

# 2012 AMBIENT AIR MONITORING NETWORK PLAN



Air Pollution Control District  
San Luis Obispo County

**Monitoring and Compliance Division  
July 9, 2012**

## Table of Contents

1.	Introduction.....	1
2.	Overview of Network Operation .....	2
2.1	Air Monitoring Network Design – Site Types and Spatial Scales.....	2
2.2	Ambient Air Monitoring Network in San Luis Obispo County.....	3
	Changes to the Monitoring Network.....	3
	Ozone Monitoring Network.....	4
	Nitrogen Dioxide Monitoring Network .....	5
	Sulfur Dioxide Monitoring Network .....	7
	PM <sub>10</sub> and PM <sub>2.5</sub> Particulate Monitoring Network .....	7
2.3	Air Quality Data.....	9
2.4	Proposed Network Changes and Improvements .....	10
Appendix A:	Minimum Monitoring Requirements .....	A-1
Appendix B:	Collocation Requirements.....	B-1
Appendix C:	Detailed Site Information.....	C-1
Appendix D:	Ambient Air Quality Standards as of 2012.....	D-1

### List of Figures

Figure 1:	Map of Ambient Air Monitoring Stations in San Luis Obispo County in 2011.....	1
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### List of Tables

Table 1:	Relationship Among Site Type and Scale of Representativeness.....	3
Table 2:	Ambient Air Quality Parameters Monitored in San Luis Obispo County in 2011 .....	6
Table 3:	Some Sources Of Ambient Air Quality Data.....	9
Table A- 1-:	Minimum Monitoring Requirements for Ozone .....	A-1
Table A- 2:	Minimum Monitoring Requirements for PM <sub>2.5</sub> SLAMs.....	A-1
Table A- 3:	Minimum Monitoring Requirements for Continuous PM <sub>2.5</sub> Monitors .....	A-1
Table A- 4:	Minimum Monitoring Requirements for PM <sub>10</sub> .....	A-2
Table A- 5:	Minimum Monitoring Requirements for NO <sub>2</sub> .....	A-2
Table A- 6:	Minimum Monitoring Requirements for SO <sub>2</sub> .....	A-2
Table A- 7:	Minimum Monitoring Requirements for CO.....	A-3
Table A- 8:	Minimum Monitoring Requirements for Pb at NCore.....	A-3
Table A- 9:	Source Oriented Lead Monitoring (Including Airports).....	A-3
Table B- 1:	Collocation Requirements for PM <sub>2.5</sub> .....	B-1

# 1. Introduction

The San Luis Obispo County Air Pollution Control District (SLOAPCD) 2012 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 June 2011 (the publication of the 2011 Ambient Air Monitoring Network Review) and looks forward to December 2013 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.

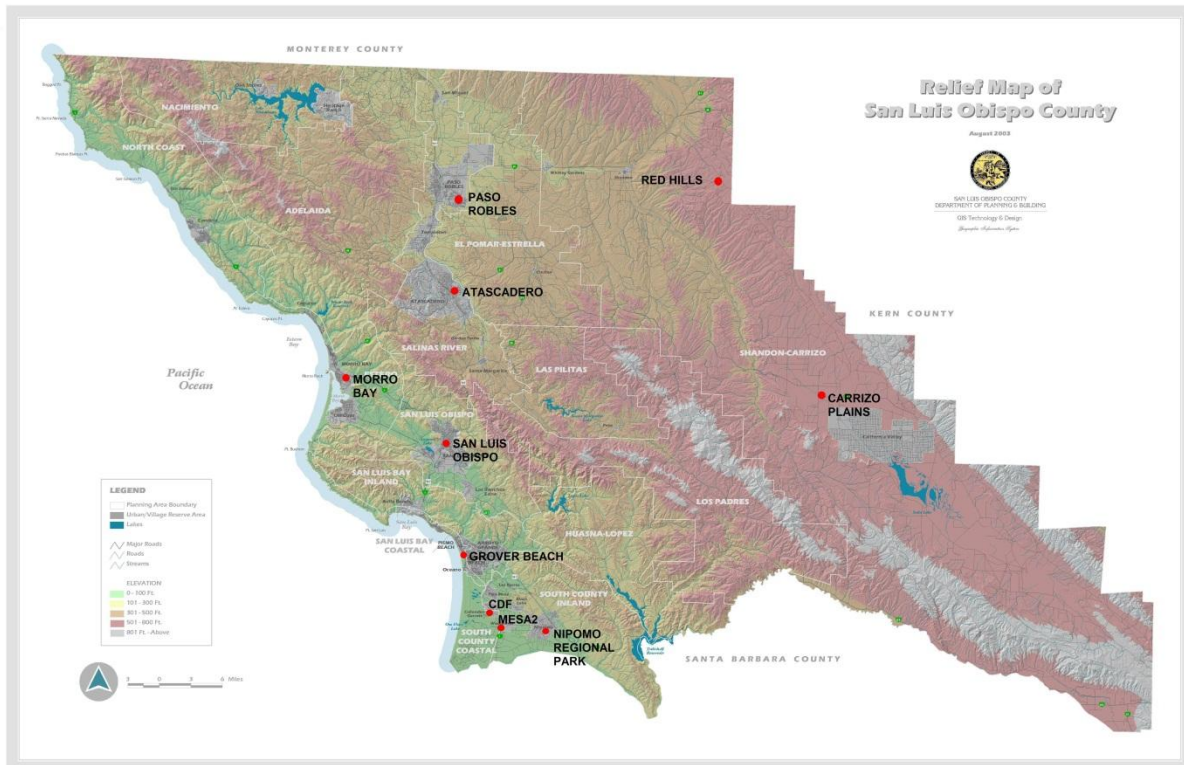


Figure 1: Map of Ambient Air Monitoring Stations in San Luis Obispo County in 2011

## 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**

<b>Site Type</b>	<b>Appropriate Spatial Scale</b>
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. 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.

There are currently ten permanent ambient air monitoring stations in San Luis Obispo County. Eight of these stations are operated by the APCD as part of our SLAMS network. The ARB operates two stations in the county as part of their SLAMS network, one in Paso Robles and the other in San Luis Obispo.

### **Changes to the Monitoring Network**

This section lists changes made to the District's network since the publication of the 2011 Ambient Air Monitoring Network Plan.

#### Ozone Monitoring Network:

No changes were made to the Ozone Monitoring Network.

#### Particulate Monitoring Network:

The PM<sub>10</sub> and PM<sub>2.5</sub> FRM samplers at the San Luis Obispo station (managed by ARB, rather than the SLOAPCD) were replaced by continuous FEM monitors, specifically MetOne BAM 1020 monitors.

#### Other:

1. The 2011 Ambient Air Monitoring Network Plan proposed sealing the roof and replacing the flooring at the Morro Bay station. This work has been deferred.
2. Similarly, proposed improvements to the roof of NRP have also been deferred.
3. The roof of the Atascadero station was sealed in October of 2011.
4. The wind measurement system at the Morro Bay station was upgraded from a mechanical cup and vane system to a MetOne 50.5 sonic anemometer in October 2011.
5. The wind measurement system at the Atascadero station was upgraded from a mechanical cup and vane system to a MetOne 50.5 sonic anemometer in April 2012.

## Ozone Monitoring Network

All ambient air monitoring stations in the county except for MESA 2, 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<sub>x</sub> 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 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. 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 (NO<sub>2</sub>) monitors at Atascadero, Morro Bay, and Nipomo Regional Park. NO<sub>2</sub> 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, NO<sub>2</sub> monitoring is most useful here as an indicator of depletion of ambient ozone through titration with nitric oxide. Having at least one NO<sub>2</sub> 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 NO<sub>2</sub> monitor in the Salinas River air basin, and it records the highest NO, NO<sub>2</sub> and NO<sub>x</sub> levels in the county. The monitor's location downtown has established a strong diurnal inverse relationship between ozone and NO<sub>2</sub> 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 NO<sub>2</sub>.

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

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



The SLAMS monitoring objectives met by the existing NO<sub>2</sub> network are:

- 1) Highest Concentration – The Atascadero monitor historically has measured the highest NO<sub>2</sub> concentrations in the county. NO<sub>2</sub> 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 NO<sub>2</sub> 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 NO<sub>2</sub> 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 NO<sub>2</sub> are not currently addressed by the District's SLAMS network and are not thought to be significant.

### **Sulfur Dioxide Monitoring Network**

The sulfur dioxide (SO<sub>2</sub>) 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 SO<sub>2</sub>. Since it is located close to and downwind of a major source of SO<sub>2</sub> 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 SO<sub>2</sub> monitoring objectives met by the network are:

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

Monitoring objectives not addressed by the existing SO<sub>2</sub> network are: General/Background, Population, Regional Transport, and Welfare-Related. Historical SO<sub>2</sub> 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.

### **PM<sub>10</sub> and PM<sub>2.5</sub> Particulate Monitoring Network**

The particulate monitoring network in San Luis Obispo County consists of six FEM PM<sub>10</sub> monitors (at Paso Robles, Atascadero, San Luis Obispo, Mesa 2, CDF and Nipomo Regional Park) and four FEM PM<sub>2.5</sub> monitors (at Atascadero, CDF, Mesa2 and San Luis Obispo). The PM<sub>10</sub> network has been in place since 1988, and PM<sub>2.5</sub> samplers began operation in 1999 in response to the establishment of a new federal standard for PM<sub>2.5</sub> 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, which developed its own processing facilities and operating procedures. (Note that, for quality assurance, the District remains part of the ARB PQAQO.)

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 PM<sub>10</sub> 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 PM<sub>10</sub> sampler in August 2009.

**Atascadero** – Operated by SLOAPCD, PM<sub>10</sub> monitoring has been conducted here since 1988. Collocated FRM PM<sub>2.5</sub> monitors began operation in 1999 and have since been replaced by a single FEM BAM 1020 PM<sub>2.5</sub> continuous monitor. The FRM samplers were taken offline in March 2010. In September 2010 a FEM BAM 1020 PM<sub>10</sub> sampler was installed at Atascadero to replace the 1-in-6 day FRM sampler. All monitors are neighborhood in scale and representative of particulate concentrations in the city of Atascadero.

**San Luis Obispo** – Operated by ARB, a PM<sub>10</sub> sampler has been in place since 1988, and the PM<sub>2.5</sub> 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 PM<sub>10</sub> samplers that were replaced by a single FEM BAM 1020 PM<sub>10</sub> monitor in June 2009. An FEM BAM 1020 PM<sub>2.5</sub> 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 two FEM BAM 1020 samplers for PM<sub>10</sub> and PM<sub>2.5</sub> which are neighborhood in scale and measure source impacts from the ODSVRA.

**Nipomo Regional Park** – Operated at this location by SLOAPCD since 1998, it was previously located at Wilson Street in Nipomo where it had been in place since 1990. The 1-in-6 day FRM PM<sub>10</sub> sampler was replaced with an FEM BAM 1020 continuous PM<sub>10</sub> sampler in May 2010. The monitor is regional in scale and is representative of PM<sub>10</sub> concentrations on the Nipomo Mesa.

### 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. The data generated at these stations are public information and are available in various formats from the respective agencies. Table 3 below lists some popular sources for air quality data.

**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	<a href="http://www.sloapcd.dst.ca.us">www.sloapcd.dst.ca.us</a> <a href="http://www.slocleanair.org/air/data.asp">www.slocleanair.org/air/data.asp</a>	San Luis Obispo County only
California Air Resources Board	P.O. Box 2815 Sacramento, CA 95812 attn: Xiaomang Pan	<a href="http://www.arb.ca.gov">www.arb.ca.gov</a> <a href="http://www.arb.ca.gov/adam/index.html">www.arb.ca.gov/adam/index.html</a>	California Air Monitoring Data
United States Environmental Protection Agency	Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460	<a href="http://www.epa.gov">www.epa.gov</a> <a href="http://www.epa.gov/ttn/airs/airsaqs/index">www.epa.gov/ttn/airs/airsaqs/index</a>	National Air Monitoring Data

## **2.4 Proposed Network Changes and Improvements**

### **Ozone Monitoring Network:**

The Environics S-100 Multi Gas Calibrator at NRP is scheduled to be replaced with a Teledyne/API 700E Dynamic Dilution Calibrator in 2012.

### **Nitrogen Dioxide Network:**

The Environics S-100 Multi Gas Calibrator at NRP is scheduled to be replaced with a Teledyne/API 700E Dynamic Dilution Calibrator in 2012.

### **Sulfur Dioxide Monitoring Network:**

No changes to the sulfur dioxide monitoring network for 2012-2013 are anticipated.

### **Particulate Monitoring Network:**

No changes to the particulate monitoring network for 2012-2013 are anticipated.

### **Meteorology Monitoring Network:**

Pending funding, in the next 18 months the mechanical cup-and-vane wind sensors at NRP, Mesa2, and CDF are scheduled to be upgraded to sonic anemometers.

### **Site and Safety Improvements:**

1. The Morro Bay station is scheduled to have the roof sealed and safety railing installed this year.
2. The Nipomo Regional Park station is scheduled to have the deck repaired and a new rooftop catwalk and safety railing extended this year.
3. Improvements to the rooftop safety railings at Red Hills and Atascadero are scheduled for this year.

## 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)	78 ppb* (2009-11)	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 64 ppb (2009-11), 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 PM2.5 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)	7.9 ug/m <sup>3</sup> (2008-10)	Atascadero (06-079-8001)	21 ug/m <sup>3</sup> (2008-10)	Atascadero (06-079-8001)	1	4	0

**Table A- 3: Minimum Monitoring Requirements for Continuous PM2.5 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)	7.9 ug/m <sup>3</sup> (2008-10)	Atascadero (06-079-8001)	21 ug/m <sup>3</sup> (2008-10)	Atascadero (06-079-8001)	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)	134 ug/m <sup>3</sup> (2011)	CDF (06-079-2007)	1-2	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 <sub>2</sub> (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

\* Values in table are 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 SO<sub>2</sub> 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 (PM<sub>10</sub>, PM<sub>2.5</sub>, 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 (PM<sub>10</sub> method code: 122; PM<sub>2.5</sub> 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/smnetrpt12.pdf), online at <http://www.arb.ca.gov/aqd/amnr/smnetrpt12.pdf>) the ARB PQAO meets the minimum collocation requirements for its network of PM<sub>2.5</sub> FEM BAM 1020 monitors. With regard to PM<sub>10</sub> 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 PM2.5**

<b>Method Code</b>	<b># Primary Monitors</b>	<b># Required Collocated Monitors</b>	<b># Active Collocated Monitors</b>	<b># Active Collocated FEM Monitors (same method designation as primary)</b>
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)	92	
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	
Pollutant, POC	Ozone, 1	PM <sub>10</sub> , 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 400	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)	11.4	N/A
Will there be changes within the next 18 months? (Y/N)	N	N
Is it suitable for comparison against the annual PM <sub>2.5</sub> ? (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	bi-weekly
Frequency of one-point QC check for gaseous instruments	daily	N/A
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	04/17/2012	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/17/2012; 07/19/2011

<b>Local site name</b>	<b>Grover Beach</b>
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
Pollutant, POC	None (this is a meteorology-only station)

<b>Local site name</b>	<b>Mesa2</b>		
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)	80		
Traffic count (AADT, year)	6000 (2010)		
Groundcover (e.g. asphalt, dirt, sand)	Vegetated, Sand		
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES		
Pollutant, POC	SO <sub>2</sub> , 1	PM <sub>2.5</sub> , 1	PM <sub>10</sub> , 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	TECO 43C	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	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)	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	1.4	1.4
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)	4.5	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	N	N	N
Is it suitable for comparison against the annual PM <sub>2.5</sub> ? (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)	05/15/2012	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	05/15/2012; 08/10/2011	05/15/2012; 08/10/2011

<b>Local site name</b>	<b>San Luis Obispo</b>		
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		
Traffic count (AADT, year)	22,529 (2006)		
Groundcover (e.g. asphalt, dirt, sand)	Roof		
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES		
Pollutant, POC	O <sub>3</sub> , 1	PM <sub>2.5</sub> , 3	PM <sub>10</sub> , 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 400	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	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)	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	2.0	2.0
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)	13.1	N/A	N/A
Will there be changes within the next 18 months? (Y/N)	N	N	N
Is it suitable for comparison against the annual PM <sub>2.5</sub> ? (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)	04/17/2012	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	04/17/2012; 07/21/2012	04/17/2012; 07/21/2012

<b>Local site name</b>	<b>CDF</b>	
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)	30	
Traffic count (AADT, year)	6,000 (2010)	
Groundcover (e.g. asphalt, dirt, sand)	Vegetated, Sand	
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES	
Pollutant, POC	PM <sub>2.5</sub> , 1	PM <sub>10</sub> , 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)	1:3	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)	1.2	1.2
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)	N	N
Is it suitable for comparison against the annual PM <sub>2.5</sub> ? (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
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)	05/16/2012; 08/10/2011	05/16/2012; 08/10/2011

<b>Local site name</b>	<b>Morro Bay</b>	
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	
Traffic count (AADT, year)	12,400 (2006)	
Groundcover (e.g. asphalt, dirt, sand)	Paved	
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES	
Pollutant, POC	O <sub>3</sub> , 1	NO <sub>2</sub> , 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 400	API 200
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 <sub>2.5</sub> ? (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	Daily	Daily
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	06/13/2012	06/13/2012
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A

<b>Local site name</b>	<b>Nipomo Regional Park</b>		
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)	200		
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		
Pollutant, POC	O <sub>3</sub> , 1	NO <sub>2</sub> , 1	PM <sub>10</sub> , 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
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)	9.4	10.1	N/A
Will there be changes within the next 18 months? (Y/N)	N	N	N
Is it suitable for comparison against the annual PM <sub>2.5</sub> ? (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)	05/16/2012	05/16/2012	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	05/16/2012; 08/11/2011

<b>Local site name</b>	<b>Atascadero</b>			
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)	30			
Traffic count (AADT, year)	1,000 (estimated)			
Groundcover (e.g. asphalt, dirt, sand)	Paved			
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES			
Pollutant, POC	O <sub>3</sub> , 1	NO <sub>2</sub> , 1	PM <sub>2.5</sub> , 3	PM <sub>10</sub> , 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 400	API 200	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	1:3	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	2.3
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. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A
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 PM <sub>2.5</sub> ? (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	06/12/2012	N/A	N/A
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A	N/A	06/12/2012; 07/14/2011	06/12/2012; 07/14/2011



<b>Local site name</b>	<b>Red Hills</b>
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)	1000
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
Pollutant, POC	O <sub>3</sub> , 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 400
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 <sub>2.5</sub> ? (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	Daily
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	6/14/2012
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A

<b>Local site name</b>	<b>Carrizo Plains</b>
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)	30
Traffic count (AADT, year)	500 (2010)
Groundcover (e.g. asphalt, dirt, sand)	Vegetated
Representative statistical area name (i.e. MSA, CBSA, other)	SAN LUIS OBISPO – PASO ROBLES
Pollutant, POC	O <sub>3</sub> , 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 400
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 <sub>2.5</sub> ? (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	Daily
Last Annual Performance Evaluation for gaseous parameters (MM/DD/YYYY)	6/14/2012
Last two semi-annual flow rate audits for PM monitors (MM/DD/YYYY, MM/DD/YYYY)	N/A

## Appendix D: Ambient Air Quality Standards as of 2012

	Averaging Time	California Standard	National Standard (NAAQS)
Ozone (O <sub>3</sub> )	8 Hour	0.070 ppm	0.075 ppm
	1 Hour	0.09 ppm	-----
Respirable Particulate Matter (PM <sub>10</sub> )	24 Hour	50 ug/m <sup>3</sup>	150 ug/m <sup>3</sup>
	Annual Arithmetic Mean	20 ug/m <sup>3</sup>	-----
Fine Particulate Matter (PM <sub>2.5</sub> )	24 Hour	-----	35 ug/m <sup>3</sup>
	Annual Arithmetic Mean	12 ug/m <sup>3</sup>	15 ug/m <sup>3</sup>
Carbon Monoxide (CO)	8 Hour	9.0 ppm	9 ppm
	1 Hour	20 ppm	35 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.030 ppm	0.053 ppm
	1 hour	0.18 ppm	100 ppb*
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	-----	0.030 ppm** (primary)
	24 Hour	0.04 ppm	0.14 ppm** (primary)
	3 Hour	-----	0.5 ppm*** (secondary)
	1 Hour	0.25 ppm	75 ppb*** (primary)
Hydrogen Sulfide (H <sub>2</sub> S)	1 Hour	0.03 ppm	-----
Visibility	8 hour	Sufficient amount to reduce the prevailing visibility to less than ten miles when the relative humidity is less than 70 %.	

\* This is a new standard that took effect on April 12, 2010.

\*\* Revoked as of August 23, 2010.

\*\*\* Effective as of August 23, 2010.