# 2019 Ambient Air Monitoring Network Plan





Fiscal, Administrative & Technical Services

June 2019

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# SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT 2019 ANNUAL AMBIENT AIR MONITORING NETWORK PLAN

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#### **List of Abbreviations**

AADT Annual Average Daily Traffic count

ANP Annual Network Plan AQS Air Quality System

AQS ID Air Quality System site identification number

BAM Beta Attenuation Monitor
CARB California Air Resources Board
CBSA Core Based Statistical Area
CDF California Department of Forestry
CFR Code of Federal Regulations

CO Carbon monoxide

E-BAM Portable, non-FEM version of the BAM

EPA United States Environment Protection Agency

FEM Federal Equivalent Method FRM Federal Reference Method MSA Metropolitan Statistical Area

NAAQS National Ambient Air Quality Standard(s)

NCore National Core multipollutant monitoring station

NO Nitrogen oxide
 NO<sub>2</sub> Nitrogen dioxide
 NO<sub>x</sub> Oxides of nitrogen
 NRP Nipomo Regional Park

O<sub>3</sub> Ozone

ODSVRA Oceano Dunes State Vehicular Recreation Area
PAMS Photochemical Assessment Monitoring Station

PM<sub>2.5</sub> Particulate Matter less than 10 microns in aerodynamic diameter PM<sub>10</sub> Particulate Matter less than 2.5 microns in aerodynamic diameter

Pb Lead

ppb Parts per billion

PQAO Primary Quality Assurance Organization

SIP State Implementation Plan

SLAMS State or Local Air Monitoring Station

SLOCAPCD San Luis Obispo County Air Pollution Control District

SO<sub>2</sub> Sulfur dioxide

SPM Special Purpose Monitor

### Introduction

Every year the San Luis Obispo County Air Pollution Control District submits an ambient air monitoring network plan (ANP) to the United States Environmental Protection Agency; this document comprises the ANP for 2019. It is intended to fulfill the requirements of 40 CFR 58.10 and to provide information about local monitoring activities to the public.

Consistent with these goals and requirements, this ANP will be made available for public review and comment for at least 30 days prior to its submission to EPA. All comments received and any SLOCAPCD responses to those comments will be attached as Appendices D and E, respectively, and submitted to EPA as part of this ANP. The cover letter accompanying submission will note the beginning and ending dates of the comment period, whether any comments were received, and which comments were substantive. For any non-substantive comments, the cover letter will provide a rationale for deeming them as such. If public comments prompt changes to the ANP, these changes will be noted in the cover letter.

The ANP is a snapshot of the air monitoring network as it currently exists; it documents any changes since the last ANP (published June 2018) and any anticipated changes to the network over the next 18 months. This review and planning process helps ensure continued consistency with federal requirements and monitoring objectives. It also confirms and updates information in state and federal monitoring records. Information is provided for all ambient air pollution monitoring which occurred in the county, including sites operated by the California Air Resources Board. Data for CARB sites were obtained from that agency and are accurate to the best of our knowledge.

As detailed in subsequent sections, there have been no significant changes to the San Luis Obispo County ambient air monitoring network since the last ANP. All pollutant monitors in the District's SLAMS network meet the requirements of 40 CFR 58 Appendices A, B, C, D, and E, where applicable, and the District-run SPM meets the requirements of Appendices A and E.

## **General Information on Air Monitoring Networks**

Most ambient air quality monitoring stations operated by air quality agencies are classified as State and Local Air Monitoring Station. SLAMS are long-term monitoring stations and are generally considered to be permanent sites. Their primary objective is to collect data for comparison to the NAAQS. Stations may instead be classified as Special Purpose Monitors or Prevention of Significant Deterioration stations; these are generally short-term sites with objectives other than NAAQS comparison.

Appendix D of 40 CFR 58 specifies design criteria for SLAMS networks and states that networks must be designed to meet a minimum of three basic monitoring objectives: 1. Provide air pollution data to the public in a timely manner; 2. Support compliance with the NAAQS; and 3. Support air pollution research. A variety of site types are needed to support these basic objectives, including the six general types identified in the Appendix:

- **Highest Concentration**: Sites located to determine the highest concentration expected to occur in the area covered by the network;
- **Population Exposure**: Those located to determine representative concentrations in areas of high population density;
- **Source Oriented**: Sites located to determine the impact on ambient pollution levels of significant sources or source categories;
- General/Background: Those located to determine general background concentration levels;
- **Regional Transport**: Sites located to determine the extent of regional pollutant transport among populated areas, and in support of secondary standards; and
- **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 the requirements of the Appendix, 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 defined in the Appendix 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 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); and
- National and Global Scales.

The relationship between site type and spatial scale is summarized in Table 1, below, which is adapted from Table D-1 of the Appendix.

Table 1: Relationship between Site Type and Spatial Scale

Site Type	Appropriate Spatial Scale
Highest concentration	Micro, middle, neighborhood, (sometimes urban or
	regional for secondary pollutants)
Population exposure	Neighborhood, urban
Source oriented	Micro, middle, neighborhood
General/background & regional transport	Urban, regional
Welfare Related Impacts	Urban, regional

## **Air Monitoring Stations in San Luis Obispo County**

San Luis Obispo County comprises the San Luis Obispo-Paso Robles MSA. Air monitoring responsibilities for the MSA are divided between SLOCAPCD and CARB, as allowed by Section 2(e) of Appendix D to 40 CFR 58. SLOCAPCD acknowledges this joint responsibility and is a member of the CARB Primary Quality Assurance Organization. The roles and responsibilities of the two agencies with regard to fulfilling state and federal monitoring requirements are formalized in a "Roles and Responsibilities" document, which can be viewed on the CARB website.<sup>1</sup>

There are currently ten SLAMS stations in the county/MSA; their locations are shown in Figure 1. CARB operates the stations in Paso Robles and in San Luis Obispo as part of their network, while the other eight are operated by the SLOCAPCD. Table 2 lists these stations, along with the pollutants and meteorological parameters monitored at each location and the site type. Each criteria pollutant monitor at each of these ten SLAMS meets all applicable requirements in Appendices A, B, C, D, and E to 40 CFR 58.

The District also operates the Oso Flaco monitoring station for the California Department of Parks and Recreation. This site is located within the ODSVRA in an area where off-highway vehicle activity is not allowed. The PM<sub>10</sub> FEM monitor at the site is classified as an SPM and complies with 40 CFR 58.11(a)(2), meeting all applicable requirements of 40 CFR 58 Appendices A and E.

In addition to these SLAMS and SPM stations, the District also conducts temporary monitoring projects to support certain objectives. In 2016, the District received an EPA multipurpose grant for the construction of a mobile particulate monitoring platform to be used for further characterizing dust impacts downwind of the ODSVRA. The platform, which hosts meteorological sensors and PM<sub>10</sub> and PM<sub>2.5</sub> FEM BAM monitors, was completed in the spring of 2017. It has been used to collect data at various locations on the Nipomo Mesa since June 2017. Similarly, since 2017 the District has conducted short-term PM<sub>10</sub> monitoring on the Nipomo Mesa using a spare FEM BAM housed in small enclosure. Data collected with the mobile monitoring platform and the temporary PM<sub>10</sub> monitor are not uploaded to AQS. In 2019 the District started a short-term deployment of an FEM BAM in Oceano. This project was funded through Community Air Protection Program, a state program related to Assembly Bill 617. The deployment is expected to last about 6 months, and the data will not be uploaded to AQS.

The District is also actively engaged in testing and deploying networks of non-FRM/non-FEM low-cost sensors. In collaboration with CARB, South Coast AQMD, residents, and a variety of community partners we have deployed dozens of Purple Air sensors throughout the county. These are visible on the Purple Air website.<sup>2</sup> We have also deployed several IQAir nodes, including three in Oceano as part of the aforementioned AB 617 monitoring project.

Finally, the District also has a data feed from the monitoring station at Sentinel Peak Resources' Arroyo Grande Oilfield in Price Canyon, but it does not play any role in data collection or validation. Table 3 summarizes the pollutant and meteorological parameters monitored at these non-SLAMS stations.

<sup>&</sup>lt;sup>1</sup> California Air Resources Board, "Quality Management Documents, Document Repository, Finalized Roles and Responsibilities," <a href="http://arb.ca.gov/aagm/qa/pqao/repository/rr">http://arb.ca.gov/aagm/qa/pqao/repository/rr</a> docs.htm.

<sup>&</sup>lt;sup>2</sup> Purple Air, "Map – Purple Air," <a href="https://www.purpleair.com/map">https://www.purpleair.com/map</a>.

Table 2: Summary of Parameters Monitored at SLAMS in San Luis Obispo County

Site	Ozone <sup>b</sup>	Nitrogen Dioxide	Sulfur Dioxide	PM <sub>10</sub>	PM <sub>2.5</sub>	Wind <sup>c</sup>	Temp
Atascadero	P, C	P, C		Р	Р	Χ	Χ
Carrizo Plain	T, B					Χ	Χ
CDF				S, C	S, C	Χ	
Grover Beach						Χ	
Mesa2			S, C	S	S	Х	Х
Morro Bay	В					Х	
Nipomo Regional Park	В	В		В		Х	Х
Paso Robles <sup>a</sup>	Р			Р		Х	Х
San Luis Obispo <sup>a</sup>	Р			Р	Р	Х	Х
Red Hills	T, C					Х	Х

**Site Types:** B = General/Background, C = Highest Concentration, P = Population Exposure, T = Regional Transport, S = Source, X = Parameter measured at this site.

Notes: a Paso Robles and San Luis Obispo are operated by CARB; all other sites are operated by SLOCAPCD.

Table 3: Summary of Parameters Monitored at Non-SLAMS in San Luis Obispo County

Site/Station	Hydrogen Sulfide	PM <sub>10</sub>	PM <sub>2.5</sub>	Relative Humidity	Wind <sup>a</sup>	Temp
Oso Flaco (SPM)		Χ		X	X	X
Price Canyon Oilfield	Х			Х	Х	X
Mobile Monitor		Χ	Χ		X	X
Temporary PM <sub>10</sub>		Χ			X	X
Oceano AB617		Χ			X	X

**Note:** <sup>a</sup> Wind speed, wind direction, and sigma theta.

<sup>&</sup>lt;sup>b</sup> Atascadero is typically the highest concentration site for the western county attainment area, while Red Hills is the highest concentration site for the eastern county nonattainment area. <sup>c</sup> Wind speed, wind direction, and sigma theta.



Figure 1: Locations of air monitoring stations in San Luis Obispo County as of May 2019. The thin red line depicts the boundary of the ozone nonattainment area.

## **Changes to Monitoring Network Since the Previous ANP**

Changes to the monitoring network since the publication of the last ANP are summarized below.

#### **Opened, Closed, and Relocated Stations**

No existing air monitoring stations in San Luis Obispo County have closed or relocated since the previous ANP. No new permanent stations have opened.

#### **Ozone Monitoring Network Changes**

No changes have been made to the ozone monitoring network since the previous ANP.

#### **Particulate Monitoring Network Changes**

No changes have been made to either the PM<sub>2.5</sub> or PM<sub>10</sub> monitoring networks since the previous ANP.

### **Nitrogen Dioxide Monitoring Network Changes**

No changes have been made to the nitrogen dioxide monitoring network since the previous ANP.

## **Sulfur Dioxide Monitoring Network Changes**

No changes have been made to the sulfur dioxide monitoring network since the previous ANP.

#### **Infrastructure and Support Equipment Changes**

- In November 2018, a roof deck and safety railing were installed at Red Hills.
- In February 2019, the roof deck and safety railing at CDF were expanded.

## **Detailed Descriptions of the Current Network**

#### **Ozone Monitoring Network**

The SLAMS network in San Luis Obispo County features ozone monitors in Atascadero, Red Hills, Carrizo Plain, Paso Robles, Morro Bay, San Luis Obispo, and Nipomo Regional Park.

**Atascadero** – SLOCAPCD has operated an ozone monitor in Atascadero since 1988. The Atascadero station was moved in 2015 from the central business district to a nearby city property. The original location was bounded on two sides by public schools, and the current site is adjacent to a community center. The monitor is classified as population-oriented and neighborhood scale. It provides ozone measurements representative of the City of Atascadero. Ozone concentrations at this site exhibit strong diurnal fluctuations caused by the titration of ozone with oxides of nitrogen from nearby mobile and residential sources. Concentrations at this site are similar to those recorded at Paso Robles and are often the highest among the five ozone monitors in the western portion of the county that is classified as attaining the federal ozone standard. The highest ozone concentrations at Atascadero occur when high pressure over the interior southwest U.S. causes transport of ozone and other pollutants into the county from the east. Under these infrequent conditions, transported ozone, enhanced by local pollutants, can cause highly elevated concentrations. Most of the time, prevailing winds from the west and northwest help keep ozone levels at Atascadero low.

**Carrizo Plain** – Operated by SLOCAPCD since January 2006, this regional scale station monitors background levels and ozone transport from the interior areas of the state. The monitor is located in an outbuilding at the Carrisa Plains Elementary School. The ozone concentrations recorded here are second only to Red Hills in concentration and persistence; this site is located within the Eastern San Luis Obispo County nonattainment area.

**Morro Bay** – Operated since 1975 by SLOCAPCD, 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 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.

**Nipomo Regional Park (NRP)** – Operated by SLOCAPCD 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, 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.

**Paso Robles** – Operated by CARB since 1974, this population-oriented, neighborhood 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.

**Red Hills** – Operated by SLOCAPCD since 2000, this station is located near the summit of Red Hills at an elevation of about 2,000 feet. It is in a very sparsely populated area near the community of Shandon. This regional scale site is often influenced by ozone transport from distant source areas outside of the county, and it consistently records the highest and most persistent ozone concentrations in the network; its site type is thus regional and maximum concentration. In early 2012, the eastern portion of the county was designated as marginally nonattainment for the federal 8-hr ozone standard based on the design value from this site.

**San Luis Obispo** – CARB has operated a population-oriented, neighborhood scale ozone monitor in the City of San Luis Obispo since 1970. The monitor has been at its current site since 2005. It 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 depleted by titration with local mobile and stationary  $NO_x$  sources. As a result, the concentrations recorded here are often lower than at Morro Bay.

As noted in Table 2, 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 of the state from distant sources to the northeast. Among the sites in the western portion of the county that is classified as attaining the ozone standard, Atascadero and Paso Robles measure the highest concentrations.
- 2. **Population Exposure** The Paso Robles, Atascadero, and San Luis Obispo monitors provide good representations of the ozone levels in the larger cities of the county.
- 3. **Source Impact** Because ozone is a secondary pollutant, the effect of emissions from any single source are experienced five to seven 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 Plain, and Nipomo Regional Park provide regional background ozone levels.
- 5. **Regional Transport** The stations located at Carrizo Plain 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 the Pacific Ocean from distant urban sources.

#### **Nitrogen Dioxide Monitoring Network**

The SLAMS network in San Luis Obispo County features  $NO_2$  monitors at Atascadero and Nipomo Regional Park.  $NO_2$  was also measured at Morro Bay until March 31, 2016.  $NO_2$  levels have always been well below the state and federal standards at all locations in our county. For this reason,  $NO_2$  monitoring is most useful as an indicator of depletion of ambient ozone through titration with nitric oxide. Having  $NO_2$  monitors in North and South County also serves a long-term air quality surveillance role.

**Atascadero** – Operated by SLOCAPCD since 1990 and relocated in 2015, 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,  $NO_2$  and  $NO_x$  levels in the county. The monitor's downtown location has established a strong diurnal inverse relationship between ozone and  $NO_2$  levels caused by local mobile sources and residential and commercial combustion of natural gas.

**Nipomo Regional Park** – Operated by the SLOCAPCD 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>.

The SLAMS sites in 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-hour NO<sub>2</sub> standard (100 ppb), with annual maximum 1-hour concentrations typically around 50% of the standard.
- 2. **General/Background** With no significant local sources present, the monitor at Nipomo Regional Park provides excellent information on coastal background levels of NO<sub>2</sub>.

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. With the closure of the Morro Bay Power Plant in 2014, the County's only potentially significant point source of NO<sub>2</sub>, no monitors in the network are considered to be source oriented. The San Luis Obispo-Paso Robles MSA, does not have, nor per Appendix D, Section 4.3 of 40 CFR 58 is it required to have, any NO<sub>2</sub> sites for vulnerable populations or near-road NO<sub>2</sub> monitoring sites.

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

The SO<sub>2</sub> monitoring network in San Luis Obispo County currently consists of one station: Mesa2.

**Mesa2** – Established in 1989 and operated by the SLOCAPCD since 2006, this monitor performs surveillance of a nearby oil refinery. It is considered middle scale and highest concentration for  $SO_2$ . Since it is located close to and downwind of a major source of  $SO_2$  emissions, it is representative only of the immediate area. The station was sited to optimize surveillance of the refinery's nearby coke calciner, which has since been shut down. Nonetheless, the refinery remains the largest point source of  $SO_2$  in the county, and during upsets this monitor can record concentrations approaching and sometimes exceeding the NAAQS. In addition to meeting NAAQS compliance objectives, this site is also vital for public information and emergency response.

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  $SO_2$  network are: General/Background, Population Exposure, Regional Transport, and Welfare-Related. Historical  $SO_2$  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. Furthermore, background levels of  $SO_2$  in the county are believed to be negligible since only a single hourly value measured in 2017 was greater than 1 ppb.

There are no sources within SLOCAPCD's jurisdiction with annual SO<sub>2</sub> emissions greater than 2000 tons; therefore, no monitoring is required to fulfill the "Data Requirements Rule" (40 CFR 51.1203).

#### **Particulate Monitoring Network**

The particulate SLAMS network in San Luis Obispo County consists of six permanent FEM PM<sub>10</sub> monitors (Paso Robles, Atascadero, San Luis Obispo, Mesa2, CDF, and Nipomo Regional Park) and four permanent FEM PM<sub>2.5</sub> monitors (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 CARB's network, but eventually all monitors except those at Paso Robles and San Luis Obispo became part of the SLOCAPCD network. Note that for quality assurance, the District remains part of the CARB PQAO. SLOCAPCD, therefore, relies on CARB for performing federally required audits of its particulate monitors and for meeting federal collocation requirements.

Initially all particulate sampling was conducted by filter-based FRM monitors. With the advent of continuous monitoring technologies, all the FRM monitors in the county have been replaced with FEM monitors in recent years. Currently these are Met One Instruments BAM 1020 continuous, semi-real-time monitors that report hourly PM concentrations. The hourly data have greatly improved our ability to issue timely air quality forecasts, which is a significant benefit for the advancement of public health goals.

In addition to these SLAMS monitors, the District operates the Oso Flaco  $PM_{10}$  SPM, which is located within the ODSVRA.

**Atascadero** – Operated by SLOCAPCD,  $PM_{10}$  monitoring has been conducted in Atascadero since 1988, initially via an FRM and currently with a continuous FEM monitor. Collocated FRM  $PM_{2.5}$  monitors began operation in 1999 and have since been replaced by a single FEM. The monitors are neighborhood or urban in scale and representative of particulate concentrations in the City of Atascadero. As previously noted, the station was moved about 400 meters north of its original location in February 2015.

**CDF** – Originally established for the SLOCAPCD's Nipomo Mesa Phase 2 Particulate Study, this site has become a permanent part of the SLAMS particulate network. The site features continuous FEM samplers for  $PM_{10}$  and  $PM_{2.5}$ , which are neighborhood in scale and measure source impacts from the ODSVRA. These monitors record the highest particulate levels in the county and are strongly influenced by the ODSVRA, located directly upwind. In 2012, extensive temporary monitoring on the Nipomo Mesa

confirmed that this site is located within the 1 square mile sector of the study area that experiences the highest PM<sub>10</sub> levels.<sup>3</sup>

**Mesa2** –  $PM_{10}$  sampling began at this site in 1991, and the monitors have been operated by the SLOCAPCD since 2006. This site initially featured collocated FRM  $PM_{10}$  samplers that were replaced by a single continuous FEM  $PM_{10}$  monitor in 2009. A continuous  $PM_{2.5}$  FEM monitor was installed at the same time. This site monitors source impacts from the nearby oil refinery and coastal dunes, and the monitors are neighborhood in scale. These monitors record some of the highest particulate levels in the county and are strongly influenced by the extensive coastal sand dunes and the ODSVRA located upwind.

**Nipomo Regional Park** – Operated at this location by SLOCAPCD since 1998, it replaced a site at Wilson Street in Nipomo that operated from 1990-96. The 1-in-6 day FRM  $PM_{10}$  sampler was replaced with a continuous FEM sampler in 2010. The monitor is regional in scale and is representative of  $PM_{10}$  concentrations on the Nipomo Mesa.

**Oso Flaco** – Operated by SLOCAPCD on behalf of the California Department of Parks and Recreation, this PM<sub>10</sub> monitor was established in July 2015 to fulfill a requirement of SLOCAPCD Rule 1001. It is classified as an SPM rather than a SLAMS monitor. It is located within the Oso Flaco area of the ODSVRA; off-road vehicular activity is not permitted upwind of the monitor. It is considered neighborhood in scale and representative of the non-riding areas of the dunes complex.

**Paso Robles** – Operated by CARB since 1991, this  $PM_{10}$  monitor is neighborhood in scale and representative of the City of Paso Robles. The FRM sampler at this site was replaced with an FEM  $PM_{10}$  sampler in August 2009.

**San Luis Obispo** – CARB has operated a  $PM_{10}$  sampler in San Luis Obispo since 1988 and a  $PM_{2.5}$  sampler since 1999. CARB replaced the FRM samplers with continuous FEM instruments in 2011. These population-oriented monitors are neighborhood in scale and representative of particulate concentrations in the City of San Luis Obispo.

#### **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, carbon monoxide or near-road monitoring stations.

<sup>&</sup>lt;sup>3</sup> San Luis Obispo County Air Pollution Control District, "South County Community Monitoring Project," January 2013. Available online: <a href="https://www.slocleanair.org/library/air-quality-reports.php">https://www.slocleanair.org/library/air-quality-reports.php</a>

## **Proposed Network Changes and Improvements**

The following sections list any modifications that are planned for the 18-month period after the publication of this ANP. Note that with a population well below 500,000, the San Luis Obispo-Paso Robles MSA/CBSA<sup>4</sup> is not required to have any near-road NO<sub>2</sub>, carbon monoxide, or PM<sub>2.5</sub> monitors, and therefore, SLOCAPCD has no plans to establish any such monitors. Additionally, there are no sources in our jurisdiction with SO<sub>2</sub> emissions greater than 2,000 tons per year; therefore, no new SO<sub>2</sub> monitoring is needed nor planned to comply with the SO<sub>2</sub> Data Requirements Rule.

#### **New Stations and Station Closures and Relocations**

The District plans to shut down the Grover Beach monitoring station in 2019. It has been more than a decade since any pollutant measurements were made at this site, but wind speed and direction measurements have continued, and these data are still added to AQS. There are no plans to close or relocate any other existing stations within the next 18 months.

California Assembly Bill 1647, which was signed into law in late 2017, mandates the establishment of both "refinery-related community air monitoring systems" and "fence-line monitoring systems" near or at petroleum refineries by 2020. The Phillips 66 Santa Maria Refinery is within San Luis Obispo County and is subject to AB 1647 requirements. The District and Phillips 66 are currently discussing implementation of these requirements, which will likely entail adding new monitors to existing stations and/or establishing new stations. At this time, it has yet to be determined which pollutants will be monitored, how many new monitors will be established and where, and whether the new monitors will be run by the District, the refinery, or a third party. Similarly, it currently unknown whether any of these monitors will be designated as SLAMS or SPM or whether any of the data generated will be included in AQS.

#### **Ozone Monitoring Network**

No changes to the ozone monitoring network are anticipated.

#### **Nitrogen Dioxide Network**

No changes to the nitrogen dioxide monitoring network are anticipated.

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

No changes to the sulfur dioxide monitoring network are anticipated.

#### **Particulate Monitoring Network**

No changes to the particulate monitoring network are anticipated.

### **Infrastructure and Support Equipment Changes**

The following equipment upgrades are planned for the next 12 months:

- Carrizo Plain: Replace the Teledyne-API 703E photometric ozone calibrator with a T703.
- Atascadero: Replace the Teledyne-API 701 zero air generator with Sabio 1001 zero air generator.

<sup>&</sup>lt;sup>4</sup> San Luis Obispo County, the San Luis Obispo-Paso Robles MSA, and the San Luis Obispo-Paso Robles CBSA have identical borders and populations.

 Nipomo Regional Park: Replace the tilt-down meteorological tower with a crank-down telescoping tower.

## Statement Regarding Review of Changes to the PM<sub>2.5</sub> Network

In the event that SLOCAPCD needs to change the location of a PM<sub>2.5</sub> monitor that records violations of the NAAQS, the agency will notify EPA Region 9 and CARB contact points immediately, and work closely with CARB to formulate a plan for moving the site. The public will be notified of the plan and provided with an opportunity to comment for at least 30 days. Finally, the agency will submit formal notification to EPA. The SLOCAPCD intends to discuss and receive CARB and EPA approval prior to making any changes to our PM<sub>2.5</sub> network, whether the changes affect monitors violating NAAQS or not; however, unforeseen circumstances (e.g. unexpected loss of site access) may preclude this.

# **Accessing Air Quality Data**

All SLAMS and SPM monitoring stations currently operating in the county are registered with the EPA and CARB and regularly report data to the EPA's AQS database, CARB's AQMIS2 website, and the airnow.gov website. Validated data from SLAMS and SPM sites operated by SLOCAPCD are typically submitted to AQS by end of the quarter following the quarter in which they were collected. Usually data is submitted well before this deadline. Raw data is uploaded automatically to AQMIS2 and airnow.gov within an hour after being generated in the field. In addition, raw data for the current day and previous day is available on the SLOCAPCD website. All data generated at these stations are public information and are available in various formats. Table 3, below, lists some popular sources for these data.

SLOCAPCD, and where applicable CARB, regularly submit precision and accuracy data to AQS for all gaseous and particulate pollutants measured in the SLAMS network. Additionally, in accordance with 40 CFR 58.15, SLOCAPCD certifies its AQS dataset for the previous year every spring. SLOCAPCD submitted a certification package for calendar year 2018 data to EPA on April 15, 2019.

Table 3: Sources for Air Quality Data from San Luis Obispo

Agency	Address for Data Requests	Website for Data Access	Data Available Online
SLOCAPCD	3433 Roberto Court, San Luis Obispo, CA 93401	Table: www.slocleanair.org/air /lasthour.php  Map: http://www.slocleanair. org/air/AirForcasting m ap3.php	Raw data from last 24 to 48 hours for sites in San Luis Obispo County.
CARB	P.O. Box 2815 Sacramento, CA 95812	AQMIS2: www.arb.ca.gov/aqmis2 /aqdselect.php  ADAM: www.arb.ca.gov/adam/	Most California sites, including all sites in San Luis Obispo County. Real-time raw data and archived validated data.
EPA	Ariel Rios Building 1200 Pennsylvania Ave NW Washington, DC 20460	AQS: www.epa.gov/ttn/airs/ai rsaqs/detaildata	Validated data from across the U.S. Typically one to several months behind current date.
AirNow.gov	U.S. EPA – OAQPS – ITG Mail Code E143-03 Research Triangle Park, NC 27711	www.airnow.gov	Current air quality conditions, nationwide. Based on real-time raw data.

# **Appendix A: Minimum Monitoring Requirements**

The SLOCAPCD monitoring network meets the minimum monitoring requirements for all criteria pollutants as established in 40 CFR 58. The tables below list the criteria used to determine compliance with Federal regulations. The county population cited in these tables (279,370) is the California Department of Finance estimate for July 1, 2018. The official figure from the most recent US Census (2010) is 269,637. Using this figure in lieu of the Department of Finance estimate does not change the required number of sites for any pollutant.

## Minimum Monitoring Requirements for Ozone (O<sub>3</sub>)

MSA	County	Population (Census Year)	8-hour Design Value (years) <sup>a</sup>	Design Value Site Name (AQS ID)	Number of Required Sites <sup>b</sup>	Number of Active Sites	Number of Additional Sites Needed
San Luis Obispo - Paso Robles	San Luis Obispo	279,370 (2018)	72 ppb (2016-18)	Red Hills (06-079-8005)	1	7	0

<sup>&</sup>lt;sup>a</sup> This Design Value is for eastern San Luis Obispo County, which in early 2012 was designated as marginally nonattainment for the 2008 8-hour ozone standard. The design value for the rest of the county is 64 ppb (2016-18) from Paso Robles (06-079-0005).

Monitors required for SIP or Maintenance Plan: None

<sup>&</sup>lt;sup>b</sup> Refer to section 4.1 and Table D-2 of Appendix D to 40 CFR Part 58 for requirements.

<sup>&</sup>lt;sup>5</sup> State of California, Department of Finance, E-2. California County Population Estimates and Components of Change by Year — July 1, 2010–2018, December 2018. <a href="http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-2/index.html">http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-2/index.html</a>

# Minimum Monitoring Requirements for PM<sub>2.5</sub> 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)	Number of Required SLAMS Sites <sup>a</sup>	Number of Active SLAMS Sites	Number of Additional SLAMS Sites Needed
San Luis Obispo	San Luis	279,370	8.9 μg/m <sup>3</sup>	CDF	26 μg/m <sup>3</sup>	CDF	0	4	0
- Paso Robles	Obispo	(2018)	(2016-18)	(06-079-2007)	(2016-18)	(06-079-2007)	U	4	

<sup>&</sup>lt;sup>a</sup> Refer to section 4.7.1 and Table D-5 of Appendix D to 40 CFR Part 58 for requirements.

Monitors required for SIP or Maintenance Plan: None

# Minimum Monitoring Requirements for Continuous PM<sub>2.5</sub> 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)	Number of Required Continuous Monitors <sup>a</sup>	Number of Active Continuous Monitors	Number of Additional Continuous Monitors Needed
San Luis Obispo - Paso Robles	San Luis Obispo	279,370 (2018)	8.9 μg/m³ (2016-18)	CDF (06-079-2007)	26 μg/m <sup>3</sup> (2016-18)	CDF (06-079- 2007)	0	4	0

<sup>&</sup>lt;sup>a</sup> Refer to section 4.7.2 and Table D-5 of Appendix D to 40 CFR Part 58 for requirements.

Monitors required for SIP or Maintenance Plan: None

# Minimum Monitoring Requirements for PM<sub>10</sub>

MSA	County	Population (Census Year)	Maximum Concentration (Year)	Maximum Concentration Site Name (AQS ID)	Number of Required Sites <sup>a</sup>	Number of Active Sites	Number of Additional Sites Needed
San Luis Obispo - Paso Robles	San Luis Obispo	279,370 (2018)	124 μg/m³ (2018)	Mesa2 (06-079- 2004)	1-2	6 b	0

<sup>&</sup>lt;sup>a</sup> Refer to section 4.6 and Table D-4 of Appendix D to 40 CFR Part 58 for requirements.

Monitors required for SIP or Maintenance Plan: None

## Minimum Monitoring Requirements for Nitrogen Dioxide (NO<sub>2</sub>)

CBSA	Population (Census Year)	Maximum AADT Count (Years)	Number of Required Near-road Monitors <sup>b</sup>	Number of Active Near-road Monitors	Number of Additional Near-road Monitors Needed	Number of Required Area-wide Monitors <sup>b</sup>	Number of Active Area-wide Monitors	Number of Additional Area-wide Monitors Needed
San Luis Obispo - Paso Robles	279,370 (2018)	86,000 (2017) <sup>a</sup>	0	0	0	0	2	0

<sup>&</sup>lt;sup>a</sup> US Hwy 101 in Pismo Beach

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

<sup>&</sup>lt;sup>b</sup> In addition to these 6 SLAMS, there is also a PM<sub>10</sub> SPM.

<sup>&</sup>lt;sup>b</sup> Refer to section 4.3 of Appendix D to 40 CFR Part 58 for requirements.

## Minimum Monitoring Requirements for Sulfur Dioxide (SO<sub>2</sub>)

CBSA	County	Population (Census Year)	Total SO <sub>2</sub> <sup>a</sup> (Tons/year)	Population Weighted Emissions Index (million person- tons/year) <sup>b</sup>	Data Requirements Rule Source(s) Using Monitoring <sup>c</sup>	Number of Required Monitors <sup>d</sup>	Number of Active Monitors	Number of Additional Monitors Needed
San Luis Obispo - Paso Robles	San Luis Obispo	279,370 (2018)	263	73	NA	0	1	0

<sup>&</sup>lt;sup>a</sup> From the 2014 National Emissions Inventory, which is the most year for which the Inventory is available: https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data

Monitors required for SIP or Maintenance Plan: None

## Minimum Monitoring Requirements for Carbon Monoxide (CO)

CBSA	Population (Census Year)	Number of Required Near-Road Monitors <sup>a</sup>	Number of Active Near-Road Monitors	Number of Additional Monitors Needed	
San Luis Obispo- Paso Robles	279,370 (2018)	0	0	0	

<sup>&</sup>lt;sup>a</sup> Refer to section 4.2 of Appendix D to 40 CFR Part 58 for requirements.

Monitors required for SIP or Maintenance Plan: None

EPA Regional Administrator-required monitors per section 4.2.2. of Appendix D to 40 CFR 58: None

<sup>&</sup>lt;sup>b</sup> Product of CBSA population and SO<sub>2</sub> emissions, divided by one million.

<sup>&</sup>lt;sup>c</sup> Refer to 40 CFR 51 Subpart BB. There are no sources within the county/CBSA/SLOCAPCD jurisdiction with annual emissions over 2,000 tons, therefore, neither monitoring nor modelling is required to meet the "Data Requirements Rule."

<sup>&</sup>lt;sup>d</sup> Refer to section 4.4 of Appendix D to 40 CFR Part 58 for requirements.

# **Minimum Monitoring Requirements for Lead at NCore**

NCore Site	CBSA	Population (Census Year)	Number of Required Monitors <sup>a</sup>	Number of Active Monitors	Number of Additional Monitors Needed
none	San Luis Obispo- Paso Robles	279,370 (2018)	0	0	0

<sup>&</sup>lt;sup>a</sup> Refer to section 4.5 of Appendix D to 40 CFR Part 58 for requirements.

# **Source-Oriented Lead Monitoring (Including Airports)**

Source	Address	Pb Emissions (Tons/yr)	Emissions Inventory Source Data (Year)	Max 3-Month Design Value	Design Value Date	Number of Required Monitors <sup>b</sup>	Number of Active Monitors	Number of Additional Monitors Needed
none <sup>a</sup>	n/a	n/a	n/a	n/a	n/a	0	0	0

<sup>&</sup>lt;sup>a</sup> According to the 2014 National Emissions Inventory, total lead emissions in the county are less than 0.50 tons, therefore no single source exceeds the 0.50 ton threshold.

Monitors required for SIP or Maintenance Plan: None

EPA Regional Administrator-required monitors per section 4.5(c) of Appendix D to 40 CFR 58: None

## Near-Road NO<sub>2</sub>, PM<sub>2.5</sub>, and CO Monitors

CBSA	Population (Census Year)	Maximum AADT Count (Years)	Number of Required NO <sub>2</sub> Monitors <sup>a</sup>	Number of Active NO <sub>2</sub> Monitors	Number of Required PM <sub>2.5</sub> Monitors <sup>a</sup>	Number of Active PM <sub>2.5</sub> Monitors	Number of Required CO Monitors <sup>a</sup>	Number of Active CO Monitors	Number of Additional Monitors Needed
San Luis Obispo - Paso Robles	279,370 (2018)	86,000 (2017) <sup>b</sup>	0	0	0	0	0	0	0

<sup>&</sup>lt;sup>a</sup> Refer to 40 CFR Part 58.13 and sections 4.2, 4.3, 4.7 of Appendix D to 40 CFR Part 58

<sup>&</sup>lt;sup>a</sup> Refer to section 4.5 of Appendix D to 40 CFR Part 58 for requirements.

<sup>&</sup>lt;sup>b</sup> US Hwy 101 in Pismo Beach.

# **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 Section 3 of Appendix A to 40 CFR 58. The requirements apply at the PQAO level, and monitors are aggregated by method when determining the required number of collocated monitors. SLOCAPCD is part of the CARB PQAO and all particulate monitors in our network are Met One BAM 1020s, which are continuous FEM instruments (PM<sub>10</sub> method code: 122; PM<sub>2.5</sub> method code: 170). While there are no collocated particulate monitors within the SLOCAPCD network, there are collocated monitors within the CARB PQAO.

Collocation requirements for PM<sub>2.5</sub> are met at the PQAO level and thus, by extension, for the District. According to CARB's most recent Annual Network Plan,<sup>6</sup> in 2018 there were 41 active PM<sub>2.5</sub> FEM BAM 1020 monitors (method 170) in the PQAO; thus, six collocated monitors were needed: three FRM/FEM pairs and three FEM/FEM pairs. The report indicates that the CARB PQAO met these minimum collocation requirements. This is corroborated by an AQS Certification and Concurrence Report (AMP600) for the 2018 calendar year (executed in April 2019), which reported slightly different numbers of monitors, but nonetheless indicates that collocation requirements were met for 2018. See Table B-1 below.

With regard to  $PM_{10}$  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 therefore there is no collocation requirement.

Table B- 1: Collocation Requirements for PM<sub>2.5</sub>, Method Code 170

Data Source (see text)	Number of Primary Monitors	Number of Required Collocated Monitors	Number of Active Collocated FRM Monitors	Number of Active Collocated FEM Monitors (same method designation as primary)	
CARB	41	6	3	4	
AMP600	36	5	6 total collocated monitors, type not indicated		

<sup>&</sup>lt;sup>6</sup> California Air Resources Board, "Annual Network Plan Covering Monitoring Operations in 25 California Air Districts," July 2018. http://www.arb.ca.gov/aqd/amnr/amnr2018.pdf.

# **Appendix C: Detailed Site Information**

Local site name	Paso Robles			
AQS ID	06-079-0005			
GPS coordinates (decimal degrees)	35.61467, -120.65691			
Street Address	235 Santa Fe Ave, Pas	so Robles		
County	San Luis Obispo			
Distance to roadways (meters)	27 to Santa Fe Ave.			
	110 to Sherwood Rd.			
	180 to Creston Rd.			
	2700 to US 101			
Traffic count (AADT, year)	Santa Fe Ave.: 75 (est	-		
	Sherwood Rd.: 10,027			
	Creston Rd: 17,347 (2	017)		
	US101: 70,500 (2017)			
Groundcover (e.g. asphalt, dirt, sand)	Asphalt			
Representative statistical area name (i.e. MSA, CBSA,	San Luis Obispo – Pas	so Robles		
other)	(MSA)	1		
Pollutant, POC	Ozone, 1	PM <sub>10</sub> , 2		
Primary / QA Collocated / Other	N/A	Primary		
Parameter code	44201	81102		
Basic monitoring objective(s)	NAAQS Comparison	Public info, NAAQS		
		Comparison		
Site type(s)	Population	Population		
	Exposure	Exposure		
Monitor type(s)	SLAMS	SLAMS		
Network Affiliation	N/A	N/A		
Instrument manufacturer and model	API 400E	Met One BAM 1020		
Method code	087	122		
FRM/FEM/ARM/other	FEM	FEM		
Collecting Agency	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A		
Reporting Agency	CARB	CARB		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	09/01/1991	06/01/2013 a		
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous		
Calculated sampling frequency (e.g. 1:3/1:1)	continuous	continuous		
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 monitors fulfilling a QA Collocation requirement (meters)	N/A	N/A		
For low volume PM instruments, is any PM instrument	N/A	No		

Local site name	Paso Robles	
within 1m of the instrument?		
For high volume PM instruments, is any PM instrument within 2m of the instrument?	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)	11.8	N/A
Will there be changes within the next 18 months?	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A
Frequency of flow rate verification for manual PM samplers	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	monthly
Frequency of one-point QC check for gaseous instruments	daily	N/A
Date of 2018 Annual Performance Evaluation for gaseous parameters	5/9/2018	N/A
Dates of 2018 Semi-Annual Flow Rate Audits for PM monitors	N/A	5/9/2018 10/17/2018

<sup>&</sup>lt;sup>a</sup> This instrument did not begin reporting  $PM_{10}$ -standard (88102) until 06/01/2013, but it has been reporting  $PM_{10}$ -actual (85101) since 08/11/2009.

Local site name	Grover Beach
AQS ID	06-079-2001
GPS coordinates (decimal degrees)	35.12393, -120.63222
Street Address	9 Le Sage Drive, Grover Beach
County	San Luis Obispo
Distance to roadways (meters)	10 to Le Sage Drive
	120 to US 1
Traffic count (AADT, year)	Le Sage: 300 (estimated)
	US 1: 11,500 (2017)
Groundcover (e.g. asphalt, dirt, sand)	Cement and dirt
Representative statistical area name (i.e. MSA, CBSA,	San Luis Obispo – Paso Robles
other)	(MSA)
Pollutant, POC	None (this is a meteorology-only station)

Local site name	Mesa2			
AQS ID	06-079-2004			
GPS coordinates (decimal degrees)	35.02079, -120.5	56389		
Street Address	1300 Guadalupe			
County	San Luis Obispo			
Distance to roadways (meters)	40 to Guadalupe Rd. (US 1)			
Traffic count (AADT, year)		US 1): 7,100 (2017	")	
Groundcover (e.g. asphalt, dirt, sand)	Vegetative	03 1). 7/100 (2017	1	
Representative statistical area name (i.e. MSA,	San Luis Obispo	– Paso Robles		
CBSA, other)	(MSA)	r aso nobies		
Pollutant, POC	SO <sub>2</sub> , 1	PM <sub>2.5</sub> , 1	PM <sub>10</sub> , 3	
Primary / QA Collocated / Other	N/A	Primary	Primary	
Parameter code	42401	88101	81102	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	
Basic Monitoring objective(s)	Comparison	Comparison	Comparison	
Site type(s)	Source	Source	Source	
	Oriented, Max	Oriented	Oriented	
	Concentration	Oriented	Official	
Monitor type(s)	SLAMS	SLAMS	SLAMS	
Network Affiliation	N/A	N/A	N/A	
Instrument manufacturer and model	API T100U	Met One BAM	Met One BAM	
modern manadetarer and moder	71111000	1020	1020	
Method code	100	170	122	
FRM/FEM/ARM/other	FEM	FEM	FEM	
Collecting Agency	SLOCAPCD	SLOCAPCD	SLOCAPCD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	
Reporting Agency	SLOCAPCD	SLOCAPCD	SLOCAPCD	
Spatial scale (e.g. micro, neighborhood)	Middle	Neighborhood	Neighborhood	
Monitoring start date (MM/DD/YYYY)	05/01/1989	07/01/2009	07/01/2009	
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous	continuous	
Calculated sampling frequency (e.g. 1:3/1:1)	continuous	continuous	continuous	
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	
Probe height (meters)	4.8	5.4	5.5	
Distance from supporting structure (meters) <sup>a</sup>	1.3	1.9	2.0	
Distance from obstructions on roof (meters)	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	
Distance from trees (meters)	N/A	N/A	N/A	
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	
Distance between monitors fulfilling a QA	N/A	N/A	N/A	
Collocation requirement (meters)				
For low volume PM instruments, is any PM	N/A	No	No	
instrument within 1 m of the instrument?				
For high volume PM instruments, is any PM	N/A	N/A	N/A	
instrument within 2m of the instrument?				
Unrestricted airflow (degrees)	360	360	360	
Probe material for reactive gases (e.g. Pyrex,	Teflon	N/A	N/A	

Local site name	Mesa2		
stainless steel, Teflon)			
Residence time for reactive gases (seconds)	5.1	N/A	N/A
Will there be changes within the next 18 months?	No	No	No
Is it suitable for comparison against the annual	N/A	Yes	N/A
PM2.5?			
Frequency of flow rate verification for manual	N/A	N/A	N/A
PM samplers			
Frequency of flow rate verification for automated	N/A	bi-weekly	bi-weekly
PM analyzers			
Frequency of one-point QC check for gaseous	daily	N/A	N/A
instruments			
Date of 2018 Annual Performance Evaluation for	5/2/2018	N/A	N/A
gaseous parameters			
Dates of 2018 Semi-Annual Flow Rate Audits for	N/A	5/2/2018	5/2/2018
PM monitors		10/16/2018	10/16/2018

<sup>&</sup>lt;sup>a</sup> This is the roof-to-probe distance. There are no walls, parapets, penthouses, or other potential obstacles on the roof.

Local site name	San Luis Obispo				
AQS ID	06-079-2006				
GPS coordinates (decimal degrees)	35.25651, -120.6				
Street Address		uera St., San Luis (	Obispo		
County	San Luis Obispo		'		
Distance to roadways (meters)	50 to South Higi				
, , , , , , , , , , , , , , , , , , , ,	450 to US 101				
Traffic count (AADT, year)	South Higuera St.: 15,731 (2016)				
, , ,	US 101: 65,300 (2017)				
Groundcover (e.g. asphalt, dirt, sand)		ne west and north	),		
	Asphalt (east an				
Representative statistical area name (i.e. MSA,	San Luis Obispo				
CBSA, other)	(MSA)				
Pollutant, POC	O <sub>3</sub> , 1	PM <sub>2.5</sub> , 3	PM <sub>10</sub> , 2		
Primary / QA Collocated / Other	N/A	Primary	Primary		
Parameter code	44201	88101	81102		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
	Comparison	Comparison	Comparison,		
	·		Public Info		
Site type(s)	Population	Population	Population		
	Exposure	Exposure	Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network Affiliation	N/A	N/A	N/A		
Instrument manufacturer and model	API 400E	Met One BAM	Met One BAM		
		1020	1020		
Method code	087	170	122		
FRM/FEM/ARM/other	FEM	FEM	FEM		
Collecting Agency	CARB	CARB	CARB		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A		
Reporting Agency	CARB	CARB	CARB		
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date (MM/DD/YYYY)	09/21/2005	03/15/2011	06/01/2013 a		
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous	continuous		
Calculated sampling frequency (e.g. 1:3/1:1)	continuous	continuous	continuous		
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31		
Probe height (meters)	14.6	14.6	14.6		
Distance from supporting structure (meters)	2.0	2.0	2.0		
Distance from obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	N/A	N/A	N/A		
Distance from trees (meters)	N/A	N/A	N/A		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA	N/A	N/A	N/A		
Collocation requirement (meters)					
For low volume PM instruments, is any PM	N/A	No	No		
instrument within 1 m of the instrument?					
For high volume PM instruments, is any PM	N/A	N/A	N/A		
instrument within 2m of the instrument?					

Local site name	San Luis Obispo			
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)	17.0	N/A	N/A	
Will there be changes within the next 18 months?	No	No	No	
Is it suitable for comparison against the annual PM2.5?	N/A	Yes	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	monthly	monthly	
Frequency of one-point QC check for gaseous instruments	daily	N/A	N/A	
Date of 2018 Annual Performance Evaluation for gaseous parameters	5/9/2018	N/A	N/A	
Dates of 2018 Semi-Annual Flow Rate Audits for PM monitors	N/A	5/9/2018 10/17/2018	5/9/2018 10/17/2018	

<sup>&</sup>lt;sup>a</sup> This instrument did not begin reporting  $PM_{10}$ -standard (88102) until 06/01/2013, but it has been reporting  $PM_{10}$ -actual (85101) since 03/15/2011.

Local site name	CDF	
AQS ID	06-079-2007	
GPS coordinates (decimal degrees)	35.04673, -120.58777	
Street Address	2391 Willow Rd., Arroyo Grande	
County	San Luis Obispo	
Distance to roadways (meters)	53 to Willow Rd. (US 1).	
Traffic count (AADT, year)	Willow Rd. (US1): 7,100 (2017)	
Groundcover (e.g. asphalt, dirt, sand)	Vegetative, Sand	
Representative statistical area name (i.e. MSA, CBSA,	San Luis Obispo – Paso Robles	
other)	(MSA)	
Pollutant, POC	PM <sub>2.5</sub> , 1	PM <sub>10</sub> , 2
	Primary	Primary
Primary / QA Collocated / Other  Parameter code	88101	81102
Basic monitoring objective(s)	NAAQS Comparison	NAAQS Comparison
Site type(s)	Max Concentration, Source Oriented	Max Concentration,
Manitar type(s)		Source Oriented
Monitor type(s)  Network Affiliation	SLAMS	SLAMS
	N/A	N/A
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020
Method code	170	122
FRM/FEM/ARM/other	FEM	FEM
Collecting Agency	SLOCAPCD	SLOCAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A
Reporting Agency	SLOCAPCD	SLOCAPCD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	08/01/2010	01/01/2010
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	continuous	continuous
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) <sup>a</sup>	1.9	1.8
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 monitors fulfilling a QA Collocation	N/A	N/A
requirement (meters)		
For low volume PM instruments, is any PM instrument	No	No
within 1 m of the instrument?		
For high volume PM instruments, is any PM instrument	N/A	N/A
within 2m of the instrument?		
Unrestricted airflow (degrees)	360	360
Probe material for reactive gases (e.g. Pyrex, stainless	N/A	N/A
steel, Teflon)		
Residence time for reactive gases (seconds)	N/A	N/A
Will there be changes within the next 18 months?	No	No
Is it suitable for comparison against the annual PM2.5?	Yes	N/A

Local site name	CDF	
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
Date of 2018 Annual Performance Evaluation for gaseous parameters	N/A	N/A
Dates of 2018 Semi-Annual Flow Rate Audits for PM monitors	5/1/2018 10/16/2018	5/1/2018 10/16/2018

<sup>&</sup>lt;sup>a</sup> This is the roof-to-probe distance. There are no walls, parapets, penthouses, or other potential obstacles on the roof.

Local site name	Morro Bay	
AQS ID	06-079-3001	
GPS coordinates (decimal degrees)	35.36640, -120.84268	
Street Address	899 Morro Bay Blvd., Morro Bay	
County	San Luis Obispo	
Distance to roadways (meters)	37 to Morro Bay Blvd.	
, , , , , , , , , , , , , , , , , , , ,	220 to CA 1	
Traffic count (AADT, year)	Morro Bay Blvd.: 12,388 (2015) <sup>a</sup>	
,,,,,,	CA 1: 22,200 (2017)	
Groundcover (e.g. asphalt, dirt, sand)	Paved	
Representative statistical area name (i.e. MSA, CBSA,	San Luis Obispo – Paso Robles	
other)	(MSA)	
Pollutant, POC	O <sub>3</sub> , 1	
Primary / QA Collocated / Other	N/A	
Parameter code	44201	
Basic monitoring objective(s)		
Site type(s)	NAAQS Comparison	
	General/Background SLAMS	
Monitor type(s)  Network Affiliation	N/A	
Instrument manufacturer and model	API T400	
Method code	087	
FRM/FEM/ARM/other	FEM	
Collecting Agency	SLOCAPCD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	
Reporting Agency	SLOCAPCD	
Spatial scale (e.g. micro, neighborhood)	Regional	
Monitoring start date (MM/DD/YYYY)	01/01/1981	
Monitoring end date (MM/DD/YYYY)	N/A	
Current sampling frequency (e.g. 1:3, continuous)	continuous	
Calculated sampling frequency (e.g. 1:3/1:1)	continuous	
Sampling season (MM/DD-MM/DD)	01/01-12/31	
Probe height (meters)	4.2	
Distance from supporting structure (meters)	1.1	
Distance from obstructions on roof (meters)	N/A	
Distance from obstructions not on roof (meters)	N/A	
Distance from trees (meters)	N/A	
Distance to furnace or incinerator flue (meters)	N/A	
Distance between monitors fulfilling a QA Collocation	N/A	
requirement (meters)		
For low volume PM instruments, is any PM instrument	N/A	
within 1 m of the instrument?		
For high volume PM instruments, is any PM instrument	N/A	
within 2m of the instrument?		
Unrestricted airflow (degrees)	360	
Probe material for reactive gases (e.g. Pyrex, stainless	Teflon	
steel, Teflon)		
Residence time for reactive gases (seconds)	12.9	

Local site name	Morro Bay
Will there be changes within the next 18 months?	No
Is it suitable for comparison against the annual PM2.5?	N/A
Frequency of flow rate verification for manual PM	N/A
samplers	
Frequency of flow rate verification for automated PM	N/A
analyzers	
Frequency of one-point QC check for gaseous	daily
instruments	
Date of 2018 Annual Performance Evaluation for	6/13/2018
gaseous parameters	
Dates of 2018 Semi-Annual Flow Rate Audits for PM	N/A
monitors	

<sup>&</sup>lt;sup>a</sup> This is the most current AADT available for this segment.

Local site name	Nipomo Regional Park (NRP)		
AQS ID	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)	500 to Tefft St.		
·	350 to Camino	Caballo	
	240 to Pomero	y Rd.	
Traffic count (AADT, year)	Tefft St.: 13,864	1 (2016)	
	Camino Caballo	o: 2,556 (2016)	
	Pomeroy Rd.: 5	5,048 (2017)	
Groundcover (e.g. asphalt, dirt, sand)	Vegetative		
Representative statistical area name (i.e. MSA,	San Luis Obisp	o – Paso Robles	
CBSA, other)	(MSA)		
Pollutant, POC	O <sub>3</sub> , 1	NO <sub>2</sub> , 1	PM <sub>10</sub> , 2
Primary / QA Collocated / Other	N/A	Primary	Primary
Parameter code	44201	42602	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS
	Comparison	Comparison	Comparison
Site type(s)	General/	General/	General/
	Background	Background	Background
Monitor type(s)	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A
Instrument manufacturer and model	API 400E	API T200U	Met One BAM
			1020
Method code	087	599 a	122
FRM/FEM/ARM/other	FEM	FRM	FEM
Collecting Agency	SLOCAPCD	SLOCAPCD	SLOCAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A
Reporting Agency	SLOCAPCD	SLOCAPCD	SLOCAPCD
Spatial scale (e.g. micro, neighborhood)	Regional	Regional	Regional
Monitoring start date (MM/DD/YYYY)	11/01/1998	11/01/1998	05/16/2010
Current sampling frequency (e.g. 1:3,	continuous	continuous	continuous
continuous)			
Calculated sampling frequency (e.g. 1:3/1:1)	continuous	continuous	continuous
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.5	4.5	4.8
Distance from supporting structure (meters) b	1.3	1.3	1.6
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 monitors fulfilling a QA	N/A N/A N/A		
Collocation requirement (meters)			
For low volume PM instruments, is any PM	N/A	N/A	No
instrument within 1 m of the instrument?			
For high volume PM instruments, is any PM	N/A	N/A	N/A

Local site name	Nipomo Reg	ional Park (NRP)	
instrument within 2m of the instrument?			
Unrestricted airflow (degrees)	360	360	360
Probe material for reactive gases (e.g. Pyrex,	Teflon	Teflon	N/A
stainless steel, Teflon)			
Residence time for reactive gases (seconds)	14.0	12.5	N/A
Will there be changes within the next 18	No	No	No
months?			
Is it suitable for comparison against the annual	N/A	N/A	N/A
PM2.5?			
Frequency of flow rate verification for manual	N/A	N/A	N/A
PM samplers			
Frequency of flow rate verification for	N/A	N/A	bi-weekly
automated PM analyzers			
Frequency of one-point QC check for gaseous	daily	daily	N/A
instruments			
Date of 2018 Annual Performance Evaluation for	5/1/2018	5/1/2018	N/A
gaseous parameters			
Dates of 2018 Semi-Annual Flow Rate Audits for	N/A	N/A	5/1/2018
PM monitors			10/16/2018

<sup>&</sup>lt;sup>a</sup> EPA, "AQS Memo - Changes to Oxides of Nitrogen Analyzer Method Codes," December 22, 2014. https://www.epa.gov/aqs/aqs-memo-changes-oxides-nitrogen-analyzer-method-codes

<sup>&</sup>lt;sup>b</sup> This is the roof-to-probe distance. There are no walls, parapets, penthouses, or other potential obstacles on the roof.

Local site name	Atascadero			
AQSID	06-079-8002			
GPS coordinates (decimal degrees)	35.49453, -120.66617			
Street Address	5599 Traffic Way, Atascadero, CA			
County	San Luis Obispo			
Distance to roadways (meters)	163 to Traffic Way			
	770 to US 101			
	330 to CA 41			
Traffic count (AADT, year)	Traffic Way: < 74			
	US 101: 61,000 (	•		
	CA 41: 15,700 (2	017)		
Groundcover (e.g. asphalt, dirt, sand)	Vegetative			
Representative statistical area name (i.e. MSA,	San Luis Obispo	– Paso Robles		
CBSA, other)	(MSA)	_		
Pollutant, POC	O <sub>3</sub> , 1	NO <sub>2</sub> , 1	PM <sub>2.5</sub> , 3	PM <sub>10</sub> , 3
Primary / QA Collocated / Other	N/A	Primary	Primary	Primary
Parameter code	44201	42602	88101	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS
	Comparison	Comparison	Comparison	Comparison
Site type(s)	Population	Population	Population	Population
	Exposure, Max	Exposure, Max	Exposure	Exposure
	Concentration	Concentration		
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	N/A	N/A	N/A	N/A
Instrument manufacturer and model	API T400	API T200	Met One BAM 1020	Met One BAM 1020
Method code	087	099	170	122
FRM/FEM/ARM/other	FEM	FRM	FEM	FEM
Collecting Agency	SLOCAPCD	SLOCAPCD	SLOCAPCD	SLOCAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A
Reporting Agency	SLOCAPCD	SLOCAPCD	SLOCAPCD	SLOCAPCD
Spatial scale (e.g. micro, neighborhood)	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date (MM/DD/YYYY)	02/25/2015	02/25/2015	02/25/2015	02/25/2015
Current sampling frequency (e.g. 1:3, continuous)	continuous	continuous	continuous	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	continuous	continuous	continuous	continuous
Sampling season (MM/DD-MM/DD)	01/01-12/31	01/01-12/31	01/01-12/31	01/01-12/31
Probe height (meters)	4.6	4.6	5.7	5.2
Distance from supporting structure (meters) b	1.0	1.0	2.1	1.6
Distance from obstructions on roof (meters)	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	N/A	N/A	N/A	N/A
Distance from trees (meters)	N/A	N/A	N/A	N/A
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA Collocation requirement (meters)	N/A	N/A	N/A	N/A
For low volume PM instruments, is any PM instrument within 1 m of the instrument?	N/A	N/A	No	No

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Local site name	Atascadero			
For high volume PM instruments, is any PM instrument within 2m of the instrument?	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)	7.9	11.3	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	Yes	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
Date of 2018 Annual Performance Evaluation for gaseous parameters	5/8/2018	5/8/2018	N/A	N/A
Dates of 2018 Semi-Annual Flow Rate Audits for PM monitors	N/A	N/A	5/8/2018 10/15/2018	5/8/2018 10/15/2018

<sup>&</sup>lt;sup>a</sup> This is the most current AADT available for this segment. Traffic counts were conducted only during peak morning and afternoon hours along this street. Along this stretch of Traffic Way, a total of 1,233 vehicles were counted during these four hours, therefore, six times this figure (7,398) represents the likely maximum AADT.

<sup>&</sup>lt;sup>b</sup> This is the roof-to-probe distance. There are no walls, parapets, penthouses, or other potential obstacles on the roof.

Local site name	Red Hills
AQS ID	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)	100 to Gillis Canyon Rd.
	1740 to Bitterwater Rd.
	10,400 to CA 41/46
Traffic count (AADT, year)	Gillis Canyon Rd.: 24 (2016)
	Bitterwater Rd.: 98 (2013) <sup>a</sup>
	CA 41/46: 7,400 (2017)
Groundcover (e.g. asphalt, dirt, sand)	Vegetative
Representative statistical area name (i.e. MSA, CBSA,	San Luis Obispo – Paso Robles
other)	(MSA)
Pollutant, POC	O <sub>3</sub> , 1
Primary / QA Collocated / Other	N/A
Parameter code	44201
Basic monitoring objective(s)	NAAQS Comparison
Site type(s)	Regional Transport, Max Concentration
Monitor type(s)	SLAMS
Network Affiliation	N/A
Instrument manufacturer and model	API T400
Method code	087
FRM/FEM/ARM/other	FEM
Collecting Agency	SLOCAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SLOCAPCD
Spatial scale (e.g. micro, neighborhood)	Regional
Monitoring start date (MM/DD/YYYY)	07/01/2000
Current sampling frequency (e.g. 1:3, continuous)	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	continuous
Sampling season (MM/DD-MM/DD)	01/01-12/31
Probe height (meters)	5.3
Distance from supporting structure (meters)	1.5
Distance from obstructions on roof (meters)	N/A
Distance from obstructions not on roof (meters)	N/A
Distance from trees (meters)	N/A
Distance to furnace or incinerator flue (meters)	N/A
Distance between monitors fulfilling a QA Collocation	N/A
requirement (meters)	
For low volume PM instruments, is any PM	N/A
instrument within 1 m of the instrument?	1.1/4
For high volume PM instruments, is any PM	N/A
instrument within 2m of the instrument?	200
Unrestricted airflow (degrees)	360 T-g
Probe material for reactive gases (e.g. Pyrex, stainless	Teflon
steel, Teflon)	

Local site name	Red Hills
Residence time for reactive gases (seconds)	17.5
Will there be changes within the next 18 months?	No
Is it suitable for comparison against the annual	N/A
PM2.5?	
Frequency of flow rate verification for manual PM	N/A
samplers	
Frequency of flow rate verification for automated PM	N/A
analyzers	
Frequency of one-point QC check for gaseous	daily
instruments	
Date of 2018 Annual Performance Evaluation for	6/12/2018
gaseous parameters	
Dates of 2018 Semi-Annual Flow Rate Audits for PM	N/A
monitors	

<sup>&</sup>lt;sup>a</sup> This is the most current AADT available for this segment.

Local site name	Carrizo Plain
AQS ID	06-079-8006
GPS coordinates (decimal degrees)	35.35474, -120.04013
Street Address	9640 Carrizo Highway (CA 58),
Sirect Address	California Valley
County	San Luis Obispo
Distance to roadways (meters)	38 to Carrizo Highway (CA 58)
Traffic count (AADT, year)	Carrizo Highway (CA 58): 450 (2017)
	Vegetative (to the west, north, and east)
Groundcover (e.g. asphalt, dirt, sand)	Asphalt (south)
Depresentative statistical area name (i.e. MSA CDSA	San Luis Obispo – Paso Robles
Representative statistical area name (i.e. MSA, CBSA, other)	·
	(MSA)
Pollutant, POC	O <sub>3</sub> , 1
Primary / QA Collocated / Other	N/A
Parameter code	44201
Basic monitoring objective(s)	NAAQS Comparison
Site type(s)	Regional Transport, General Background
Monitor type(s)	SLAMS
Network Affiliation	N/A
Instrument manufacturer and model	API T400
Method code	087
FRM/FEM/ARM/other	FEM
Collecting Agency	SLOCAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SLOCAPCD
Spatial scale (e.g. micro, neighborhood)	Regional
Monitoring start date (MM/DD/YYYY)	01/01/2006
Current sampling frequency (e.g. 1:3, continuous)	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	continuous
Sampling season (MM/DD-MM/DD)	01/01-12/31
Probe height (meters)	4.7
Distance from supporting structure (meters)	1.1
Distance from obstructions on roof (meters)	N/A
Distance from obstructions not on roof (meters)	N/A
Distance from trees (meters)	N/A
Distance to furnace or incinerator flue (meters)	N/A
Distance between monitors fulfilling a QA Collocation	N/A
requirement (meters)	
For low volume PM instruments, is any PM	N/A
instrument within 1 m of the instrument?	
For high volume PM instruments, is any PM	N/A
instrument within 2m of the instrument?	
Unrestricted airflow (degrees)	360
Probe material for reactive gases (e.g. Pyrex, stainless	Teflon
steel, Teflon)	
Residence time for reactive gases (seconds)	14.2
Will there be changes within the next 18 months?	No
vin diere be changes within the next to months:	110

Local site name	Carrizo Plain
Is it suitable for comparison against the annual	N/A
PM2.5?	
Frequency of flow rate verification for manual PM	N/A
samplers	
Frequency of flow rate verification for automated PM	N/A
analyzers	
Frequency of one-point QC check for gaseous	daily
instruments	
Date of 2018 Annual Performance Evaluation for	6/12/2018
gaseous parameters	
Dates of 2018 Semi-Annual Flow Rate Audits for PM	N/A
monitors	

Local site name	Oso Flaco
AQS ID	06-079-9001
GPS coordinates (decimal degrees)	35.00876, -120.59998
Street Address	Near intersection of Oso Flaco Lake & Beigle
	Rds., Nipomo
County	San Luis Obispo
Distance to roadways (meters)	1150 to Oso Flaco Lake Rd.
Distance to rodunajo (metero)	2800 to Guadalupe Rd. (US 1)
Traffic count (AADT, year)	Oso Flaco Lake Rd.: 2088 (2017)
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Guadalupe Rd. (US 1): 5100 (2017)
Groundcover (e.g. asphalt, dirt, sand)	Vegetative
Representative statistical area name (i.e. MSA, CBSA,	San Luis Obispo – Paso Robles
other)	(MSA)
Pollutant, POC	PM <sub>10</sub> , 1
Primary / QA Collocated / Other	N/A
Parameter code	81102
Basic monitoring objective(s)	Public Information, Rule 1001 Compliance
Site type(s)	Background
Monitor type(s)	SPM
Network Affiliation	N/A
Instrument manufacturer and model	Met One BAM 1020
Method code	122
FRM/FEM/ARM/other	FEM
Collecting Agency	SLOCAPCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A
Reporting Agency	SLOCAPCD
Spatial scale (e.g. micro, neighborhood)	Neighborhood
Monitoring start date (MM/DD/YYYY)	07/01/2015
Current sampling frequency (e.g. 1:3, continuous)	continuous
Calculated sampling frequency (e.g. 1:3/1:1)	continuous
Sampling season (MM/DD-MM/DD)	01/01-12/31
Probe height (meters)	3.3
Distance from supporting structure (meters)	2.0
Distance from obstructions on roof (meters)	N/A
Distance from obstructions not on roof (meters)	N/A
Distance from trees (meters)	N/A
Distance to furnace or incinerator flue (meters)	N/A
Distance between monitors fulfilling a QA Collocation	N/A
requirement (meters)	
For low volume PM instruments, is any PM	No
instrument within 1 m of the instrument?	
For high volume PM instruments, is any PM	N/A
instrument within 2m of the instrument?	
Unrestricted airflow (degrees)	360
Probe material for reactive gases (e.g. Pyrex, stainless	N/A
steel, Teflon)	
Residence time for reactive gases (seconds)	N/A

Local site name	Oso Flaco
Will there be changes within the next 18 months?	No
Is it suitable for comparison against the annual	N/A
PM2.5?	
Frequency of flow rate verification for manual PM	N/A
samplers	
Frequency of flow rate verification for automated PM	bi-weekly
analyzers	
Frequency of one-point QC check for gaseous	N/A
instruments	
Date of 2018 Annual Performance Evaluation for	N/A
gaseous parameters	
Dates of 2018 Semi-Annual Flow Rate Audits for PM	5/1/2018
monitors	10/16/2018

## **Appendix D: Public Comments Received**

#### Comment from Kevin Jones received May 24, 2019

Hello Karl Tupper,

I would be interested in finding out the legitimacy of the amount of cause vs. effect of natural occurrence from nature of wind blowing vs. ATV's causing this dust. Obviously the ATV's did not create the dunes. There is the effect of removing all the trees which was a natural wind barrier to the Nipomo homes and their claim of an unacceptable air quality. If the 600+ acres of very tall eucalyptus trees were not removed that would have provided a wind barrier and filter for the air down wind so they would have an ocean view. Ocean views come with wind and dust. Why wouldn't they replace the trees to block the wind and dust? Because they want their ocean view and it is easier to close the dunes which people have been using for 100+ years, 10 times longer than they have been there. I think they should be forced to put the trees back and do a wind/particulate study 10 years from now once the trees mature.

Also I would be interested in the amount of Bad Air in the Grover Beach area where Cars, ATV's do not drive, you can see when you drop into Pismo on the 101 from SLO that the air quality on windy days is not good all long the beaches where there is sand from Pismo to the point. Previously living in Grover Beach for 8 years and having my office in Grover Beach for 10 years now my vehicles and home/office are constantly covered in dust, it is a natural phenomenon of beach and surrounding communities to have dust in the air.

Do you have monitoring stations in areas like Grover Beach to compare to? If not, why not? Are the particulates a natural occurrence? Are the particulates something that the ATV's produce? Where do these particulates come from? Even if the dunes were closed to vehicular traffic would the particulates stop? I have been told that if there is no vehicles a crust would form and dust would not blow? I have hiked the dunes where no vehicles drive and there was no sign of crust and there was a significant amount of dust in the air from the natural dunes.

Any questions or concerns please contact me immediately!

Respectfully,

Kevin Jones

#### Comment from Joseph Klopf received May 24, 2019

I have been to several meetings concerning the air quality at the Oceano Dunes. It is painfully obvious that the air quality is not effected my OHV use at the dunes. Facts and common sense dictates that if you build homes down wind of naturally occurring dunes that sand and dust will be airborne and travel some distance downwind. The people affected by the dust particles were warned by the developer prior to building their homes about the dust issue. They chose to live there. Now they want to hold State Parks responsible. And ultimately the OHV user lose more of the small area we have to enjoy. This is a sad situation where the blame for bad decisions is being shifted to people who have nothing to do with the problem. The people in charge are turning a blind eye to the facts and to common sense.

# SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT 2019 ANNUAL AMBIENT AIR MONITORING NETWORK PLAN

Sincerely,

Joseph Klopf

### **Appendix E: Response to Public Comments**

Neither of the commenters raise any substantive issues with this year's Annual Network Plan. No deficiencies or unmet requirements were identified, nor were any changes to the current network proposed. The entirety of Joseph Klopf's comment letter and much of Kevin Jones's relate to the efforts by the California Department of Parks and Recreation and the District to mitigate windblown dust from the ODSVRA. They raise questions and concerns that the District has addressed in the following document: Response to Comments on the May 1st Workshop Version of the Draft Particulate Matter Reduction Plan Required by Stipulated Order of Abatement 17-0, available online at <a href="https://www.slocleanair.org/air-quality/oceano-dunes-efforts.php">https://www.slocleanair.org/air-quality/oceano-dunes-efforts.php</a>, under the "June 11, 2019 Update" section.

Kevin Jones also asked about Grover Beach air quality and monitoring in that area. The District does not currently have any pollutant monitors in Grover Beach,<sup>7</sup> and previous monitoring there has shown that pollutant levels were generally low, meeting state and federal standards and/or well represented by other monitors in nearby communities. Our AQI forecast map puts Grover Beach in the San Luis Obispo forecast zone, meaning that we expect air quality conditions there to be most similar to the levels monitored in the City of San Luis Obispo.

With regard to previous monitoring in Grover Beach, the District conducted temporary PM<sub>10</sub> monitoring there as part of its "Phase 2 Study," and found that the levels were much lower than on the Nipomo Mesa. It concluded that windblown dust from ODSVRA did not impact this area. This study is available online at <a href="https://www.slocleanair.org/library/air-quality-reports.php">https://www.slocleanair.org/library/air-quality-reports.php</a>. Ozone, NO<sub>2</sub> and SO<sub>2</sub> were monitored in Grover Beach until 2005; concentrations of these pollutant were found to be low. See *the Air Quality Trends Report*: 1991- 2011, on the same webpage for further details.

<sup>&</sup>lt;sup>7</sup> As discussed earlier in this network plan, the District currently monitors wind speed and direction there, but intends to close this station in 2019.