

2013 AMBIENT AIR MONITORING NETWORK PLAN



Air Pollution Control District
San Luis Obispo County

**Monitoring and Compliance Division
May 2013**

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1. Introduction

The San Luis Obispo County Air Pollution Control District (SLOAPCD) 2013 Ambient Air Monitoring Network Plan is an annual examination and evaluation of the SLOAPCD's network of air pollution monitoring stations. This annual review of our State and Local Air Monitoring Stations (SLAMS) network is required by Title 40, Code of Federal Regulations, Part 58.10 (40 CFR 58.10). The review process helps ensure continued consistency with the network's specific monitoring objectives defined in the regulations and confirms that the information in the state and federal monitoring records accurately and properly classify each station. Information is provided for all ambient air pollution monitoring which occurred in the county including sites operated by the California Air Resources Board (ARB). Data for ARB sites was obtained from that agency and are accurate to the best of our knowledge.

This report is a directory of existing and proposed monitoring in the SLOAPCD's network of SLAMS monitoring stations and serves as a progress report on the recommendations and issues raised in earlier network reviews. The review period of this report looks back to July 2012 (the publication of the 2012 Ambient Air Monitoring Network Review) and looks forward to December 2014 anticipating any changes to the network. The Code of Federal Regulations requires specific detailed monitoring network information be included in this report along with a 30-day public review period prior to submittal of the report to the USEPA.

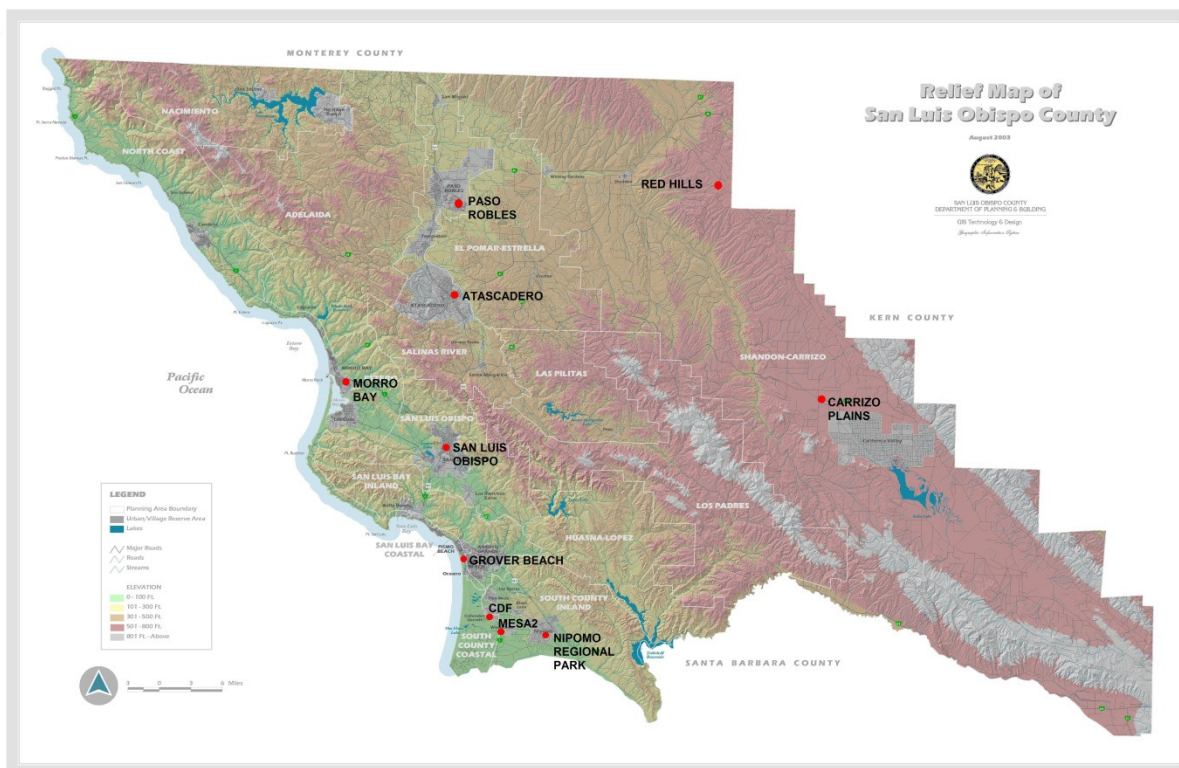


Figure 1: Map of Ambient Air Monitoring Stations in San Luis Obispo County in 2012

2. Overview of Network Operation

2.1 Air Monitoring Network Design – Site Types and Spatial Scales

Federal regulations, specifically Appendix D to 40 CFR 58, require that a SLAMS network be designed to meet a minimum of three basic monitoring objectives: providing air pollution data to the public in a timely manner, supporting compliance with the NAAQS (see Appendix D), and supporting air pollution research. A variety of site types are needed to support these basic objectives, including the six general types identified in Appendix D:

1. Highest Concentration: Sites located to determine the highest concentration expected to occur in the area covered by the network.
2. Population Exposure: Those located to determine representative concentrations in areas of high population density.
3. Source Oriented: Sites located to determine the impact on ambient pollution levels of significant sources or source categories.
4. General/Background: Those located to determine general background concentration levels.
5. Regional Transport: Sites located to determine the extent of regional pollutant transport among populated areas, and in support of secondary standards.
6. Welfare Related Impacts: Sites located to determine the welfare-related impacts in more rural and remote areas (such as visibility impairment and effects on vegetation).

The physical siting of an air monitoring station must conform to 40 CFR 58 and its location must achieve a spatial scale of representativeness that is consistent with the monitoring objective and site type. The spatial scale results from the physical location of the site with respect to the pollutant sources and categories. It estimates the size of the area surrounding the monitoring site that experiences uniform pollutant concentrations. The categories of spatial scale are:

- Microscale - An area of uniform pollutant concentrations ranging from several meters up to 100 meters.
- Middle Scale - uniform pollutant concentrations in an area of about 110 meters to 0.5 kilometer.
- Neighborhood Scale - an area with dimensions in the 0.5 to 4 kilometer range.
- Urban Scale - Citywide pollutant conditions with dimensions of from 4 to 50 kilometers.
- Regional Scale - An entire rural area of the same general geography (this area ranges from tens to hundreds of kilometers).

Table 1: Relationship Among Site Type and Scale of Representativeness

Site Type	Appropriate Spatial Scale
Highest concentration	Micro, middle, neighborhood (sometimes urban)
Population Exposure	Neighborhood, urban
Source Oriented	Micro, middle, neighborhood
General/Background	Neighborhood, urban, regional
Regional transport	Urban, regional
Welfare-related impacts	Urban, regional

2.2 Ambient Air Monitoring Network in San Luis Obispo County

Figure 1 shows a map of all currently operating ambient air monitoring stations in San Luis Obispo County, which also comprises the San Luis Obispo-Paso Robles Metropolitan Statistical Area (MSA). Air monitoring responsibilities for the MSA are divided between SLOAPCD and ARB, as allowed by 40 CFR 58, Appendix D, Section 2.e, and SLOAPCD acknowledges this joint responsibility.

There are currently ten permanent ambient air monitoring stations in the MSA. Eight of these stations are operated by the SLOAPCD as part of our SLAMS network. ARB operates two additional stations in the county as part of their SLAMS network, one in Paso Robles and the other in San Luis Obispo. Table 2 lists these stations, the agency or company which operates them, the pollutant or meteorological parameters which are monitored at each location, and the site type.

Changes to the Monitoring Network Since the Previous Network Plan

This section lists changes made to the District's network since the publication of the [2012 Ambient Air Monitoring Network Plan](#).

Ozone Monitoring Network:

The Teledyne-API 400A ozone analyzer at the Atascadero station failed in January 2013 and was replaced with a new Teledyne-API T400 ozone analyzer.

Particulate Monitoring Network:

No changes were made to the Particulate Monitoring Network.

Nitrogen Dioxide Monitoring Network:

The Teledyne-API 200A NO/NO₂/NO_x analyzer at the Morro Bay station failed in December 2012 and was replaced with a new Teledyne-API T200U analyzer in January 2013. The 200A at Nipomo Regional Park was also upgraded to a T200U in May 2013.

Sulfur Dioxide Monitoring Network:

The Thermo 43C SO₂ analyzer at Mesa2 was upgraded to a Teledyne-API T100U SO₂ analyzer in March 2013.

Other:

1. A new roof and safety railing was installed at the Morro Bay station in November 2012.
2. The roof deck and safety railing were extended at the Nipomo Regional Park station in September 2012.
3. A new safety railing was installed at the Red Hills site in February 2013.
4. The wind measurement systems at the Nipomo Regional Park, CDF, and Mesa2 stations were upgraded from mechanical cup and vane systems to MetOne 50.5 sonic anemometers in November 2012, May 2013, and January 2013, respectively.
5. The Environics S-100 Multi Gas Calibrators at the Nipomo Regional Park and Mesa2 stations were upgraded to Teledyne-API 700E Dynamic Dilution Calibrators in August 2012 and May 2013, respectively.
6. The data logger at the Morro Bay station was upgraded from an ESC 8816 to an Agilaire/ESC 8832 logger in February 2013.
7. The data acquisition system used retrieve, store, validate, and generate strings for AQS upload was upgraded from ESC's E-DAS Ambient to Agilaire's AirVision on January 1, 2013.

Ozone Monitoring Network

All ambient air monitoring stations in the county except for Mesa2, Grover Beach, and CDF monitor for ozone (see Table 2). The SLAMS network in San Luis Obispo County features ozone monitors located in Atascadero, Red Hills, Carrizo Plains, Paso Robles, Morro Bay, San Luis Obispo, and Nipomo Regional Park.

Atascadero – Operated by the SLOAPCD since 1988, this population-oriented neighborhood scale ozone monitor is located near the central business district of downtown Atascadero and is bounded on two sides by elementary schools. It provides a measurement of representative ozone concentration for the City of Atascadero. Ozone concentrations at this site exhibit strong diurnal fluctuations caused by titration of ozone by oxides of nitrogen from nearby mobile and residential sources. Measured concentrations at this site are often similar to those recorded at Paso Robles and are some of the highest in the SLAMS network. The highest ozone concentrations at Atascadero occur when high pressure over the interior southwest U.S. causes transport of ozone and other pollutants into SLO County from the east. Under these infrequent conditions transported ozone enhanced by local pollutants can cause highly elevated concentrations. The prevailing West or Northwest winds from the coast help keep ozone levels at Atascadero low most of the time.

Paso Robles – Operated by ARB since 1974, this population-oriented urban scale ozone monitor provides a representative ozone concentration for the suburban areas of the City of Paso Robles. The conditions under which elevated ozone levels occur and the location's prevailing winds are similar to Atascadero.

Morro Bay – Operated since 1975 by SLOAPCD, this site provides regional scale and General/Background ozone monitoring. Located in downtown Morro Bay, the monitor generally measures background levels of ozone from the predominant northwest winds blowing off of the Pacific Ocean. Under unusual meteorological conditions, the site can record elevated ozone concentrations transported from urban areas as far south as the Los Angeles basin.

San Luis Obispo – Operated by ARB since 1970, this population-oriented, neighborhood scale ozone monitor provides a representative ozone concentration for the City of San Luis Obispo. The monitor is located in the urban area where ozone concentrations are significantly affected by the process of depletion by titration with local mobile and stationary NO_x sources. As a result the concentrations recorded here are often lower than at Morro Bay.

Nipomo Regional Park – Operated by SLOAPCD since 1998, this station provides monitoring of background levels of ozone on a regional scale. Previously (1979 to 1996) ozone had been monitored in Nipomo on Wilson Street (06-79-4001), several miles away. The ozone concentrations measured at NRP are representative of interior portions of the Nipomo Mesa and are the highest recorded in the coastal region of San Luis Obispo County.

Red Hills – Operated by SLOAPCD since 2000, this station is located on the summit of the Red Hills near the community of Shandon at an elevation of about 2000 feet. This regional scale site is often influenced by ozone transport from outside of the county, and consistently records the highest and most persistent ozone concentrations in the network; its site type is thus Regional Transport and Maximum Concentration. In early 2012, the eastern portion of the county was designated as marginally non-attainment for the federal 8-hr ozone standard based on the design value from this site.

Carrizo Plains – Operated by SLOAPCD since January 2006, this station monitors background levels and ozone transport on a regional scale. The monitor is located in an outbuilding at the Carrizo Plains School. The ozone concentrations recorded here are second only to Red Hills in concentration and persistence.

As noted in Table 2, below, the SLAMS site types employed by the existing ozone network are:

- 1) Highest Concentration – The Red Hills station typically records the highest ozone concentrations in the county. The high ozone levels tend to occur in the interior areas of the county during summer, either following long periods of wind stagnation, or as a result of offshore winds which can transport pollutants from interior regions to the northeast.
- 2) High Population Exposure – The Paso Robles, Atascadero and San Luis Obispo monitors provide a good representation of the ozone levels in the major cities of the county.
- 3) Source Impact – Because ozone is a secondary pollutant the effect of emissions from any single source are experienced 5 to 7 hours later and often many miles distant. As a regional pollutant, monitoring for specific sources of ozone is not performed.
- 4) General/Background – The monitors at Morro Bay, Carrizo Plains and Nipomo Regional Park provide regional background ozone levels.
- 5) Regional Transport – The stations located at Carrizo Plains and Red Hills provide excellent surveillance of regional transport of ozone in the interior part of the county. Coastal monitoring stations have provided evidence in the past of regional transport of ozone over water from distant urban sources.

Nitrogen Dioxide Monitoring Network

The SLAMS network in San Luis Obispo County features nitrogen dioxide (NO₂) monitors at Atascadero, Morro Bay, and Nipomo Regional Park. NO₂ levels have always been well below the state and federal standards at all locations in our county. For this reason, except in the case of Morro Bay, NO₂ monitoring is most useful here as an indicator of depletion of ambient ozone through titration with nitric oxide. Having at least one NO₂ monitor in each geographical region of the county also serves a long-term air quality surveillance role.

Atascadero – Operated by SLOAPCD since 1990, this population-oriented monitor is considered neighborhood scale. This is the only NO₂ monitor in the Salinas River air basin, and it records the highest NO, NO₂ and NO_x levels in the county. The monitor's location downtown has established a strong diurnal inverse relationship between ozone and NO₂ levels caused by local mobile sources and residential and commercial combustion of natural gas.

Morro Bay – Operated by SLOAPCD since 2001 this monitor is neighborhood scale and monitors emissions from a specific source: the Morro Bay power plant, located less than a mile upwind.

Nipomo Regional Park – Operated by the SLOAPCD since 1998, this monitor is regional in scale and is representative of background concentrations on the Nipomo Mesa. The site's location in a large natural area away from local or mobile sources makes it ideal for regional surveillance of NO₂.

The SLAMS monitoring objectives met by the existing NO₂ network are:

- 1) Highest Concentration – The Atascadero monitor historically has measured the highest NO₂ concentrations in the county. NO₂ levels are the result of titration of ambient ozone by local sources of nitric oxide and as a result values are always relatively low. Levels have never exceeded the 1-hr NO₂ standard (100 ppb), with annual maximum 1-hr concentrations typically around 50% of the standard.
- 2) General/Background – With no significant local sources present the monitor at Nipomo Regional Park provides an excellent measure of background NO₂ levels on the Nipomo Mesa.
- 3) Source Oriented – The monitor at Morro Bay is placed to monitor local impacts of emissions from the Morro Bay Power Plant, the single greatest stationary source of oxides of nitrogen in the county.

Regional Transport and Welfare-Related impacts of NO₂ are not currently addressed by the District's SLAMS network and are not thought to be significant. San Luis Obispo County, which comprises the San Luis Obispo-Paso Robles MSA, does not have—nor per Appendix section 4.3 of 40 CFR 58 is it required to have—any NO₂ sites for vulnerable populations, near-road NO₂ monitoring sites, or area-wide NO₂ sites.

Table 2: Ambient Air Quality Parameters Monitored in San Luis Obispo County in 2011

O ₃	NO	NO ₂	NO _x	SO ₂	PM ₁₀	PM _{2.5}	WS	WD	ATM
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SLOAPCD Stations

Atascadero	P	P,C	P,C	P,C		P	P	X	X	X
Morro Bay	B	S	S	S				X	X	
Nipomo Regional Park	B	B	B	B		B		X	X	X
Grover Beach								X	X	
Mesa2					S,C	S	S	X	X	X
CDF						S,C	S,C	X	X	
Carrizo Plains	T,B							X	X	X
Red Hills	T,C							X	X	X

ARB Stations

San Luis Obispo	P					P	P	X	X	X
Paso Robles	P					P		X	X	X

Legend:

O ₃	Ozone	SO ₂	Sulfur Dioxide	WD	Wind Direction	S	Source Oriented
NO	Nitric Oxide	PM ₁₀	Particulates < 10 microns	ATM	Ambient Temperature	B	General/Background
NO ₂	Nitrogen Dioxide	PM _{2.5}	Particulates < 2.5 microns	C	Maximum Concentration	T	Regional Transport
NO _x	Oxides of Nitrogen	WS	Wind Speed	P	Population Exposure	X	Parameter Monitored

Sulfur Dioxide Monitoring Network

The sulfur dioxide (SO₂) monitoring network in San Luis Obispo County currently consists of one station: Mesa2.

Mesa2 – Operated by the SLOAPCD since 2006, this monitor performs surveillance of a nearby oil refinery. It is considered middle scale and highest concentration for SO₂. Since it is located close to and downwind of a major source of SO₂ emissions it is representative only of the immediate locality. The station was sited to optimize surveillance of the refinery's nearby coke calciner, which has since been shut down.

The SLAMS SO₂ monitoring objectives met by the network are:

- 1) Highest Concentration – The monitor at MESA2 currently records the highest SO₂ levels in the county.
- 2) Source Impact – The monitor at MESA2 is invaluable in determining the SO₂ source impact upon the immediate region.

Monitoring objectives not addressed by the existing SO₂ network are: General/Background, Population, Regional Transport, and Welfare-Related. Historical SO₂ monitoring performed elsewhere in the county (at NRP from 1998-2006; Morro Bay, 1979-1995; Grover Beach, 1982-2004; and at decommissioned stations in Arroyo Grande "Ralcoa" (06-079-1005), 1991-2002, and "Mesa1" (06-079-3002), 1987-94) has provided good evidence that monitoring for these objectives is not needed.

PM₁₀ and PM_{2.5} Particulate Monitoring Network

The particulate monitoring network in San Luis Obispo County consists of six FEM PM₁₀ monitors (at Paso Robles, Atascadero, San Luis Obispo, Mesa 2, CDF and Nipomo Regional Park) and four FEM PM_{2.5} monitors (at Atascadero, CDF, Mesa2 and San Luis Obispo). The PM₁₀ network has been in place since 1988, and PM_{2.5} samplers began operation in 1999 in response to the establishment of a new federal standard for PM_{2.5} in 1997. Originally all particulate monitoring in the county was performed as part of ARB's network, but eventually all monitors except those at Paso Robles and San Luis Obispo became part of the SLOAPCD network, which has developed its own processing facilities and operating procedures. Note that, for quality assurance, the District remains part of the ARB Primary Quality Assurance Organization (PQAO). SLOAPCD therefore relies on ARB to perform federally required audits of its particulate monitors and to meet federal collocation requirements.

Initially, all particulate sampling was conducted by the manual FRM method. With the advent of continuous monitoring technologies, all the FRM monitors in SLO County have been replaced with FEM BAM 1020 monitors in the last few years. These are continuous semi-real time monitors that report hourly PM concentrations all year long. The hourly data has greatly improved the SLOAPCD abilities to issue timely air quality forecast which is a significant benefit for the advancement of public health goals.

Paso Robles – Operated by ARB since 1991 this PM₁₀ monitor is urban in scale and representative of the city of Paso Robles. The FRM sampler at this site was replaced with an FEM BAM 1020 PM₁₀ sampler in August 2009.

Atascadero – Operated by SLOAPCD, PM₁₀ monitoring has been conducted here since 1988, initially via an FRM and currently with an FEM BAM 1020 continuous monitor. Collocated FRM PM_{2.5} monitors began operation in 1999 and have since been replaced by a single FEM BAM 1020. All monitors are neighborhood in scale and representative of particulate concentrations in the city of Atascadero.

San Luis Obispo – Operated by ARB, a PM₁₀ sampler has been in place since 1988, and the PM_{2.5} sampler since 1999. ARB replaced the FRM samplers with continuous FEM BAM instruments in 2011. These population-oriented monitors are neighborhood in scale and represent particulate concentrations in the City of San Luis Obispo.

Mesa2 – Operated by the SLOAPCD since 2006, this site initially featured collocated FRM PM₁₀ samplers that were replaced by a single FEM BAM 1020 PM₁₀ monitor in 2009. An FEM BAM 1020 PM_{2.5} monitor was installed at the same time. This site monitors source impacts from the nearby oil refinery and coastal dunes and is neighborhood scale. These monitors record some of the highest particulate levels in the county and are strongly influenced the extensive coastal sand dunes and the Oceano Dunes State Vehicular Recreation Area (ODSVRA) located upwind.

CDF – Originally established for the Nipomo Mesa Phase 2 Particulate Study, this site has become a permanent part of our SLAMS particulate network. The site features FEM BAM 1020 samplers for PM₁₀ and PM_{2.5}, which are neighborhood in scale and measure source impacts from the ODSVRA. In 2012, extensive temporary monitoring on the Nipomo Mesa downwind of the ODSVRA confirmed that this site is located within the 1 square mile sector of the study area that experiences the highest PM₁₀ levels. See <http://slocleanair.org/communitymonitoringproject> for details.

Nipomo Regional Park – Operated at this location by SLOAPCD since 1998, it replaced a site at Wilson Street in Nipomo that operated from 1990-96. The 1-in-6 day FRM PM₁₀ sampler was replaced with an FEM BAM 1020 continuous PM₁₀ sampler in 2010. The monitor is regional in scale and is representative of PM₁₀ concentrations on the Nipomo Mesa.

Statement Regarding Review of Changes to the PM_{2.5} Network

In the event that SLOAPCD needed to change the location of a PM_{2.5} monitor that recorded violations of the NAAQS, the agency would notify EPA Region 9 and ARB contact points immediately, and work closely with ARB to formulate a plan for moving the site. The public would be notified of the plan and provided with an opportunity to comment of at least 30 days. Finally, the agency would submit formal notification to EPA. SLOAPCD intends to discuss and receive approval of any changes to our PM_{2.5} Network—whether they affect monitors violating NAAQS or not—with ARB and EPA prior to making them, however unforeseen circumstances (e.g. unexpected loss of site access) may preclude this.

Other Networks

San Luis Obispo County, which comprises the San Luis Obispo-Paso Robles MSA, is not required to have—nor does it have—any NCORE, PAMS, lead, or carbon monoxide monitoring stations.

2.3 Air Quality Data

All of the ambient air monitoring stations in the county are registered with the USEPA and ARB and regularly report data to the EPA's AIRS/AQS database and ARB's AQMIS2 website. Validated data is submitted to AQS no later than the end of the quarter following the quarter in which it was collected. The data generated at these stations are public information and are available in various formats. Table 3, below, lists some popular sources for this air quality data.

SLOAPCD, and when applicable ARB, regularly submit to AQS precision and accuracy data for all gaseous and particulate pollutants measured in the network. Additionally, in accordance with 40 CFR 58.26, SLOAPCD certifies its AQS dataset for the previous year every spring. SLOAPCD submitted a certification package for calendar year 2012 data to EPA on April 18, 2013.

Table 3: Some Sources of Ambient Air Quality Data

Agency	Address For Data Requests	Internet address	Data Available
San Luis Obispo County APCD	3343 Roberto Court San Luis Obispo, CA 93401 attn: Karl Tupper	www.slocleanair.org/air/data.asp	San Luis Obispo County only
CARB	P.O. Box 2815 Sacramento, CA 95812	www.arb.ca.gov www.arb.ca.gov/adam/index.htm ↓	California Air Monitoring Data
US EPA	Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460	www.epa.gov www.epa.gov/ttn/airs/airsaqs/index	National Air Monitoring Data

2.4 Proposed Network Changes and Improvements

Ozone Monitoring Network:

No changes to the ozone monitoring network for are anticipated for 2013-2014.

Nitrogen Dioxide Network:

No changes to the nitrogen dioxide monitoring network for are anticipated for 2013-2014.

Sulfur Dioxide Monitoring Network:

No changes to the sulfur dioxide monitoring network for are anticipated for 2013-2014.

Particulate Monitoring Network:

No changes to the particulate monitoring network for 2013-2014 are anticipated.

Meteorology Monitoring Network:

No changes to the particulate monitoring network for 2013-2014 are anticipated.

Site Improvements:

1. The ESC 8816 data loggers at stations at Nipomo Regional Park, CDF, Mesa2, and—pending funding—Red Hills and Atascadero are scheduled to be upgraded to ESC/Agilair 8832 loggers.
2. All sites are scheduled to have high speed internet connections installed, and data retrieval will be upgraded from dial-up communication at 9600 baud to retrieval over the internet via private network.

3. Overview of Non-network Monitoring

Frequent exceedences of the California Ambient Air Quality Standard for 24-hour PM₁₀ (50 µg/m³) are observed downwind of the ODSVRA on the Nipomo Mesa. To address these exceedences, the SLOAPCD Board of Directors approved Coastal Dunes Dust Control Rule 1001. The rule requires, *inter alia*, the ODSVRA operator (i.e., California State Parks) to monitor PM₁₀ levels in at least two locations within the ODSVRA: one downwind of an area where off-road vehicle activity is allowed, and another downwind of a comparable area where off-road vehicle activity is not allowed. The continuous monitoring is to be performed with FEM monitors. See <http://slocleanair.org/air/pmstudydata.php> for details.

California State Parks is currently preparing to perform preliminary PM₁₀ monitoring on the ODSVRA with non-FEM E-BAM monitors. SLOAPCD anticipates that the FEM-based PM₁₀ monitoring required by Rule 1001 will commence during the period reviewed in this report, i.e. by December 2014. This monitoring will be conducted solely to comply with Rule 1001, and the monitoring entity will be California State Parks rather than an air quality agency. Therefore, SLOAPCD does not anticipate that the data obtained will be submitted to AQS or be used for federal regulatory decision making.

Appendix A: Minimum Monitoring Requirements

The SLOAPCD monitoring network meets the minimum monitoring requirements for all criteria pollutants measured as established in 40 CFR 58. Tables A-1 through A-9 list the criteria used to determine compliance with federal regulations.

Table A-1: Minimum Monitoring Requirements for Ozone

MSA	County	Population (Census Year)	8-hour Design Value (years)	Design Value Site Name (AQS ID)	Minimum # of Monitors Required	Number of Active Monitors	Monitors Needed
San Luis Obispo-Paso Robles	San Luis Obispo	269,637 (2010)	79 ppb* (2010-12)	Red Hills (06-079-8005)	1	7	0

* This Design Value is for eastern San Luis Obispo County, which in early 2012 was designated as marginally non-attainment for the 2008 8-hour ozone standard. The design value for the rest of the county is 66 ppb (2010-12), and the corresponding design value site is Paso Robles (06-079-0005).

Monitors required for SIP or Maintenance Plan: None

Table A-2: Minimum Monitoring Requirements for PM_{2.5} SLAMs

MSA	County	Population (Census Year)	Annual Design Value (years)	Annual Design Value Site (AQS ID)	Daily Design Value (years)	Daily Design Value Site Name (AQS ID)	Minimum Number of Monitors Required	Number of Active Monitors	Monitors Needed
San Luis Obispo-Paso Robles	San Luis Obispo	269,637 (2010)	8.2 ug/m ³ (2010-12)	Mesa2 (06-079-2004)	23 ug/m ³ (2010-12)	Mesa2 (06-079-2004)	0-1	4	0

Table A-3: Minimum Monitoring Requirements for Continuous PM_{2.5} Monitors

MSA	County	Population (Census Year)	Annual Design Value (years)	Annual Design Value Site (AQS ID)	Daily Design Value (years)	Daily Design Value Site Name (AQS ID)	Minimum Number of Monitors Required	Number of Active Monitors	Monitors Needed
San Luis Obispo- Paso Robles	San Luis Obispo	269,637 (2010)	8.2 ug/m ³ (2010-12)	Mesa2 (06-079-2004)	23 ug/m ³ (2010-12)	Mesa2 (06-079-2004)	0-1	4	0

Monitors required for SIP or Maintenance Plan: None

Table A-4: Minimum Monitoring Requirements for PM₁₀

MSA	County	Population (Census Year)	Max Concentration (Year)	Max Concentration Site Name (AQS ID)	Minimum Number of Monitors Required	Number of Active Monitors	Monitors Needed
San Luis Obispo- Paso Robles	San Luis Obispo	269,637 (2010)	180 ug/m ³ (2012)	CDF (06-079-2007)	3-4	6	0

Monitors required for SIP or Maintenance Plan: None

Table A-5: Minimum Monitoring Requirements for NO₂

CBSA	Population (Census Year)	Max AADT counts (Year)	# Required Near-road Monitors	# Active Near-road Monitors	# Additional Near-road Monitors Needed	# Required Area-wide Monitors	# Active Area-wide Monitors	# Additional Area-wide Monitors Needed
San Luis Obispo-Paso Robles	269,637 (2010)	68,000 (2010)	0	0	0	0	3	0

Monitors required for SIP or Maintenance Plan: None

Monitors required for PAMS: None

EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.3.4: None

Table A-6: Minimum Monitoring Requirements for SO₂

CBSA	County	Population (Census Year)	Total SO ₂ (Inventory year)	Population Weighted Emissions Index	Minimum Number of Monitors Required	Number of Active Monitors	Number of Additional Monitors Needed
San Luis Obispo-Paso Robles	San Luis Obispo	269,637 (2010)	287 tpy* (2008)	78*	0	1	0

* Value in table is calculated with data from the 2008 National Emissions Inventory (<http://www.epa.gov/ttn/chief/net/2008inventory.html>).

SLOAPCD's most recent emissions inventory (2009; available at <http://www.slocleanair.org/air/emissions.php>) records 3840.5 tpy of SO₂ emissions, resulting in a PWEI of 1095.

Monitors required for SIP or Maintenance Plan: None

EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.4.3: None

Table A-7: Minimum Monitoring Requirements for CO

CBSA	County	Population (Census Year)	Number of Required Near Road Monitors	Number of Active Near Road Monitors	Number of Additional Monitors Needed
San Luis Obispo-Paso Robles	San Luis Obispo	269,637 (2010)	0	0	0

Monitors required for SIP or Maintenance Plan: None

EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.2.2: None

Table A-8: Minimum Monitoring Requirements for Pb at NCore

NCore Site Name (AQS ID)	CBSA	County	Population (Census Year)	Number of Required Monitors	Number of Active Monitors	Number of Additional Monitors Needed
N/A	San Luis Obispo-Paso Robles	San Luis Obispo	269,637 (2010)	0	0	0

Table A-9: Source Oriented Lead Monitoring (Including Airports)

Source Name	Address	Pb Emissions	Emissions Inventory Source and Data Year	Design Value	Number of Required Monitors	Number of Active Monitors	Number of Additional Monitors Needed
No Sources	N/A	N/A	N/A	N/A	0	0	0

Monitors required for SIP or Maintenance Plan: None

EPA Regional Administrator-required monitors per 40 CFR 58, App. D 4.5(c): None

Appendix B: Collocation Requirements

Particulate monitoring (PM₁₀, PM_{2.5}, and lead) is subject to the collocation requirements described in Appendix A, section 3 of 40 CFR 58. The requirements apply at the Primary Quality Assurance Organization (PQAO) level, and SLOAPCD is part of the ARB PQAO. All particulate monitors in San Luis Obispo County are MetOne 1020 continuous FEM BAM instruments (PM₁₀ method code: 122; PM_{2.5} method code: 170). There are no collocated particulate monitors in the SLOAPCD network but as shown in the Table B-1 (adapted from the 2012 [Annual Monitoring Report for Small Districts in California](http://www.arb.ca.gov/aqd/amnr/amnr2012.pdf), online at <http://www.arb.ca.gov/aqd/amnr/amnr2012.pdf>) the ARB PQAO meets the minimum collocation requirements for its network of PM_{2.5} FEM BAM 1020 monitors. This information is one year old, but it remains accurate to the best of our knowledge. With regard to PM₁₀ monitoring, all monitors in the District are continuous, and thus there are no collocation requirements. Finally, lead monitoring is not done in the County, and thus there is no collocation requirement.

Table B- 1: Collocation Requirements for PM_{2.5}

Method Code	# Primary Monitors	# Required Collocated Monitors	# Active Collocated Monitors	# Active Collocated FEM Monitors (same method designation as primary)
170	22	3	4	1

Appendix C: Detailed Site Information

This appendix presents detailed site information the reporting of which is required by federal regulation.

Local site name	Paso Robles	
AQS ID (XX-XXX-XXXX)	06-079-0005	
GPS coordinates (decimal degrees)	35.61467, -120.65691	
Street Address	235 Santa Fe Ave, Paso Robles	
County	San Luis Obispo	
Distance to roadways (meters)	118	
Traffic count (AADT, year)	22,600 (2005)	
Groundcover (e.g. asphalt, dirt, sand)	Asphalt	
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES (MSA)	
Pollutant, POC	Ozone, 1	PM ₁₀ , 2
Parameter code	44201	85101
Basic monitoring objective(s)	NAAQS	Public info
Site type(s)	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS
Instrument manufacturer and model	API 400E	MetOne BAM 1020
Method code	087	122
FRM/FEM/ARM/other	FEM	FEM
Collecting Agency	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A
Reporting Agency	ARB	ARB
Spatial scale (e.g. micro, neighborhood)	Urban	Urban
Monitoring start date (MM/DD/YYYY)	09/01/1991	08/10/2009
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous
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)	6.2	5.2
Distance from supporting structure (meters)	2.9	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 collocated monitors (meters)	N/A	N/A
Unrestricted airflow (degrees)	360	360
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A
Residence time for reactive gases (seconds)	11.9	N/A
Will there be changes within the next 18 months? (Y/N)	N	N
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	N/A	N/A

Local site name	Paso Robles	
Frequency of flow rate verification for manual PM samplers	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	bi-weekly
Frequency of one-point QC check for gaseous instruments	daily	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	04/16/2013	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/16/2013; 10/31/2012; 04/17/2012

Local site name	Grover Beach
AQS ID (XX-XXX-XXXX)	06-079-2001
GPS coordinates (decimal degrees)	35.12389, -120.63222
Street Address	9 Le Sage Drive, Grover Beach
County	San Luis Obispo
Distance to roadways (meters)	10
Traffic count (AADT, year)	100 (estimated)
Groundcover (e.g. asphalt, dirt, sand)	Cement
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES (MSA)
Pollutant, POC	None (this is a meteorology-only station)

Local site name	Mesa2		
AQS ID (XX-XXX-XXXX)	06-079-2004		
GPS coordinates (decimal degrees)	35.02079, -120.56389		
Street Address	1300 Guadalupe Rd., Nipomo		
County	San Luis Obispo		
Distance to roadways (meters)	36		
Traffic count (AADT, year)	5700 (2011)		
Groundcover (e.g. asphalt, dirt, sand)	Vegetated, Sand		
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO - PASO ROBLES (MSA)		
Pollutant, POC	SO ₂ , 1	PM _{2.5} , 1	PM ₁₀ , 3
Parameter code	42410	88101	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS
Site type(s)	Source Oriented, Max Concentration	Source Oriented	Source Oriented
Monitor type(s)	SLAMS	SLAMS	SLAMS
Instrument manufacturer and model	API T100U	MetOne BAM 1020	MetOne BAM 1020
Method code	009	170	122
FRM/FEM/ARM/other	FEM	FEM	FEM
Collecting Agency	SLOAPCD	SLOAPCD	SLOAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A
Reporting Agency	SLOAPCD	SLOAPCD	SLOAPCD
Spatial scale (e.g. micro, neighborhood)	Middle	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	09/21/2005	05/01/2009	05/01/2009
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	continuous	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.8	4.8	4.8
Distance from supporting structure (meters)	1.3	1.3	1.3
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	N/A	N/A
Residence time for reactive gases (seconds)	8.1	N/A	N/A
Will there be changes within the next 18	N	N	N

Local site name	Mesa2		
months? (Y/N)			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Y	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	Bi-weekly	bi-weekly
Frequency of one-point QC check for gaseous instruments	daily	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	05/14/2013	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	05/14/2013; 10/30/2012; 5/15/2012	05/14/2013; 10/30/2012; 5/15/2012

Local site name	San Luis Obispo		
AQS ID (XX-XXX-XXXX)	06-079-2006		
GPS coordinates (decimal degrees)	35.25651, -120.66930		
Street Address	3220 South Higuera St., San Luis Obispo		
County	San Luis Obispo		
Distance to roadways (meters)	30 to South Higuera St. 424 to US 101		
Traffic count (AADT, year)	South Higuera St.: 22,529 (2006) US 101: 60,500 (2011)		
Groundcover (e.g. asphalt, dirt, sand)	asphalt		
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES (MSA)		
Pollutant, POC	O ₃ , 1	PM _{2.5} , 3	PM ₁₀ , 3
Parameter code	44201	88101	85101
Basic monitoring objective(s)	NAAQS	NAAQS	Public Info
Site type(s)	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS
Instrument manufacturer and model	API T400	MetOne BAM 1020	MetOne BAM 1020
Method code	087	170	122
FRM/FEM/ARM/other	FEM	FEM	FEM
Collecting Agency	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A
Reporting Agency	ARB	ARB	ARB
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	09/21/2005	09/19/2005	09/19/2005
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	continuous	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	12.8	12.8	12.8
Distance from supporting structure (meters)	1.8	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	N/A	N/A
Residence time for reactive gases (seconds)	5.8	N/A	N/A
Will there be changes within the next 18	N	N	N

Local site name	San Luis Obispo		
months? (Y/N)			
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	Y	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	Bi-weekly	bi-weekly
Frequency of one-point QC check for gaseous instruments	daily	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	04/16/2013	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/16/2013; 10/31/2012; 04/17/2012	04/16/2013; 10/31/2012; 04/17/2012

Local site name	CDF	
AQS ID (XX-XXX-XXXX)	06-079-2007	
GPS coordinates (decimal degrees)	35.04676, -120.58777	
Street Address	2391 Willow Rd., Arroyo Grande	
County	San Luis Obispo	
Distance to roadways (meters)	46	
Traffic count (AADT, year)	5,700 (2011)	
Groundcover (e.g. asphalt, dirt, sand)	Vegetated, Sand	
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES (MSA)	
Pollutant, POC	PM _{2.5} , 1	PM ₁₀ , 2
Parameter code	88101	81102
Basic monitoring objective(s)	NAAQS	NAAQS
Site type(s)	Max Concentration, Source Oriented	Max Concentration, Source Oriented
Monitor type(s)	SLAMS	SLAMS
Instrument manufacturer and model	MetOne BAM 1020	MetOne BAM 1020
Method code	170	122
FRM/FEM/ARM/other	FEM	FEM
Collecting Agency	SLOAPCD	SLOAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A
Reporting Agency	SLOAPCD	SLOAPCD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	08/28/2010	08/28/2010
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	continuous	1:1
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31
Probe height (meters)	4.0	4.0
Distance from supporting structure (meters)	1.4	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	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	N
Is it suitable for comparison against the annual PM _{2.5} ? (Y/N)	Y	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	bi-weekly	bi-weekly

Local site name	CDF	
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)	05/15/2013; 10/30/2012; 05/16/2012	05/15/2013; 10/30/2012; 05/16/2012

Local site name	Morro Bay	
AQS ID (XX-XXX-XXXX)	06-079-3001	
GPS coordinates (decimal degrees)	35.36639, -120.84260	
Street Address	899 Morro Bay Blvd., Morro Bay	
County	San Luis Obispo	
Distance to roadways (meters)	20 to Morro Bay Blvd. 221 to CA 1	
Traffic count (AADT, year)	Morro Bay Blvd.: 12,400 (2006) CA 1: 23,000 (2011)	
Groundcover (e.g. asphalt, dirt, sand)	Paved	
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES (MSA)	
Pollutant, POC	O ₃ , 1	NO ₂ , 1
Parameter code	44201	42602
Basic monitoring objective(s)	NAAQS	NAAQS
Site type(s)	General/Background	Source Oriented
Monitor type(s)	SLAMS	SLAMS
Instrument manufacturer and model	API 400A	API T200U
Method code	087	099
FRM/FEM/ARM/other	FEM	FRM
Collecting Agency	SLOAPCD	SLOAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A
Reporting Agency	SLOAPCD	SLOAPCD
Spatial scale (e.g. micro, neighborhood)	Regional	Neighborhood
Monitoring start date (MM/DD/YYYY)	01/01/1981	06/01/2001
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous
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)	4.0	4.0
Distance from supporting structure (meters)	1.0	1.0
Distance from obstructions on roof (meters)	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A
Distance from trees (meters)	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A
Unrestricted airflow (degrees)	360	360
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon
Residence time for reactive gases (seconds)	7.4	8.6
Will there be changes within the next 18 months? (Y/N)	N	N
Is it suitable for comparison against the annual PM _{2.5} ? (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

Local site name	Morro Bay	
Frequency of one-point QC check for gaseous instruments	Daily	Daily
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/13/2012 (Anticipated 6/12/13)	06/13/2012 (Anticipated 6/12/13)
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A

Local site name	Nipomo Regional Park		
AQS ID (XX-XXX-XXXX)	06-079-4002		
GPS coordinates (decimal degrees)	35.03150, -120.50101		
Street Address	W. Tefft St. and Pomeroy Rd., Nipomo		
County	San Luis Obispo		
Distance to roadways (meters)	246		
Traffic count (AADT, year)	11,000 (2006)		
Groundcover (e.g. asphalt, dirt, sand)	Vegetated		
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES (MSA)		
Pollutant, POC	O ₃ , 1	NO ₂ , 1	PM ₁₀ , 2
Parameter code	44201	42602	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS
Site type(s)	General/Background	General/Background	General/Background
Monitor type(s)	SLAMS	SLAMS	SLAMS
Instrument manufacturer and model	API 400	API 200	MetOne BAM 1020
Method code	087	099	122
FRM/FEM/ARM/other	FEM	FRM	FEM
Collecting Agency	SLOAPCD	SLOAPCD	SLOAPCD
Analytical Lab (i.e. weigh lab, other)	N/A	N/A	N/A
Reporting Agency	SLOAPCD	SLOAPCD	SLOAPCD
Spatial scale (e.g. micro, neighborhood)	Regional	Regional	Regional
Monitoring start date (MM/DD/YYYY)	11/01/1998	11/01/1998	05/26/2010
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	1:6
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.0	4.0	4.0
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	N/A

Local site name	Nipomo Regional Park		
Unrestricted airflow (degrees)	360	360	360
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A
Residence time for reactive gases (seconds)	8.4	7.4	N/A
Will there be changes within the next 18 months? (Y/N)	N	N	N
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	bi-weekly
Frequency of one-point QC check for gaseous instruments	daily	daily	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	05/15/2013	05/15/2013	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	05/15/2013; 10/30/2012; 05/16/2012

Local site name	Atascadero			
AQS ID (XX-XXX-XXXX)	06-079-8001			
GPS coordinates (decimal degrees)	35.49153, -120.66799			
Street Address	6005 Lewis Ave., Atascadero, CA			
County	San Luis Obispo			
Distance to roadways (meters)	68 to Lewis Ave. 398 to US 101			
Traffic count (AADT, year)	Lewis Ave.: 1,000 (estimated) US 101: 57,000 (2011)			
Groundcover (e.g. asphalt, dirt, sand)	Paved			
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES (MSA)			
Pollutant, POC	O ₃ , 1	NO ₂ , 1	PM _{2.5} , 3	PM ₁₀ , 3
Parameter code	44201	42602	88101	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS
Instrument manufacturer and model	API T400	API 200A	MetOne BAM 1020	MetOne BAM 1020
Method code	087	099	170	122
FRM/FEM/ARM/other	FEM	FRM	FEM	FEM
Collecting Agency	SLOAPCD	SLOAPCD	SLOAPCD	SLOAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SLOAPCD	SLOAPCD	SLOAPCD	SLOAPCD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	10/01/1998	08/01/1990	05/01/2009	08/28/2010
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous	continuous	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	N/A	N/A	continuous	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	5.8	5.3
Distance from supporting structure (meters)	1.4	1.4	2.2	1.7
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between collocated monitors (meters)	N/A	N/A	N/A	N/A
Unrestricted airflow (degrees)	360	360	360	360
Probe material for reactive gases (e.g.	Teflon	Teflon	N/A	N/A

Local site name	Atascadero			
Pyrex, stainless steel, Teflon)				
Residence time for reactive gases (seconds)	6.6	5.8	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	N	N	N	N
Is it suitable for comparison against the annual PM2.5? (Y/N)	N/A	N/A	Y	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	bi-weekly	bi-weekly
Frequency of one-point QC check for gaseous instruments	daily	daily	N/A	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/12/2012 (Anticipated 06/11/13)	06/12/2012 (Anticipated 06/11/13)	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	12/27/2012; 06/12/2012; (Anticipated 06/11/13)	12/27/2012; 06/12/2012; (Anticipated 06/11/13)

Local site name	Red Hills
AQS ID (XX-XXX-XXXX)	06-079-8005
GPS coordinates (decimal degrees)	35.64366, -120.23134
Street Address	3601 Gillis Canyon Rd., Shandon
County	San Luis Obispo
Distance to roadways (meters)	1720
Traffic count (AADT, year)	20 (estimated)
Groundcover (e.g. asphalt, dirt, sand)	Vegetated
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO - PASO ROBLES (MSA)
Pollutant, POC	O ₃ , 1
Parameter code	44201
Basic monitoring objective(s)	NAAQS
Site type(s)	Regional Transport, Max Concentration
Monitor type(s)	SLAMS
Instrument manufacturer and model	API 400A
Method code	087
FRM/FEM/ARM/other	FEM
Collecting Agency	SLOAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SLOAPCD
Spatial scale (e.g. micro, neighborhood)	Regional
Monitoring start date (MM/DD/YYYY)	7/1/2000
Current sampling frequency (e.g. 1:3, continuous)	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31
Probe height (meters)	4.7
Distance from supporting structure (meters)	1.2
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)	Teflon
Residence time for reactive gases (seconds)	10.3
Will there be changes within the next 18 months? (Y/N)	N
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	Daily

Local site name	Red Hills
instruments	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	6/14/2012 (Anticipated 6/13/2013)
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A

Local site name	Carrizo Plains
AQS ID (XX-XXX-XXXX)	06-079-8006
GPS coordinates (decimal degrees)	35.35474, -120.04013
Street Address	9640 Carrizo Highway, California Valley
County	San Luis Obispo
Distance to roadways (meters)	38
Traffic count (AADT, year)	420 (2011)
Groundcover (e.g. asphalt, dirt, sand)	Vegetated
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO - PASO ROBLES (MSA)
Pollutant, POC	O ₃ , 1
Parameter code	44201
Basic monitoring objective(s)	NAAQS
Site type(s)	Regional Transport, General/Background
Monitor type(s)	SLAMS
Instrument manufacturer and model	API 400A
Method code	087
FRM/FEM/ARM/other	FEM
Collecting Agency	SLOAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SLOAPCD
Spatial scale (e.g. micro, neighborhood)	Regional
Monitoring start date (MM/DD/YYYY)	1/1/2006
Current sampling frequency (e.g. 1:3, continuous)	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	N/A
Sampling season (MM/DD-MM/DD)	01/01-12/31
Probe height (meters)	4.6
Distance from supporting structure (meters)	1.0
Distance from obstructions on roof (meters)	N/A
Distance from obstructions not on roof (meters)	N/A
Distance from trees (meters)	N/A
Distance to furnace or incinerator flue (meters)	N/A
Distance between collocated monitors (meters)	N/A
Unrestricted airflow (degrees)	360
Probe material for reactive gases (e.g. Pyrex, stainless steel, Teflon)	Teflon
Residence time for reactive gases (seconds)	2.7
Will there be changes within the next 18 months? (Y/N)	N
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	Daily

Local site name	Carrizo Plains
instruments	
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	6/14/2012 (Anticipated 6/13/2013)
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A