report for Pomona

Last updated; May 15, 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	
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	
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 colocated 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)	02/27/2015	02/27/2015	02/27/2015	
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.



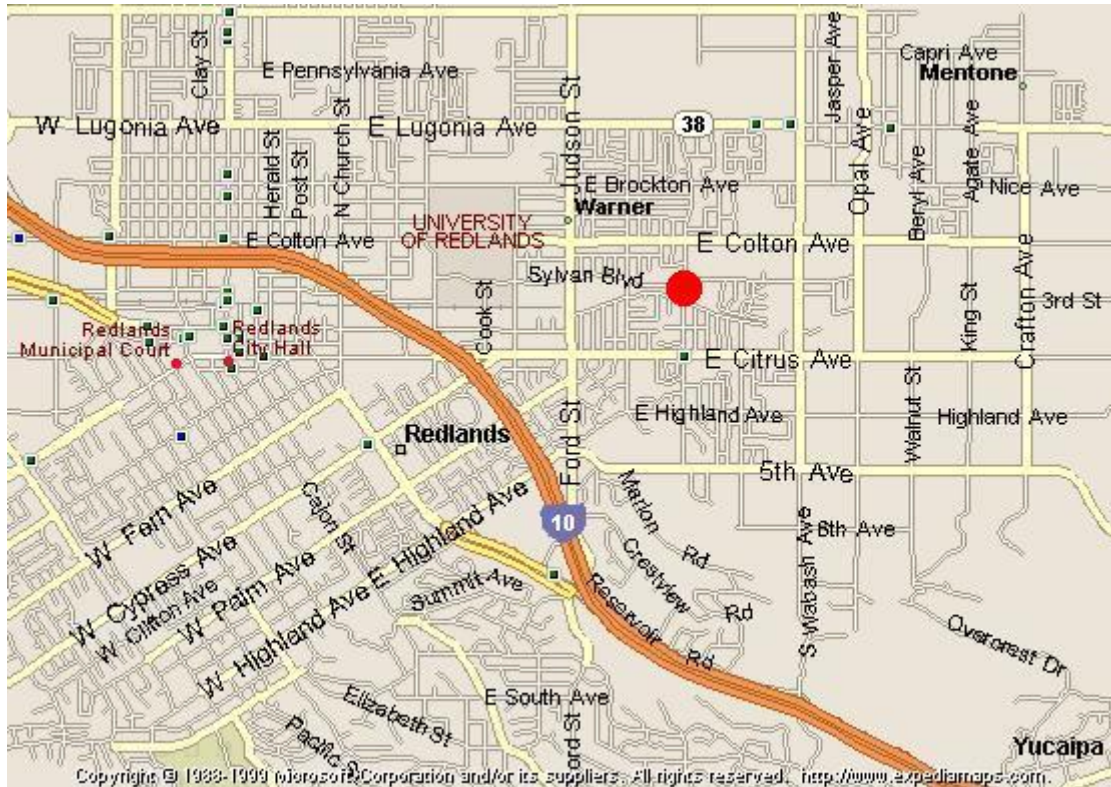
Looking at the probe from the South.



Looking at the probe from the West.

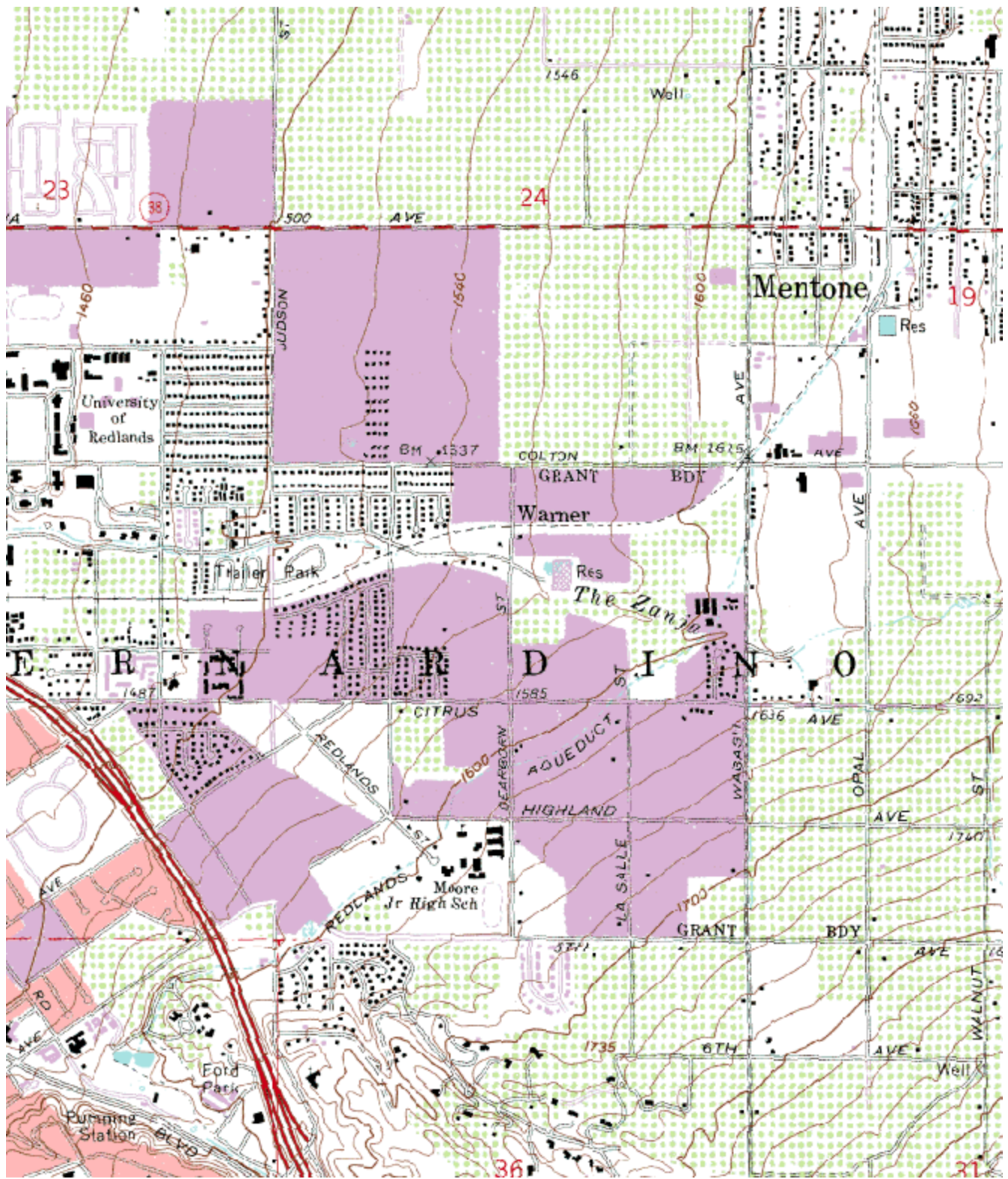
Quality Assurance Site Survey Report for Redlands

Last updated: May 15, 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		
Parameter code	44201	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS	SLAMS		
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)	1.6	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 colocated 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)	11/04/2015	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/16/2015, 10/23/2015		

**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.



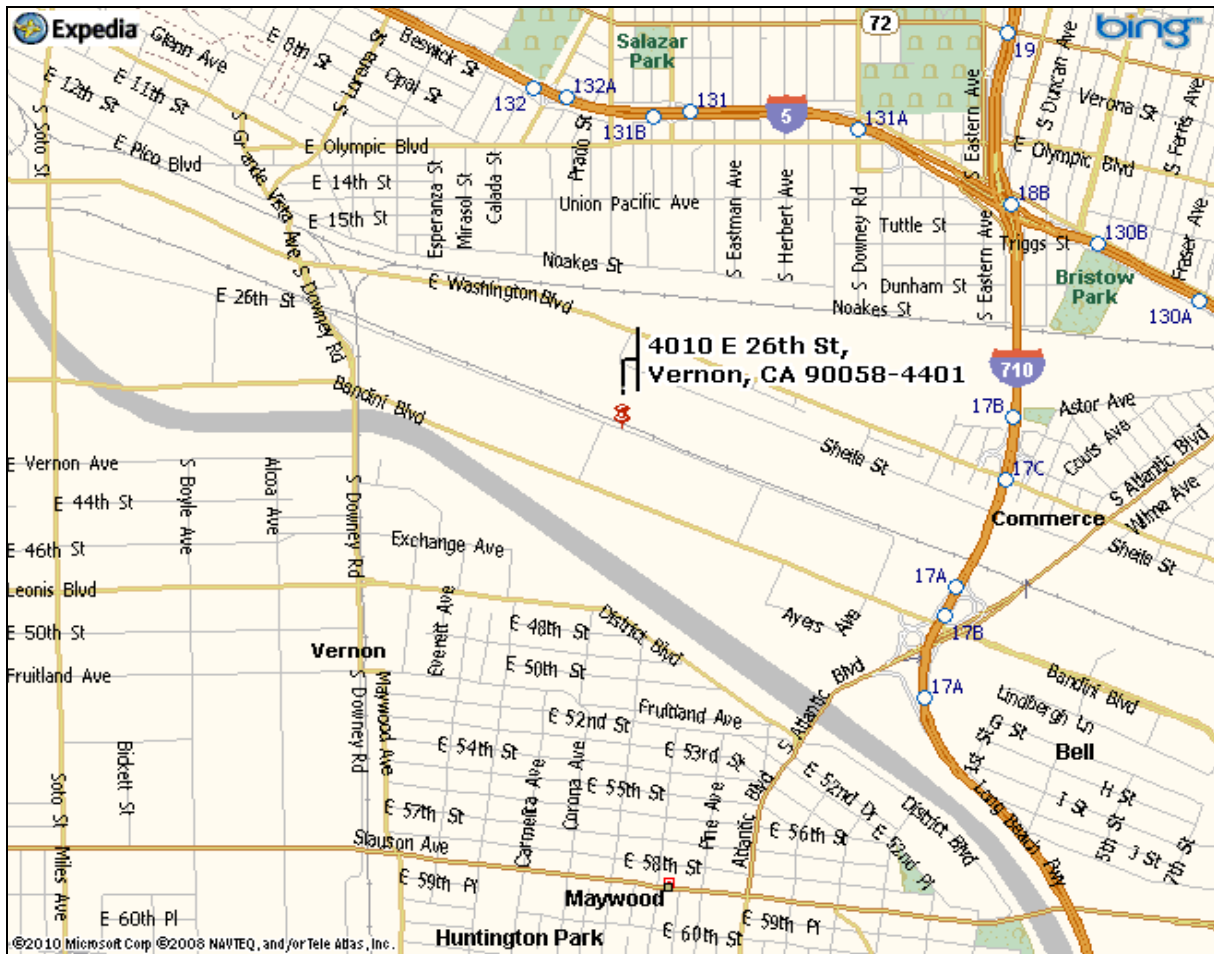
Looking at the probe from the South.



Looking at the probe from the West.

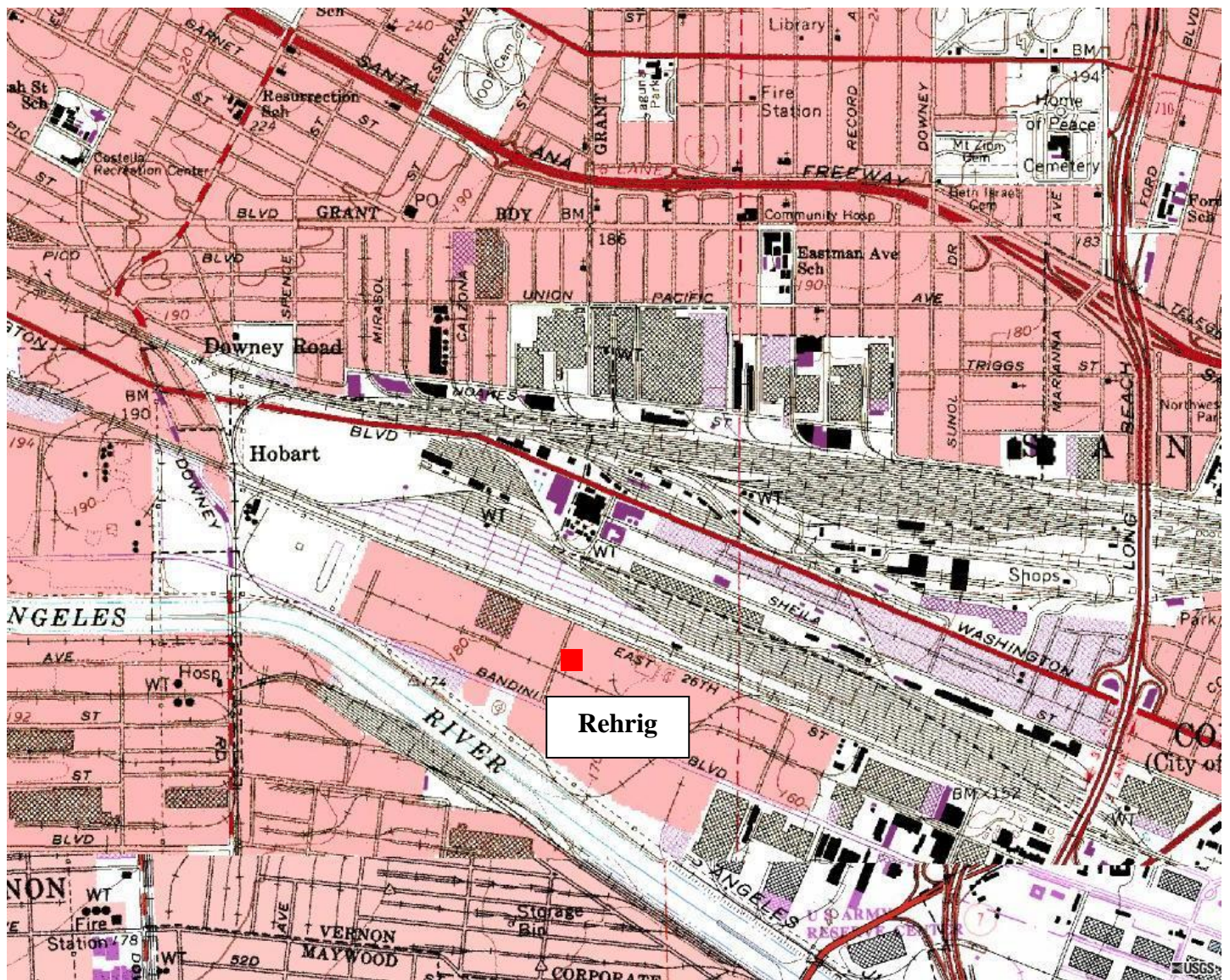
Quality Assurance Site Survey Report for Rehrig (Exide)

Last updated May, 2016



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



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	
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	
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)	2.6	2.6	2.6	
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)	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 PM _{2.5} ? (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)	06/03/2015, 11/25/2015	06/03/2015, 11/25/2015	06/03/2015, 11/25/2015	

**Exide - Rehrig
Site Photos**



Looking North



Looking East from the probe.



Looking South from the probe.



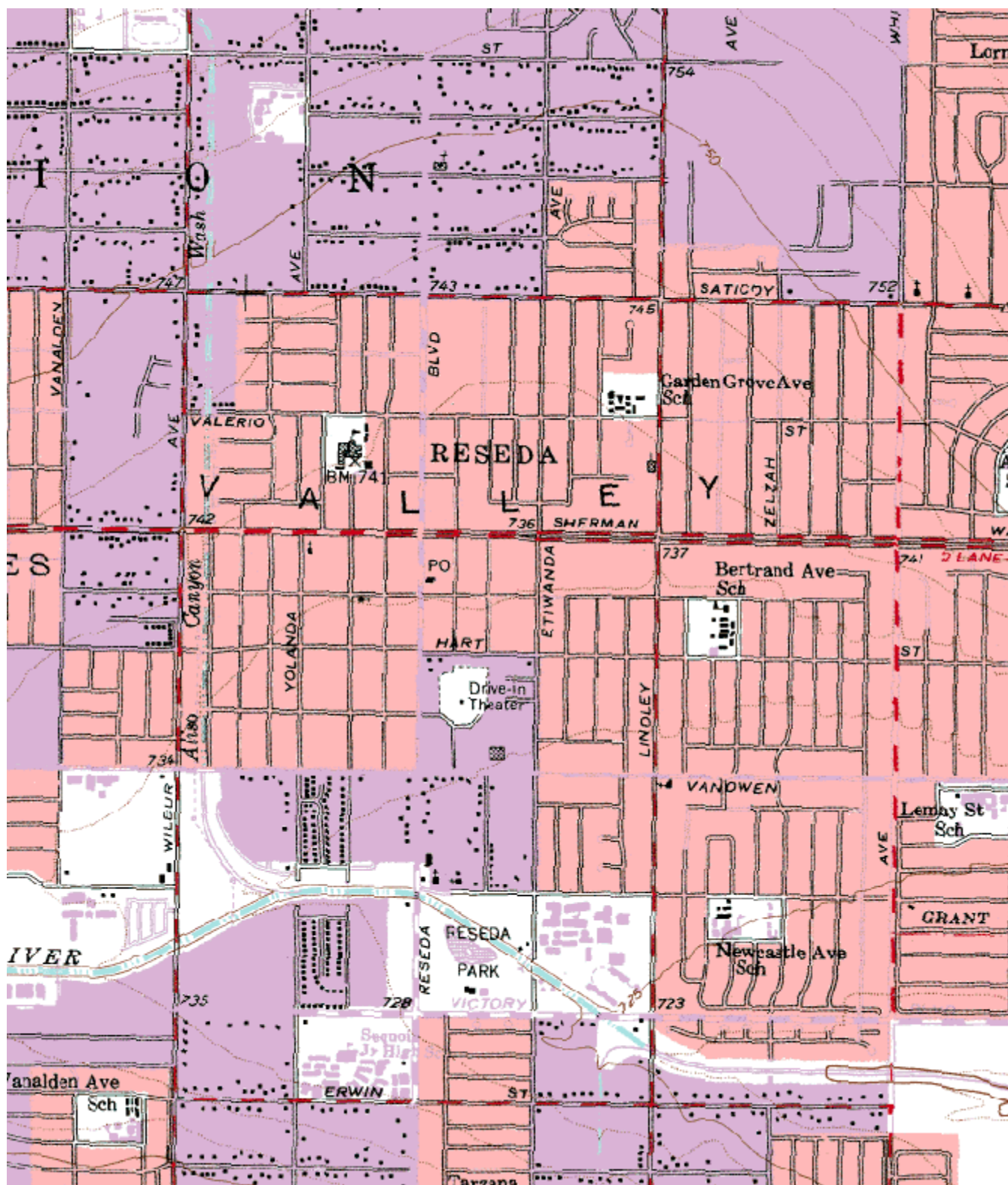
Looking West toward the probe

Quality Assurance Site Survey Report for Reseda

Last updated: May 15, 2016



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	
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	
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)	02/20/2015	02/20/2015	02/20/2015	
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		
Parameter code	88502	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure		
Monitor (type)	SLAMS	SLAMS		

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)	04//17//2015, 11//06//2015	04//17//2015, 11//06//2015		

**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.



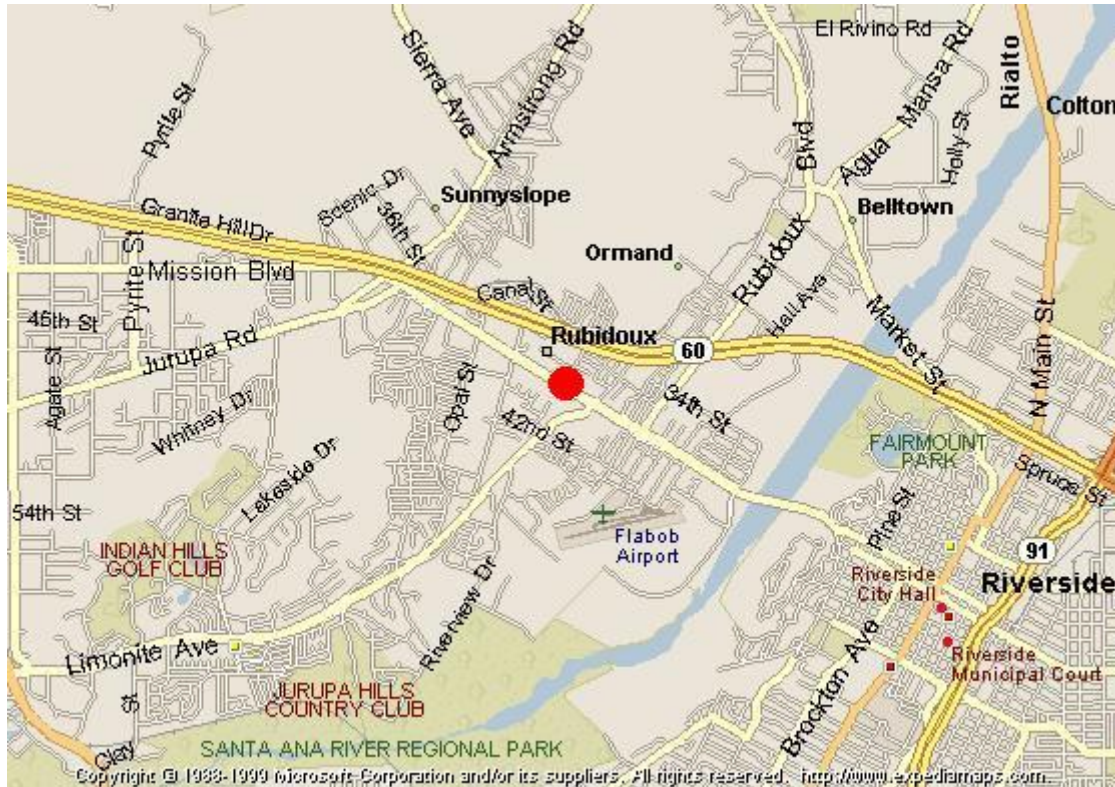
Looking at the probe from the South.



Looking at the probe from the West.

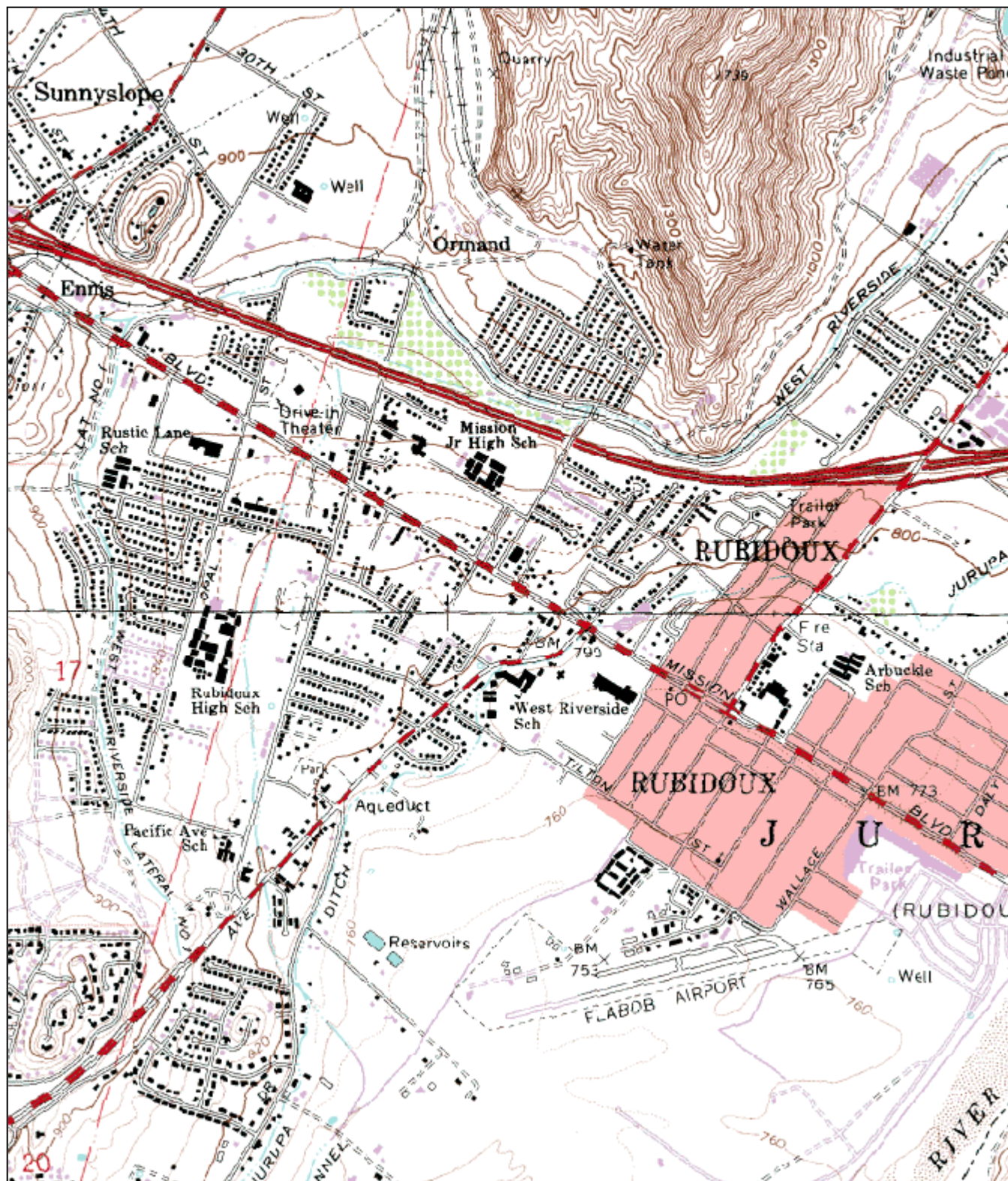
Quality Assurance Site Survey Report for Riverside-Rubidoux

Last updated May, 2016



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	
Parameter code	42101	42602	44201	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	
Monitor (type)	SLAMS/PAMS/ NCore	SLAMS/PAMS/ NCore	SLAMS/PAMS/ 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)	03/19/2015	03/19/2015	03/19/2015	
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, 4	Continuous PM10, PM Coarse, 9	24 Hour VOCs, 4
Parameter code	88101	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	SLAMS	SLAMS	NATTS
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020	RM Env. 910
Method code	170	731	122	See Table 26
FRM/FEM/ARM/ other	FEM	Non-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	No, unless the manual	N/A	No	N/A

comparison against the annual PM2.5? (Y/N)	sampler has missing data.			
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	12/18/15
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	05/19/2015, 11/13/2015	05/19/2015, 11/13/2015	05/19/2015, 11/13/2015	N/A

Pollutant, POC	24 Hour VOCs, 8	24 Hour VOCs, 2	3 Hour VOCs, 1	
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)	NATTS/QA Collocated	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	N/A	N/A	N/A	

frequency (e.g. 1:3/1:1)				
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)	06/24/2015	06/24/2015	06/24/2015	
Last two semi-annual flow rate audits for	N/A	N/A	N/A	

PM monitors (MM/DD/YYYY, MM/DD/YYYY)				
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Pollutant, POC	VOCs, N/A	24 Hour PM2.5, 2	24 Hour PM2.5, 1	Speciated PM2.5, 11
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)	CA Air Toxics	SLAMS/QA Collocated	SLAMS	SLAMS
Instrument manufacturer and model	RM Env. 910	Thermo 2025i PM2.5, B Sampler QA Collocated	Thermi 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	360°	360°	360°	360°

(degrees)				
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	05/19/15, 06/30/15, 11/13/15, 12/07/15	05/19/2015, 11/13/2015	06/14/2015, 12/16/2015

Pollutant, POC	Speciated PM2.5, N/A	Speciated PM2.5, N/A	PM2.5 Carbon, N/A	PM2.5 Carbon, N/A
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)	STN	STN/QA Collocated	STN	STN/QA Collocated
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	3	2	2
Distance from supporting structure (meters)	1.6	1.6	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)	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 PM _{2.5} ? (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	N/A	N/A	N/A	N/A

gaseous instruments				
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	Lead, 2	PM10, 2	PM10, 4	Metals, CR6, Carbonyls, 1
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/QA Collocated	NATTS
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)	2	2.5	2.5	3
Distance from supporting structure (meters)	1.6	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)	10	10	10	10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between colocated 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)	05/30/14, 12/17/14	05/19/2015, 11/13/2015	05/19/2015, 11/13/2015	N/A

Pollutant, POC	Metals, CR6, Carbonyls, 2	Metals, CR6, Carbonyls, N/A	Polycyclic Aromatic Hydrocarbons, 1	Polycyclic Aromatic Hydrocarbons, 2
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)	NATTS/QA Collocated	CA Air Toxics	NATTS	NATTS/QA Collocated
Instrument	RM Env. 924, B	RM Env. 924	Tisch Env. PUF, A	Graseby PUF, B

manufacturer and model	Sampler		Sampler	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?	N/A	N/A	N/A	N/A

(Y/N)				
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	
Parameter code	42101	42401	42612	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	
Monitor (type)	SLAMS/NCore	SLAMS/NCore	SLAMS/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	1.5	1.5	1.5	

(meters)				
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)	12/20/2015	12/20/2015	12/20/2015	
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.



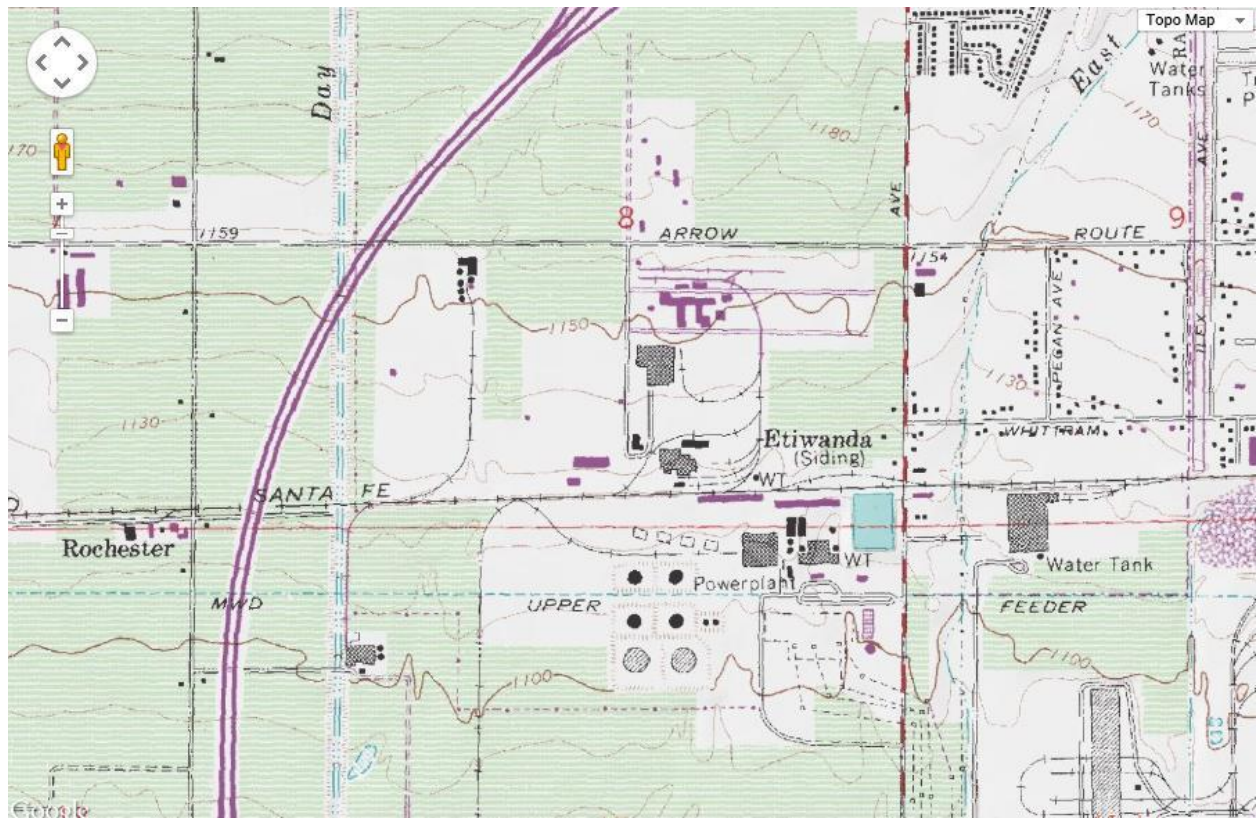
Looking at the probe from the West.

Quality Assurance
Site Survey Report for SA Recycling
Last updated May, 2016



AQS ID	ARB Number	Site Start Date	Reporting Agency and Agency Code
060711407	Unavailable	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



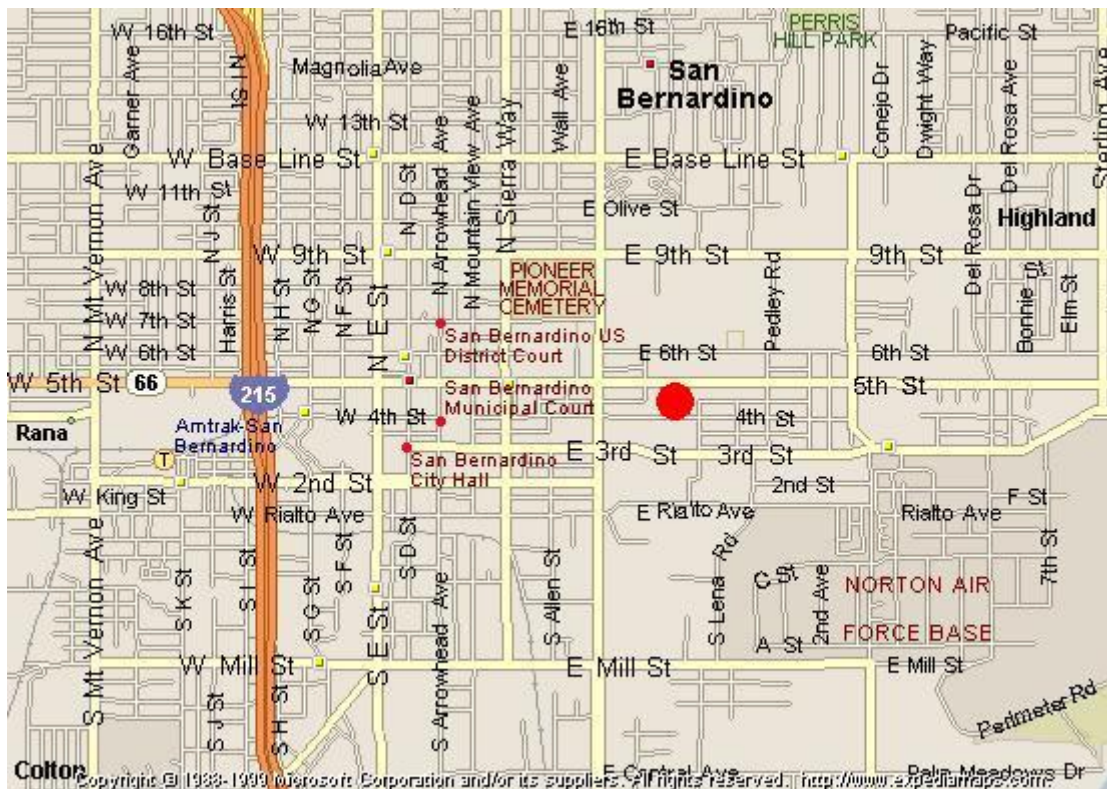
Detailed Site Information

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		
Parameter code	14129	See Table 26		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Source Oriented	Source Oriented		
Monitor (type)	SLAMS	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 colocated 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)	Scheduled for audit in 2016.	N/A		

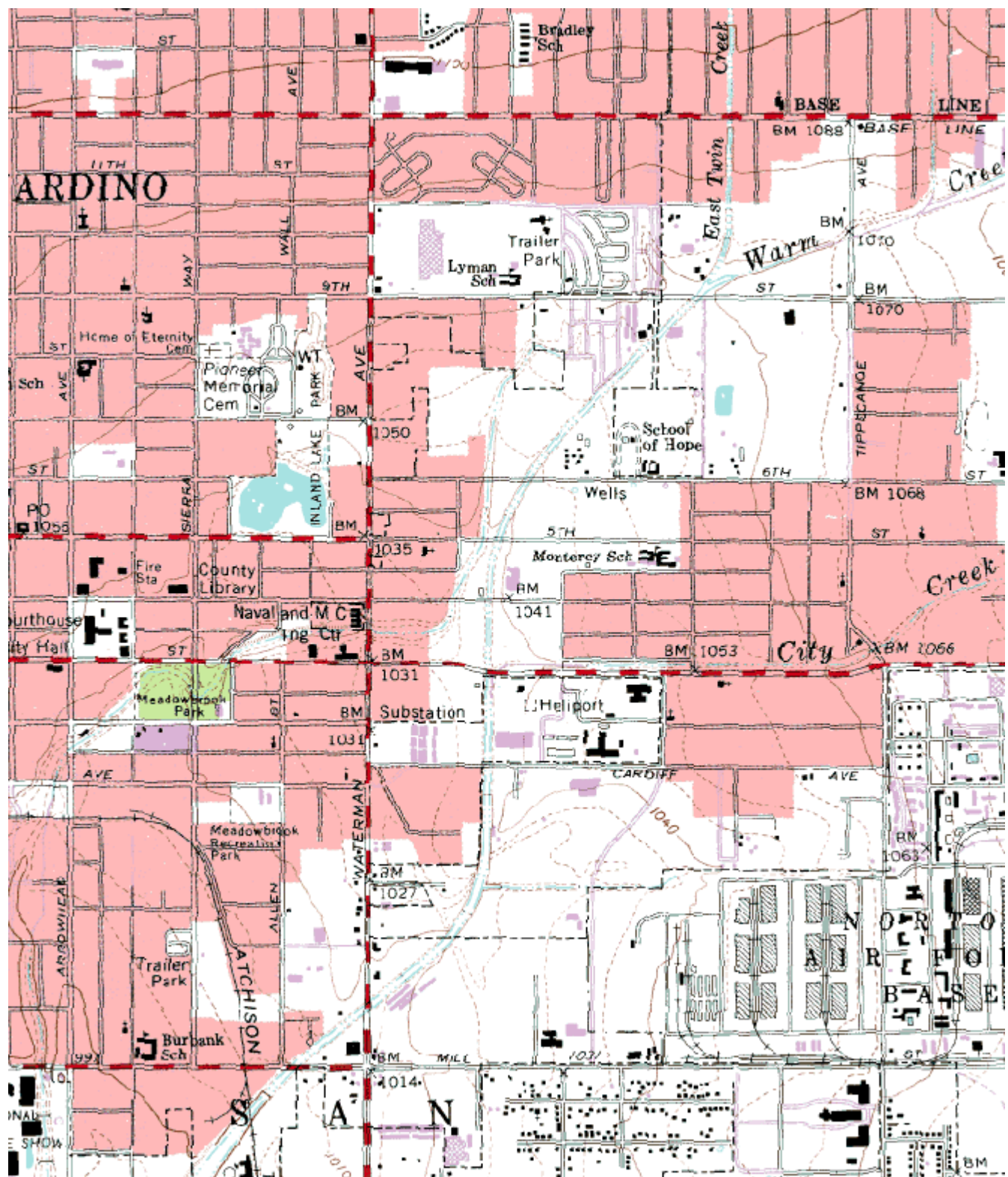
Quality Assurance Site Survey Report for San Bernardino

Last updated: May 15, 2016



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
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
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)	03/12/2015	03/12/2015	03/12/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/18/2015, 12/08/2015

Pollutant, POC	Lead, 2	24 Hour PM2.5, 1	PM10, 2	
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	
Instrument	GMW 1200 TSP	Andersen RAAS	GMW 1200 SSI	

manufacturer and model		PM2.5		
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?	N/A	Yes	No	

(Y/N)				
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)	04/16/2015, 10/31/2015	04/16/2015, 10/31/2015	04/16/2015, 10/31/2015	

**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.



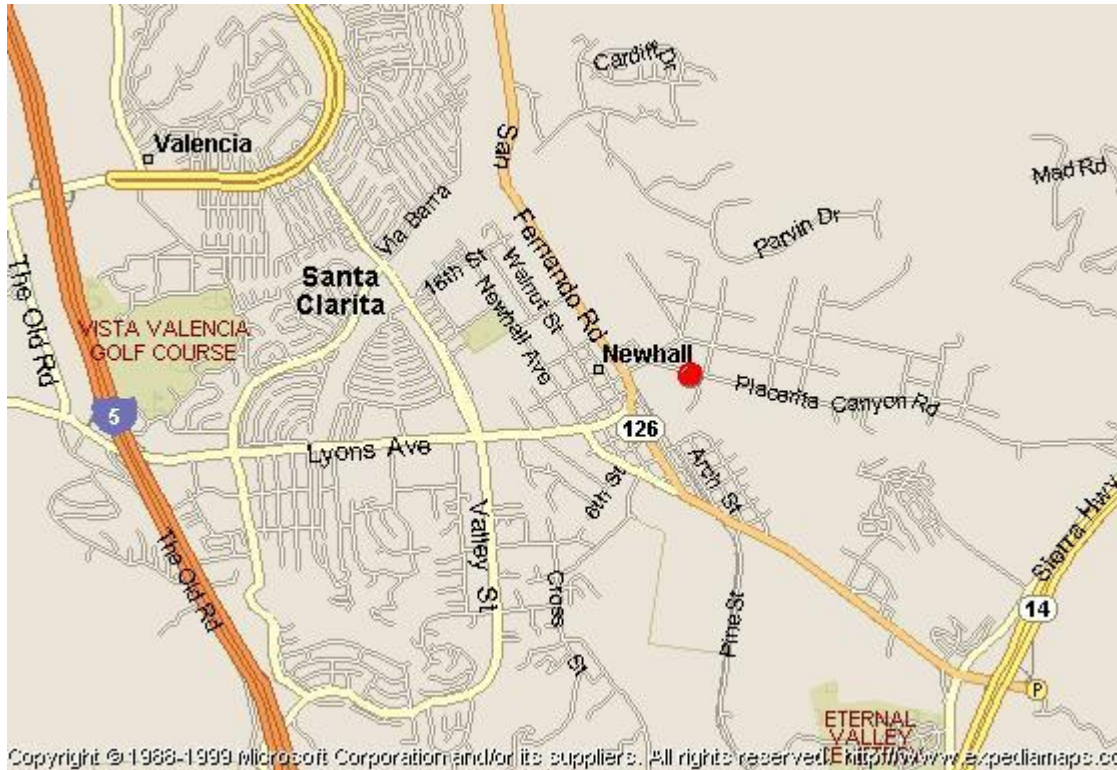
Looking at the probe from the South.



Looking at the probe from the West.

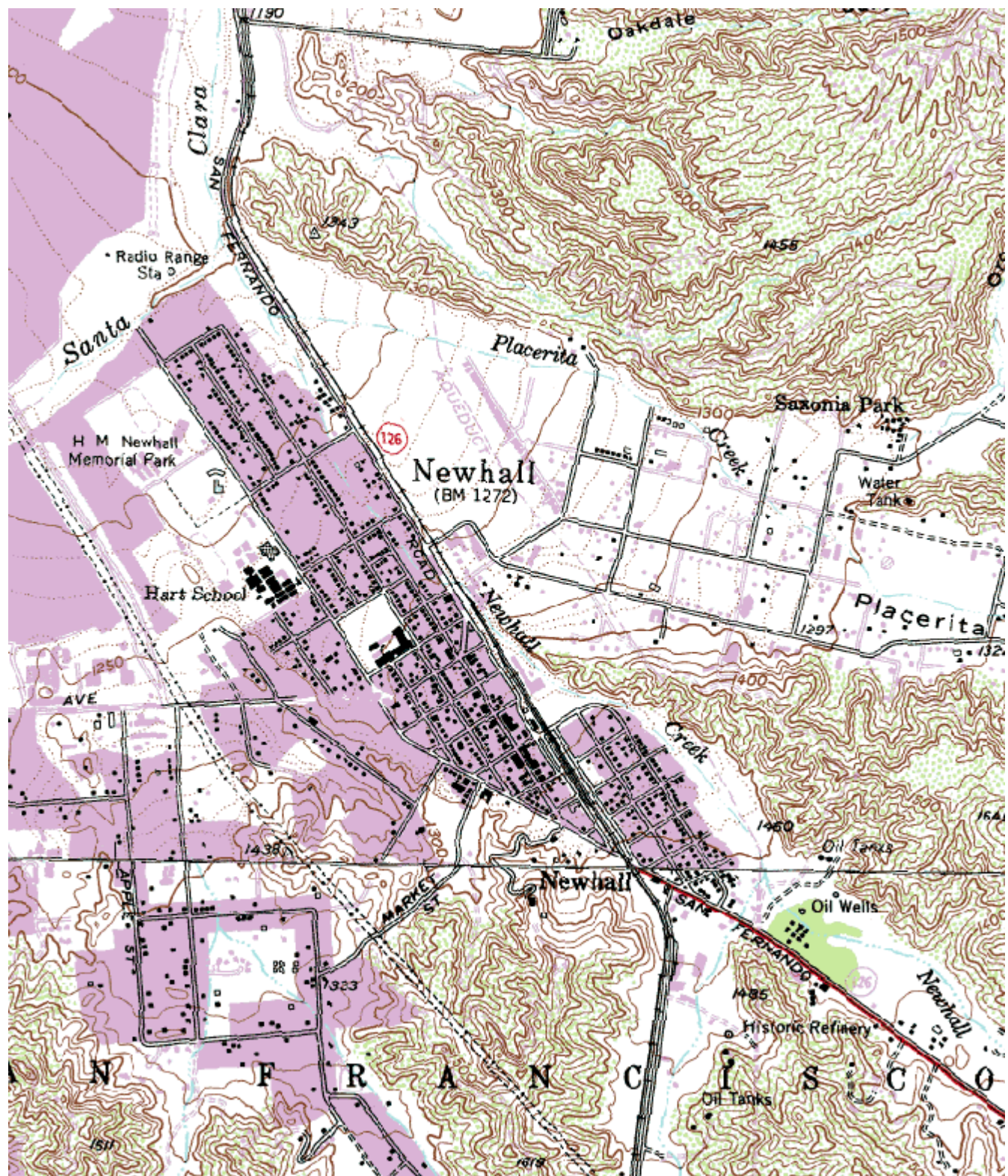
Quality Assurance Site Survey Report for Santa Clarita-Placerita

Last updated May, 2016



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
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
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)	09/29/2015	09/29/2015	09/29/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	04/17/2015, 11/06/2015

Pollutant, POC	24 Hour Carbonyls, 2	24 Hour VOCs, 2	3 Hour VOCs, 1	Continuous PM2.5, 3
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)	PAMS	PAMS	PAMS	SLAMS
Instrument	ATEC 8000	RM Env. 910A	RM Env. 910A	Met One BAM 1020

manufacturer and model				
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?	N/A	N/A	N/A	N/A

(Y/N)				
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)	2/6/14	2/6/14	2/6/14	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	04/17/2015, 11/06/2015

**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.



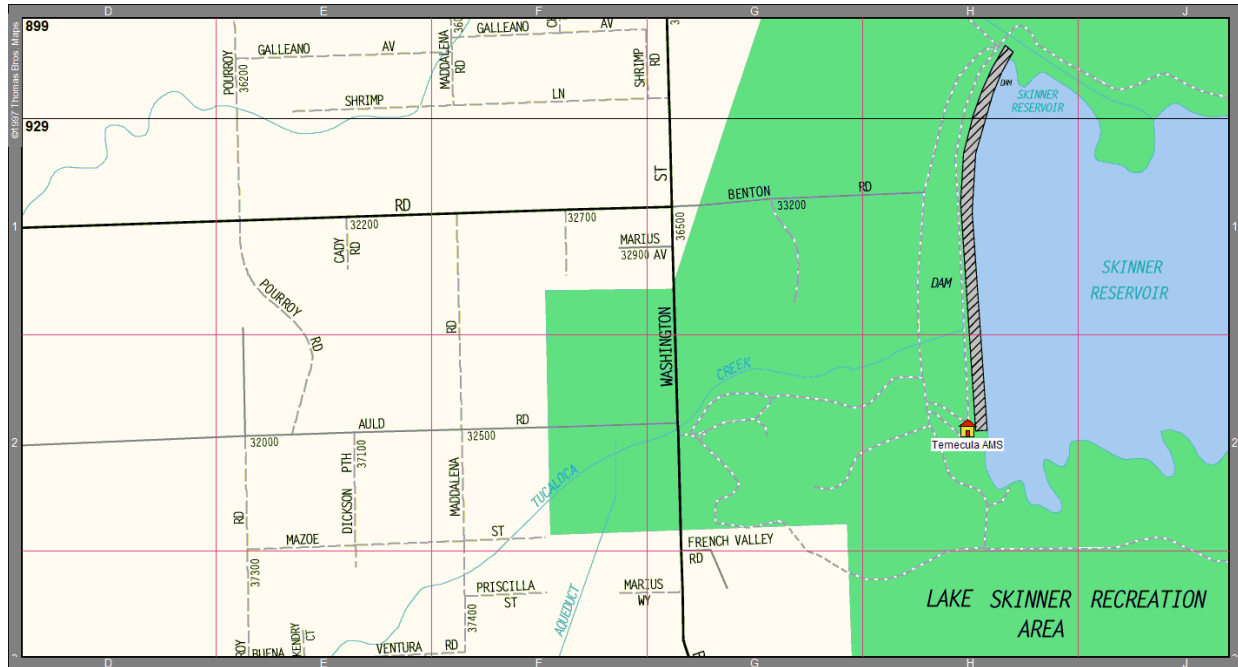
Looking at the probe from the South.



Looking at the probe from the West.

Quality Assurance Site Survey Report for Temecula (Lake Skinner)

Last updated: May 15, 2016



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		
Parameter code	44201	88502		
Basic monitoring objective(s)	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Population Exposure		
Monitor (type)	SLAMS	SLAMS		
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)	11/16/2015	N/A		
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	06/27/2015, 12/05/2015		

**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.



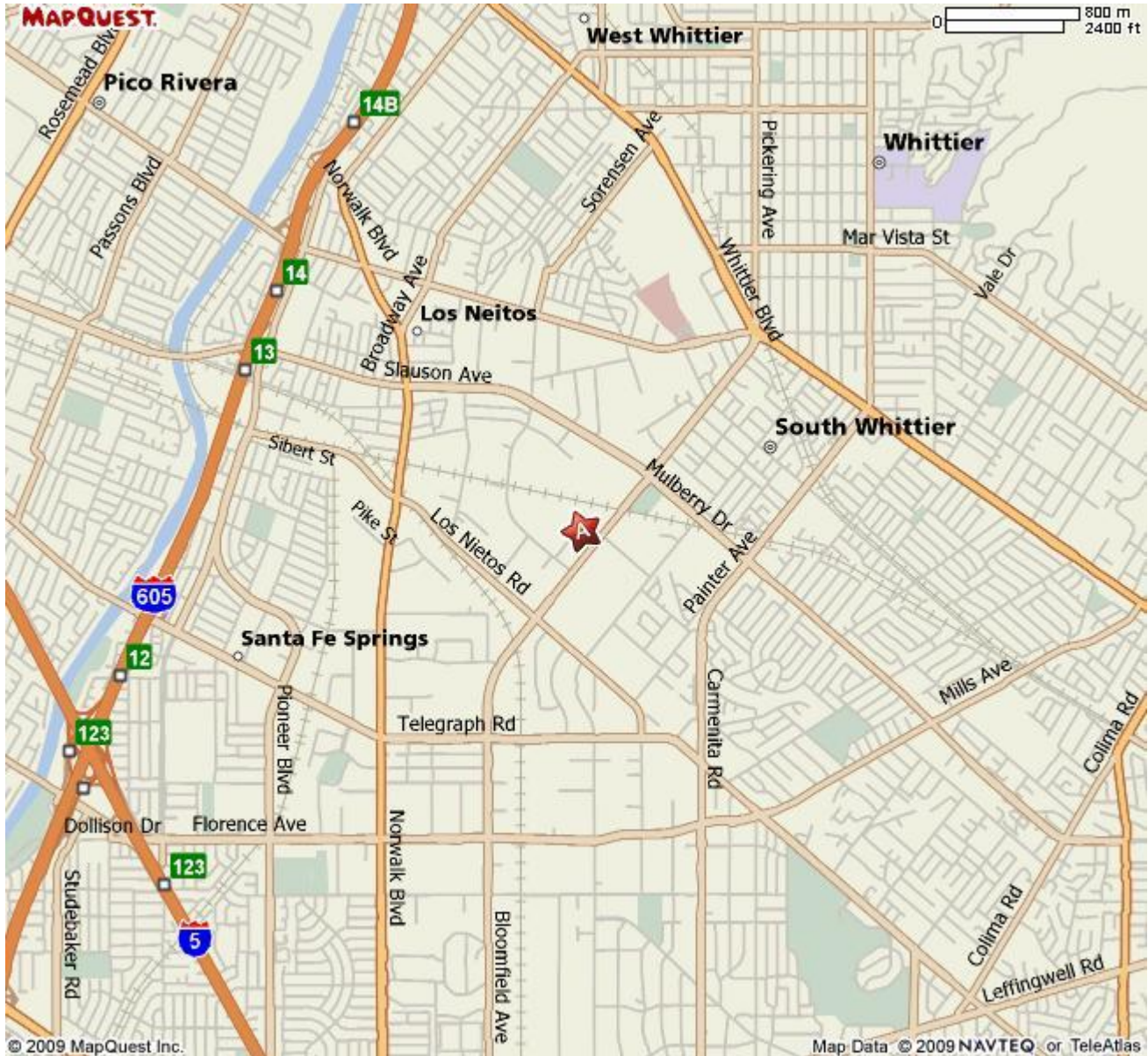
Looking at the probe to the South.



Looking at the probe to the West.

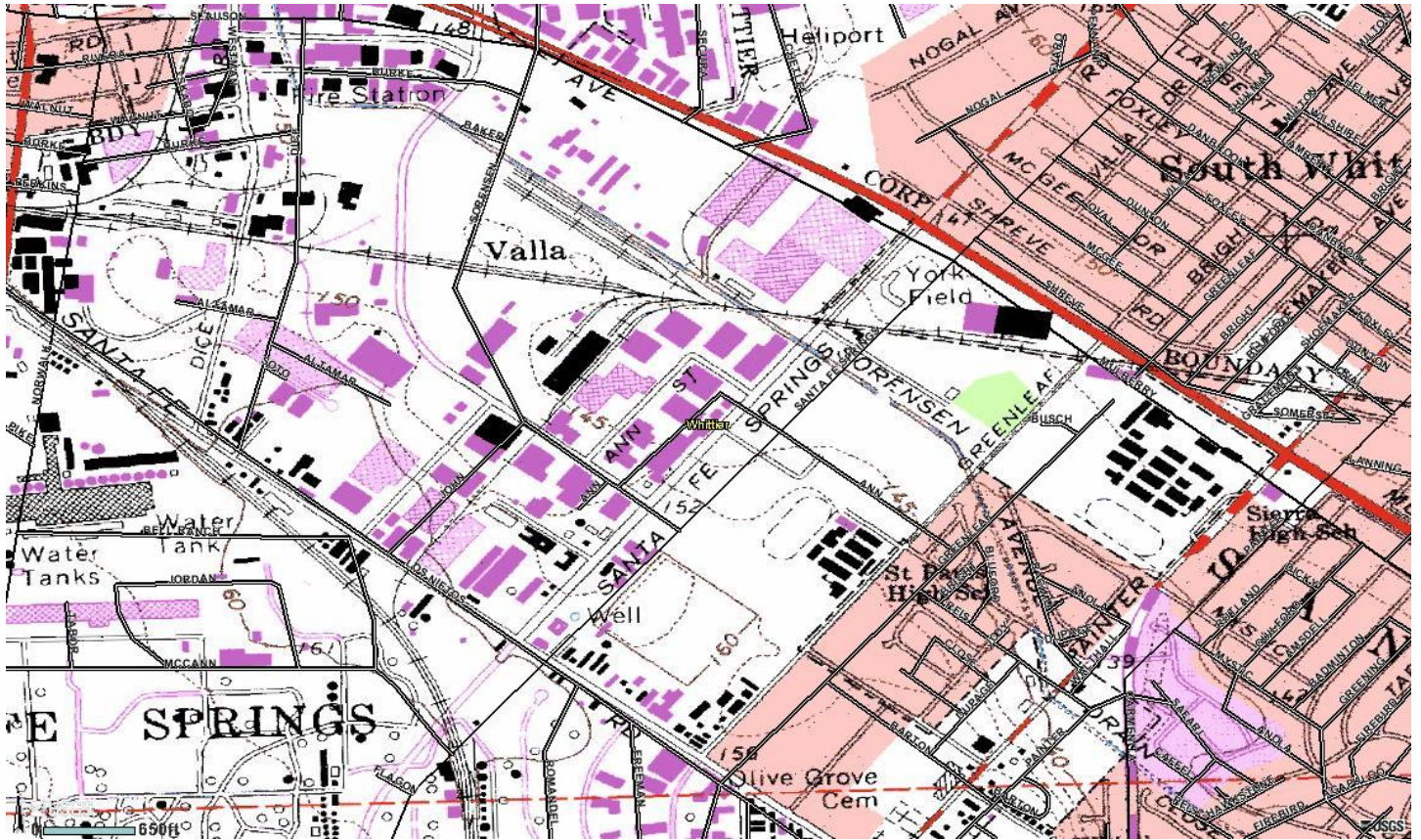
Quality Assurance Site Survey Report for Uddeholm (Quemetco)

Last updated May, 2016



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			
Parameter code	14129			
Basic monitoring objective(s)	NAAQS			
Site type(s)	Source Oriented			
Monitor (type)	SLAMS			
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)	06/03/2015, 11/25/2015			

**Trojan Battery - UDDH
Site Photos**



Looking North from the probe



Looking East from the probe.



Looking South toward the probe.



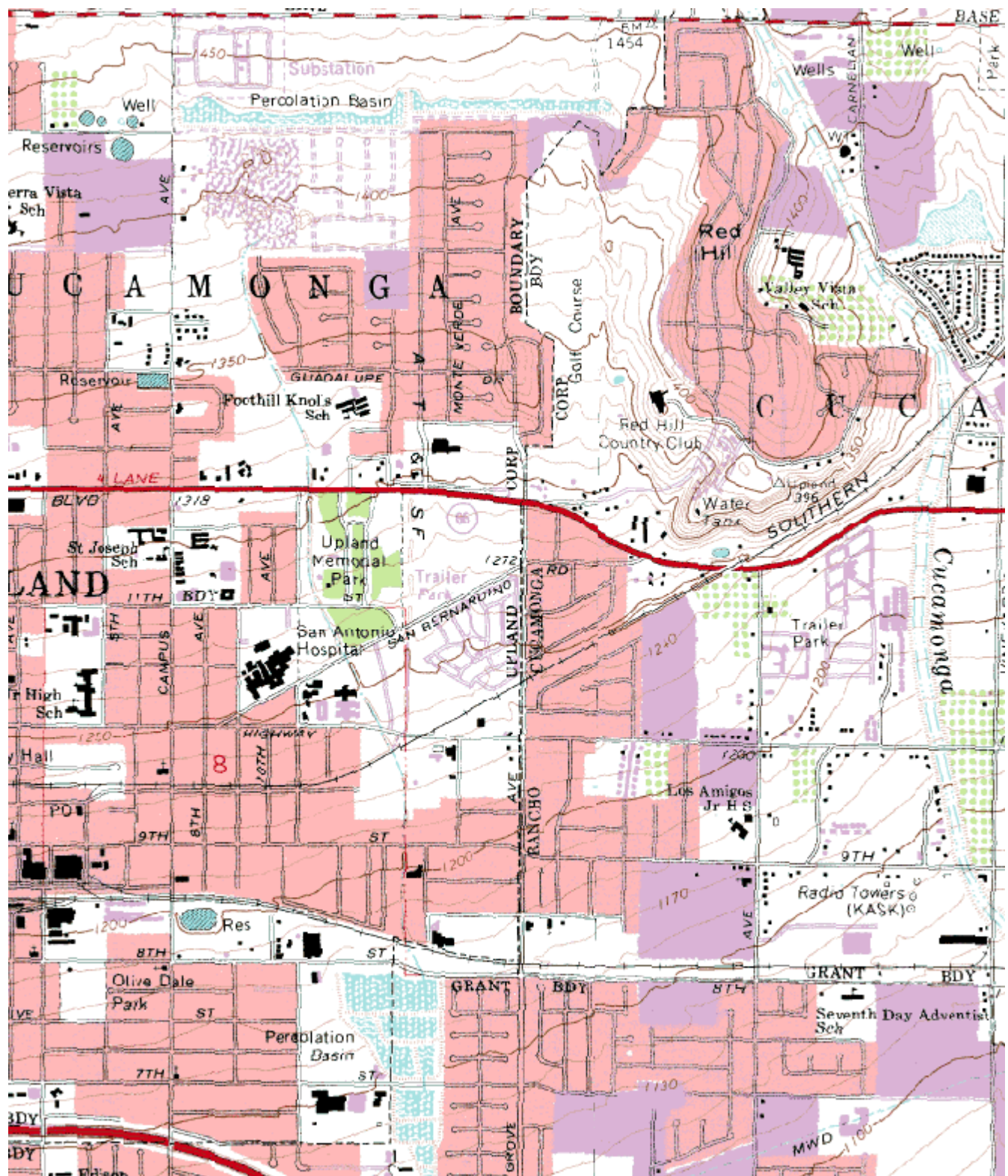
Looking West from the probe

Last updated: May 15, 2016



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
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
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 colocated 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)	09/03/2015	09/03/2015	09/03/2015	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	06/21/2015, 12/05/2015

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

manual PM samplers				
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)	06/21/2015, 12/05/2015	4/17/2015, 11/06/2015		

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.

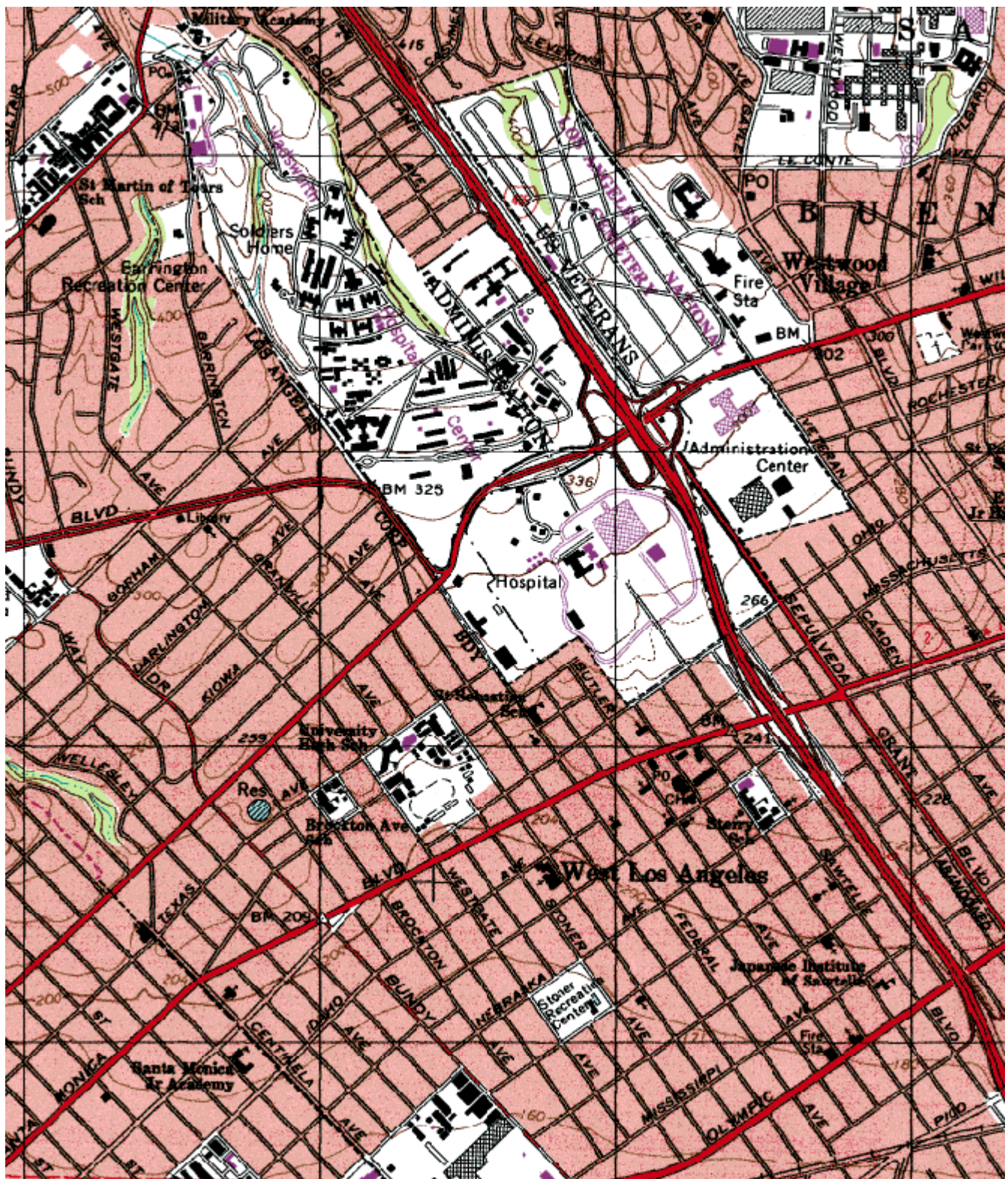
Quality Assurance Site Survey Report for Los Angeles-VA Hospital

Last updated: May 15, 2016



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	
Parameter code	42101	42602	44201	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Highest Concentration	Population Exposure	
Monitor (type)	SLAMS	SLAMS	SLAMS	
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 (meters)	N/A	N/A	N/A	
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 colocated 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)	06/16/2015	06/16/2015	06/16/2015	
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	N/A	