Annual Network Plan

Covering Monitoring Operations in 25 California Air Districts

July 2017

California Environmental Protection Agency
Air Resources Board

Table of Contents

Appendices

Abbreviations used in this document

ARB	California Air Resources Board
ANP	Annual Network Plan
APCD	Air Pollution Control District
AQMD	Air Quality Management District
AQS	Air Quality System
ARD	Air Resources District
ARM	Approved Regional Method
AQDA	Air Quality Data Action
CAN	Corrective Action Notification
CASTNET	Clean Air Status and Trends Network Stations
CBSA	Core-Based Statistical Area
CFR	Code of Federal Regulations
CO	Carbon monoxide
CSN	Chemical Speciation Network
DV	Design Value
FEM	Federal Equivalent Method
FRM	Federal Reference Method
MLD	Monitoring and Laboratory Division
NAAQS	National Ambient Air Quality Standard
NCore	National Core multipollutant network monitoring site
NIST	National Institute of Standards and Technology
NO_2	Nitrogen dioxide
NPS	National Park Service
OMB	Office of Management and Budget
PAMS	Photochemical Assessment Monitoring Site
PM_{10}	Particulate Matter with an aerodynamic diameter <10 micrometers
$PM_{2.5}$	Particulate Matter with an aerodynamic diameter <2.5 micrometers
PQAO	Primary Quality Assurance Organization
PWEI	Population Weighted Emissions Index
QAS	Quality Assurance Section
QMB	Quality Management Branch
QMS	Quality Management Section
SLAMS	State and Local Air Monitoring Site
SO_2	Sulfur dioxide
SPM	Special Purpose Monitor
STN	Speciated Trends Network
TPY	Tons Per Year
U.S. EPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound

Section 1: Introduction

Federal regulations require state and local agencies that conduct ambient air monitoring for regulatory purposes to submit an Annual Network Plan (ANP) to the U.S. Environmental Protection Agency (U.S. EPA). ANPs are required to provide detailed information about sites and instruments operating in the ambient air monitoring network. This ANP meets the federal regulatory requirements set forth in 40 CFR 58.10 and Appendices A through E.

The Air Resources Board (ARB) Primary Quality Assurance Organization (PQAO) is comprised of 32 of the 35 air districts in California. The districts in the ARB PQAO may elect to prepare their own ANP or have their information included in the ARB ANP. The 2017 ARB ANP covers the monitoring networks of 25 districts within the ARB PQAO. Seven districts in the ARB PQAO will prepare their own ANPs and submit them directly to U.S. EPA. Three other districts in California, the Bay Area Air Quality Management District (AQMD), San Diego Air Pollution Control District (APCD), and South Coast AQMD represent their own PQAOs and are responsible for preparing their own ANPs and submitting them directly to U.S. EPA.

The 2017 ANP details the operations of the monitoring networks in 2016 and describes the changes that are planned to occur within the next 18 months. Consistent with direction from U.S. EPA, this ANP describes monitors operated by local districts, ARB, and other agencies such as the National Park Service (NPS), within the jurisdictions of the districts covered by this report. As required by federal regulations, this ANP includes detailed information about monitors using Federal Reference Methods (FRM), Federal Equivalent Methods (FEM), or Approved Regional Methods (ARM) that are included in the State and Local Air Monitoring (SLAMS) network, National Core (NCore) Multipollutant monitoring station, Chemical Speciation Network (CSN), Special Purpose Monitor (SPM) stations, and Photochemical Assessment Monitoring Stations (PAMS).

Areas Covered in this Network Plan

The geographic boundaries of the 25 air districts covered in this ANP as well as the districts preparing their own ANPs are identified in Table 1 and Figure 1. Monitoring sites operated by districts that are not covered by this ANP are included when necessary to demonstrate fulfillment of federal monitoring requirements.

Public Inspection and Comment Period

The ARB ANP was available for a 30 day public inspection and comment period prior to its submittal to the U.S. EPA. If public comments are received, ARB will provide a response to the comments when the plan is submitted to the U.S EPA. The final version of the ARB ANP is available for download from http://www.arb.ca.gov/aqd/amnr/amnr.htm.

Table 1: Districts in the ARB Primary Quality Assurance Organization

Districts Included in the ARB ANP	Districts Drafting Their Own ANP
Amador County APCD	Great Basin Unified APCD
Antelope Valley AQMD	Monterey Bay Unified APCD*
Butte County AQMD	North Coast Unified AQMD
Calaveras County APCD	Sacramento Metropolitan AQMD
Colusa County APCD	San Joaquin Valley APCD
Eastern Kern APCD	San Luis Obispo County APCD
El Dorado County AQMD	Santa Barbara County APCD
Feather River AQMD	
Glenn County APCD	
Imperial County APCD	
Lake County AQMD	
Lassen County APCD**	
Mariposa County APCD	
Mendocino County AQMD	
Modoc County APCD**	
Mojave Desert AQMD	
Northern Sierra AQMD	
Northern Sonoma County APCD	
Placer County APCD	
Shasta County AQMD	
Siskiyou County APCD	
Tehama County APCD	
Tuolumne County APCD	
Ventura County APCD	
Yolo-Solano AQMD	

* Now doing business as the Monterey Bay Air Resources District.
** Lassen County APCD and Modoc County APCD are covered by this ANP; however, no ambient air quality monitors are currently sited in these districts.

Figure 1: California Primary Quality Assurance Organizations

ARB PQAO districts preparing their own plan: North Coast Unified (NCU); Sacramento (SAC); San Joaquin Unified (SJU); Great Basin Unified (GBU); Monterey Bay Unified (MBU); San Luis Obispo (SLO); and Santa Barbara (SB)

Section 2: Monitoring Network Overview

California's ambient air monitoring network includes over 250 sites and more than 700 monitors, making it one of the most extensive in the world. Many regions in California are characterized by complex terrain, variable meteorological conditions, and diverse emission sources. A large monitoring network is critical for assessing the State's progress in meeting clean air objectives, understanding spatial and temporal variation in air pollutants, and evaluating pollutant exposure. Monitors are operated by ARB, local air districts, and other entities including the National Park Service (NPS), private contractors, and tribal authorities. Tribal monitors are not included in this report.

Ambient concentration data are collected for a wide variety of pollutants including ozone, particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), particulate matter with a diameter of 10 microns or less (PM_{10}), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb), which are the federal criteria pollutants. Meteorological parameters, volatile organic compounds (VOC), and a host of toxic air contaminants are also monitored at a number of sites. While toxics, VOCs, and meteorological monitoring play an integral role in California's air quality programs, the focus of this ANP, as specified by federal requirements, is on sites that conduct monitoring of the federal criteria pollutants, as well as PAMS data, within the jurisdictions of districts covered by this ANP.

Although most sites monitor for multiple pollutants, not all pollutants are monitored at every site because the data needs vary by locale. One fundamental purpose of monitoring is to distinguish between areas where pollutant levels violate the ambient air quality standards and areas that meet ambient air quality standards. Areas in violation of a standard usually have increasingly stringent mandates to reduce the sources of pollution that result in the exceedances. Based in part on monitoring data, air quality agencies develop strategies, programs, and regulations to achieve needed emission reductions. Data from the ambient monitoring network are then used to assess the efficacy of strategies, programs, and regulations.

The pollutants and the number of monitors at each monitoring site in the area covered by this ANP are shown in Table 2; additional site and monitor-level details are provided in Appendix A.

Table 2: Pollutants Monitored in the Districts Covered by this ANP

District	Site	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$	ARB Operated
Amador	Jackson-Clinton			1				Yes
Antelope Valley	Lancaster-Division	1	1	1		1	1	
Butte	Chico-East	1	1	1		1	2	Yes
	Gridley						1	Yes
	Paradise-Airport			1				Yes
	Paradise - Theater						1	Yes
Calaveras	San Andreas			1		1	1	Yes
Colusa	Colusa-Sunrise Blvd			1		1	2	Yes
Eastern Kern	Canebrake					1		
	Mojave			1		1	1	Yes
	Ridgecrest-California					1	1	
El Dorado	Cool			1				Yes
	Echo Summit			1				Yes
	Placerville			1				Yes
	South Lake Tahoe					1		Yes
Feather River	Sutter Buttes			1				Yes
	Yuba City		1	1		1	2	Yes
Glenn	Willows-Colusa			1		1	1	Yes
Imperial	Brawley-Main					2	1	
	Calexico-Ethel	1	1	1	1	2	3	Yes
	El Centro-9th	1	1	1		1	1	
	Niland-English			1		2		
	Westmorland			1		1		
Lake	Middletown					1		
	Glenbrook					1		
	Lakeport			1		1	1	
Mariposa	Jerseydale			1				Yes
	Yosemite Village					1	1	Yes
Mendocino	Fort Bragg-300 Dana					1		
	Ukiah-Gobbi			1				
	Ukiah-Library						1	
	Willits-Justice Center						1	
Mojave Desert	Barstow	1	1	1		1		
	Blythe-Murphy			1				Yes
	Hesperia-Olive			1		1		
	Joshua Tree-Black Rock			1				
	Joshua Tree-Pinto Wells			1				
	Lucerne Valley					1		
	Mojave NP			1				
	Phelan			1				
	Trona-Athol/Telescope		1	1	1	1		
	Victorville-Park	1	1	1	1	2	2	
Northern Sierra	Chester						1	
	Grass Valley			1			2	
	Portola						3	
	Quincy-N Church						2	
	Truckee-Fire Station						2	
	White Cloud Mountain			1				Yes
Northern Sonoma	Cloverdale					1		
	Guerneville-Church					1		
	Healdsburg-Matheson					1		
	Healdsburg-Municipal			1				
Placer	Auburn-Atwood			1			1	
	Colfax-City Hall			1			1	
	Lincoln-1st			1			1	
	Roseville-N Sunrise		1	1		1	3	
	Tahoe City-Fairway			1			1	

Table 2 continued:

District	Site	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$	ARB Operated
Shasta	Anderson-North			1		1		
	Lassen Volcanic NP			1				
	Redding-Health Dept			1		1	1	
	Shasta Lake-Lake			1				
	Shasta Lake-La Mesa					1		
Siskiyou	Yreka			1		1	2	Yes
Tehama	Red Bluff-Walnut			1		1	1	
	Tuscan Butte			1				Yes
Tuolumne	Sonora-Barretta			1				Yes
Ventura	El Rio-Rio Mesa School		1	1		1	1	
	Ojai-East Ojai			1			1	
	Piru-Pacific			1			1	
	Simi Valley-Cochran		1	1		1	2	
	Thousand Oaks			1			1	
Yolo-Solano	Davis-UCD Campus		1	1			1	Yes
	Vacaville-Merchant					1		
	Vacaville-Ulatis			1				
	West Sacramento-15th					1		
	Woodland-Gibson			1		1	1	

Section 3: Site and Monitoring Information

U.S. EPA requires the federal site type, federal monitoring objective, and federal monitor type to be included in ANPs. These elements are described in the following sections and identified at the monitor-level in Appendix A.

Federal Site Type

Monitoring sites must be capable of informing air quality program managers about peak air pollution levels, typical levels in populated areas, air pollution transported into and out of a city or region, and air pollution levels near specific sources. For these reasons, U.S. EPA requires that each monitor at a site be designated, at a minimum, with one of the following site types established in the Air Quality System (AQS) database:

- Extreme Downwind
- Highest Concentration
- Maximum Ozone Concentration
- Maximum Precursor Emissions Impact
- Population Exposure
- Source Oriented
- Upwind Background
- General/Background
- Regional Transport
- Welfare Related Impacts
- Quality Assurance
- Other*

*U.S. EPA states that "Other" is intended for a monitor for a parameter not addressed by 40CFR Part 58. (i.e. it will not be allowed for criteria pollutants or monitoring network such as NCore, PAMs or NATTS).

U.S. EPA requires that a monitor be designated with an appropriate site type so that the data collected can be used to support a specific federal monitoring objective. The site type designations are at the monitor level rather than the site level because U.S. EPA has determined that a single site type may not describe all of the monitors at a particular site.

Federal regulations note that the spatial scale of representativeness of a monitor should be consistent with the stated site type. The spatial scale of representativeness is a measure of the physical dimensions of the air mass through which pollutant concentrations are expected to be relatively homogeneous. The scales of representativeness that are most relevant to ambient air monitoring are defined on the next page:

- *Microscale*: Measured concentrations are expected to be similar for an area ranging from several meters up to about 100 meters.
- *Middle scale*: Measured concentrations are expected to be similar for areas up to several city blocks in size with dimensions ranging from about 100 meters to 0.5 kilometer.
- *Neighborhood scale*: Measured concentrations are expected to be similar within some extended area of the city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometers range.
- *Urban scale*: Measured concentrations are expected to be similar within an area of city-like dimensions, on the order of 4 to 50 kilometers.
- *Regional scale*: Measured concentrations are expected to be similar within a rural area of reasonably homogeneous geography without large sources, and extend from tens to hundreds of kilometers.
- *National and global scales*: These measurement scales represent concentrations characterizing the nation and the globe as a whole

The spatial scale of representativeness that is generally most appropriate for each of the most common federal site types are shown in Table 3, which is based on Table D-1 in Appendix D of 40 CFR 58. The types of monitoring sites and the spatial scales designated in the area covered by this ANP are illustrated in Table 4. The site type is listed first following the spatial scale. Note that a monitor may have more than one site type.

Table 3: Site Type and Recommended Spatial Scale

Appropriate Site Type	Appropriate Spatial Scales
Highest concentration	Micro, middle, neighborhood (sometimes urban or regional for secondarily formed pollutants)
Population exposure	Neighborhood, urban
Source oriented	Micro, middle, neighborhood
General background	Urban, regional
Regional transport	Urban, regional
Welfare-related impacts	Urban, regional

Table 4: Site Type and Spatial Scale in the Districts Covered by this ANP

District	Site	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$
Amador	Jackson-Clinton			pop/ n			
Antelope Valley	Lancaster-Division	pop/ m	pop/ m	pop/ m		pop/ n	pop/ n
Butte	Chico-East	pop/ n	pop/ n	pop/ n		pop/ n	high/ n
	Gridley						pop/ n
	Paradise-Airport			high/ r			
	Paradise - Theater						gen/ n
Calaveras	San Andreas			high/ n		gen/ n	gen/ n
Colusa	Colusa-Sunrise Blvd			gen/ r		high/ n	pop/ n
Eastern Kern	Canebrake					gen,pop/ u	
	Mojave			high/ r		high/ n	high/ n
	Ridgecrest-California					high/ n	pop/ n
El Dorado	Cool			high/ r			
	Echo Summit			trans/ r			
	Placerville			high/ r			
	South Lake Tahoe					pop/ m	
Feather River	Sutter Buttes			high,trans/ r			
	Yuba City		pop/ n	high/ n		pop/ n	pop/ n
Glenn	Willows-Colusa			pop/ n		pop/ n	pop/ n
Imperial	Brawley-Main					pop/ n	pop/ n
	Calexico-Ethel	pop/ n	pop/ n	gen/ n	pop/ n	high/ n	pop/ n
	El Centro-9th	pop/ n	pop/ n	high/ n		pop/ n	pop/ n
	Niland-English			pop/ n		pop/ n	
	Westmorland			pop/ r		pop/ m	
Lake	Middletown					pop/ u	
	Glenbrook					pop/ u	
	Lakeport			pop/ u		gen/ n	pop/ n
Mariposa	Jerseydale			high/ r			
	Yosemite Village					pop/ m	pop/ m
Mendocino	Fort Bragg-300 Dana					gen/ n	
	Ukiah-Gobbi			pop/ n			
	Ukiah-Library						pop/ n
	Willits-Justice Center						pop/ n
Mojave Desert	Barstow	pop/ m	pop/ m	pop/ m		pop/ n	
	Blythe-Murphy			gen/ n			
	Hesperia-Olive			pop/ n		gen,pop/ n	
	Joshua Tree-Black Rock			high/ r			
	Joshua Tree-Pinto Wells			gen/ r			
	Lucerne Valley					pop/ n	
	Mojave NP			gen/ r			
	Phelan			pop/ n			
	Trona-Athol/Telescope		source/ n	pop/ n	source/ n	high,source/ n	
	Victorville-Park	pop/ n	pop/ n	pop/ n	pop/ n	pop/ n	trans,pop/ n
Northern Sierra	Chester						pop/ n
	Grass Valley			pop/ n			pop/ n
	Portola						pop/ n
	Quincy-N Church						pop/ n
	Truckee-Fire Station						pop/ n
	White Cloud Mountain			gen/ r			
Northern Sonoma	Cloverdale					pop/ n	
	Guerneville-Church					pop/ n	
	Healdsburg-Matheson					pop/ n	
	Healdsburg-Municipal			high/ r			
Placer	Auburn-Atwood			pop/ n			pop/ n
	Colfax-City Hall			pop/ n			pop/ n
	Lincoln-1st			pop/ n			pop/ n
	Roseville-N Sunrise		pop/ n	high/ n		high/ n	pop/ n
	Tahoe City-Fairway			gen/ u			pop,gen/ u

Table 4 continued:

District	Site	CO	NO_2	Ozone	SO_2	PM_{10}	$PM_{2.5}$
Shasta	Anderson-North			pop/ n		high/ n	
	Lassen Volcanic NP			gen/ n			
	Redding-Health Dept			pop,high/ n		high/ n	pop/ n
	Shasta Lake-Lake			pop/ n			
	Shasta Lake-La Mesa					pop/ n	
Siskiyou	Yreka			high,trans,pop / n		high/ n	pop/ n
Tehama	Red Bluff-Walnut			pop/ n		high/ n	gen/ n
	Tuscan Butte			high/ r			
Tuolumne	Sonora-Barretta			high/ n			
Ventura	El Rio-Rio Mesa School		pop/ u	pop/ u		pop/ n	pop/ n
	Ojai-East Ojai			pop/ u			pop/ n
	Piru-Pacific			pop/ n			pop/ n
	Simi Valley-Cochran		high/ u	high/ u		high/ n	high/ n
	Thousand Oaks			pop/ u			pop/ n
Yolo-Solano	Davis-UCD Campus		pop/ n	pop/ n			pop/ n
	Vacaville-Merchant					pop/ n	
	Vacaville-Ulatis			pop/ n			
	West Sacramento-15th					pop/ n	
	Woodland-Gibson			pop/ n		pop/ n	pop/ n

Site Types:
gen- general background
high- highest concentration
pop- population exposure
trans- regional transport
source- source oriented

Spatial Scales:
m- middle scale
n- neighborhood scale
u- urban scale
r- regional scale

Federal Monitoring Objective

The federal monitoring objectives are defined in Appendix D of 40 CFR 58. Federal monitoring regulations require that each monitor measuring a criteria pollutant is sited to meet at least one monitoring objective. The three federal monitoring objectives are:

- To provide air quality data to the public in a timely manner;
- To support compliance with national ambient air quality standards; and
- To support air quality research studies.

Many air quality agencies operate monitors with multiple objectives in mind. For example, monitoring is conducted to provide both air quality data to the public as well as to support compliance with national ambient air quality standards. There are a number of monitoring purposes besides the federal monitoring objectives that are directly related to the needs of state and local agencies. Some of the most common state and local monitoring purposes include determination of agricultural and residential burn periods, geyser air monitoring, and state designations. These are outside of the scope of the ANP.

Federal Monitor Type

The federal monitor type refers to the agency operating the monitor or the specific purpose for which the monitor is operated. There are seven federal monitor types:

- SLAMS
- SPM
- Industrial
- Non-EPA federal
- Tribal
- EPA
- Other

Most monitors established and operated by state and local air agencies are identified as SLAMS. SLAMS monitors meet specific siting and quality assurance criteria defined in federal regulations. Some monitors are identified as SPMs, and are operated by state and local monitoring agencies to fulfill very specific or short-term monitoring goals. SPMs are required to meet 40 CFR Part 58 Appendix A requirements and 40 CFR Part 58 Appendix E requirements are optional. Many SPMs operated in California by state and local agencies do fulfill these requirements. SPMs that operate for more than two years can be used by U.S. EPA to determine compliance with federal standards. Tribal monitors are operated on tribal lands by tribal entities and are outside of the scope of this ANP. In this ANP all the monitors identified as non-EPA federal monitors are operated by the NPS. Table 5 shows the types of monitors, their monitoring objectives and the network affiliations (i.e. network programs under which the monitor is operated).

Table 5: Monitor Type, Monitoring Objective and Network Affiliation

District	Site	Monitoring Objective	Monitor Type*	Network Affiliation**
Amador	Jackson-Clinton	NAAQS	SLAMS	
Antelope Valley	Lancaster-Division	NAAQS, Public Information	SLAMS	
Butte	Chico-East	NAAQS, Public Information	SLAMS	CSN Supplemental
	Gridley	Public Information	SLAMS	
	Paradise-Airport	NAAQS	SLAMS	
	Paradise - Theater	Public Information	SLAMS	
Calaveras	San Andreas	NAAQS, Public Information	SLAMS	
Colusa	Colusa-Sunrise Blvd	NAAQS	SLAMS	
Eastern Kern	Canebrake	NAAQS	SLAMS	
	Mojave	NAAQS	SLAMS	
	Ridgecrest-California	NAAQS	SLAMS	
El Dorado	Cool	NAAQS	SLAMS	
	Echo Summit	NAAQS	SLAMS	
	Placerville	NAAQS	SLAMS	
	South Lake Tahoe	NAAQS	SLAMS	
Feather River	Sutter Buttes	NAAQS	SLAMS	
	Yuba City	NAAQS, Public Information	SLAMS	
Glenn	Willows-Colusa	NAAQS, Public Information	SLAMS	
Imperial	Brawley-Main	NAAQS	SLAMS	
	Calexico-Ethel	NAAQS, Public Information	SLAMS	CSN Supplemental
	El Centro-9th	NAAQS	SLAMS	
	Niland-English	NAAQS	SLAMS	
	Westmorland	NAAQS	SLAMS	
Lake	Middletown	Public Information	SLAMS	
	Glenbrook	Public Information	SLAMS	
	Lakeport	NAAQS	SLAMS	
Mariposa	Jerseydale	NAAQS	SPM	
	Yosemite Village	NAAQS, Public Information	SLAMS	

Table 5 continued:

District	Site	Monitoring Objective	Monitor Type*	Network Affiliation**
Mendocino	Fort Bragg-300 Dana	NAAQS	SLAMS	
	Ukiah-Gobbi	NAAQS	SLAMS	
	Ukiah-Library	NAAQS	SLAMS	
	Willits-Justice Center	NAAQS	SLAMS	
Mojave Desert	Barstow	NAAQS	SLAMS	
	Blythe-Murphy	NAAQS, Public Information	SLAMS	
	Hesperia-Olive	NAAQS	SLAMS	
	Joshua Tree-Black Rock	NAAQS	non-EPA Federal	CASTNET
	Joshua Tree-Pinto Wells	Public Information	non-EPA Federal	
	Lucerne Valley	NAAQS	SLAMS	
	Mojave NP	Public Information	non-EPA Federal	
	Phelan	NAAQS	SLAMS	
	Trona-Athol/Telescope	NAAQS	SLAMS	
	Victorville-Park	NAAQS	SLAMS	
Northern Sierra	Chester	NAAQS	SLAMS	
	Grass Valley	NAAQS	SLAMS	
	Portola	NAAQS	SLAMS	CSN Supplemental
	Quincy-N Church	NAAQS	SLAMS	
	Truckee-Fire Station	NAAQS	SLAMS	
	White Cloud Mountain	NAAQS	SLAMS	
Northern Sonoma	Cloverdale	NAAQS	SLAMS	
	Guerneville-Church	NAAQS	SLAMS	
	Healdsburg-Matheson	NAAQS	SLAMS	
	Healdsburg-Municipal	NAAQS	SLAMS	
Placer	Auburn-Atwood	NAAQS	SLAMS	
	Colfax-City Hall	NAAQS, Public Information	SLAMS	
	Lincoln-1st	NAAQS, Public Information	SLAMS	
	Roseville-N Sunrise	NAAQS, Public Information	SLAMS	
	Tahoe City-Fairway	NAAQS, Public Information	SLAMS	
Shasta	Anderson-North	NAAQS	SLAMS	
	Lassen Volcanic NP	NAAQS, Research	non-EPA Federal	CASTNET
	Redding-Health Dept.	NAAQS	SLAMS	
	Shasta Lake-Lake	NAAQS	SLAMS	
	Shasta Lake-La Mesa	NAAQS	SLAMS	
Siskiyou	Yreka	NAAQS	SPM	
Tehama	Red Bluff-Walnut	NAAQS	SLAMS	
	Tuscan Butte	NAAQS	SPM	
Tuolumne	Sonora-Barretta	NAAQS	SLAMS	
Ventura	El Rio-Rio Mesa School	NAAQS	SLAMS	PAMS
	Ojai-East Ojai	NAAQS	SLAMS	
	Piru-Pacific	NAAQS	SLAMS	
	Simi Valley-Cochran	NAAQS, Public Information	SLAMS	PAMS
	Thousand Oaks	NAAQS	SLAMS	
Yolo-Solano	Davis-UCD Campus	NAAQS, Public Information	SLAMS	
	Vacaville-Merchant	NAAQS	SLAMS	
	Vacaville-Ulatis	NAAQS	SLAMS	
	West Sacramento-15th	NAAQS	SLAMS	
	Woodland-Gibson	NAAQS	SLAMS	

* Monitor type "Industrial" and "EPA" are not in the area coved by this ANP.
** There are no other network types such as CSN STN, IMPROVE, NATTS, NCore, or Near Road in the area covered by this ANP.

Section 4: Additional Information about the Monitors

Required Monitor Information

U.S. EPA regulations (40 CFR Part 58.10) require that the annual monitoring network plan lists specific additional information that characterizes the nature and location of the monitors. U.S. EPA Region 9 identified all of the information that is required on each site/monitor basis. The full list of required information is included in Table 6. This detailed information for each site can be found in Appendix A of this ANP.

Table 6: Required Detailed Monitoring Site Information

Site Name
Local site name
AQS ID
GPS coordinates (decimal degrees)
Street Address
County
Distance to roadways (meters)
Traffic count (AADT, year)
Groundcover (e.g. paved, vegetative, dirt, sand, gravel)
Representative statistical area name (i.e. MSA, CBSA, other)
Pollutant, POC
Primary / QA Collocated / Other
Parameter code
Basic monitoring objective(s)
Site type(s)
Monitor type
Network affiliation(s), if applicable
Instrument manufacturer and model
Method code
FRM/FEM/ARM/other
Collecting Agency
Analytical Lab (i.e. weigh lab, toxics lab, other)
Reporting Agency
Spatial scale (e.g. micro, neighborhood)
Monitoring start date
Current sampling frequency
Required sampling frequency
Sampling season
Probe height (meters)
Distance from supporting structure (meters)
Distance from obstructions on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)
Distance from obstructions not on roof. Include horizontal distance + vertical height above probe for obstructions nearby. (meters)
Distance from tree drip-lines (meters)
Distance to furnace or incinerator flue (meters)
Distance between monitors fulfilling a QA collocation requirement (meters).
Unrestricted airflow (degrees around probe/inlet or percentage of monitoring path)
Probe material for reactive gases $NO/NO_2/NO_y$, SO_2, O_3; PAMS: VOCs, Carbonyls

Table 6 continued:

Residence time for reactive gases $NO/NO_2/NO_y$, SO_2, O_3; PAMS: VOCs, Carbonyls (seconds)
Will there be changes within the next 18 months? (Y/N)
Is it suitable for comparison against the annual $PM_{2.5}$? (Y/N)
Frequency of flow rate verification for manual PM samplers, including Pb samplers
Frequency of flow rate verification for automated PM analyzers
Frequency of one-point QC check for gaseous instruments
Date of Annual Performance Evaluation conducted in the past calendar year for gaseous parameters
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors

Information on the continuous $PM_{2.5}$ non-FEM monitors

The federal regulations require that monitors are Federal Equivalent Method (FRM), Federal Equivalent Method (FEM), or Approved Regional Method (ARM) and meet certain siting criteria in order for the data to be used for NAAQS comparison. While all continuous PM_{10} monitors discussed in this report are FEM monitors, there are some continuous $PM_{2.5}$ monitors that are non-FEMs. Table 7 lists the continuous $PM_{2.5}$ non-FEM monitoirng sites covered in this ANP. The continuous $PM_{2.5}$ data reported from these non-FEM monitors are exluded from NAAQS comparison. However, these non-FEM monitors are California Approved Samplers (CAS) and the data are used for State designation and/or in AirNow for Air Quality Index reporting.

Table 7: Monitoirng Site Operating $PM_{2.5}$ Non-FEM monitors

District	Site
Butte	Chico-East Avenue
	Gridley
	Paradise-Theater
Colusa	Colusa-Sunrise Blvd
Feather River	Yuba City
Glenn	Willows-Colusa
Imperial	Calexico
Mariposa	Yosemite Village
Northern Sierra	Chester
	Grass Valley
	Portola
	Quincy-N Church Street
	Truckee-Fire Station
Placer	Colfax-City Hall
	Lincoln-1st Street
	Roseville-N Sunrise Ave
	Tahoe City-Fairway Drive
Siskiyou	Yreka
Yolo-Solano	Davis-UCD Campus

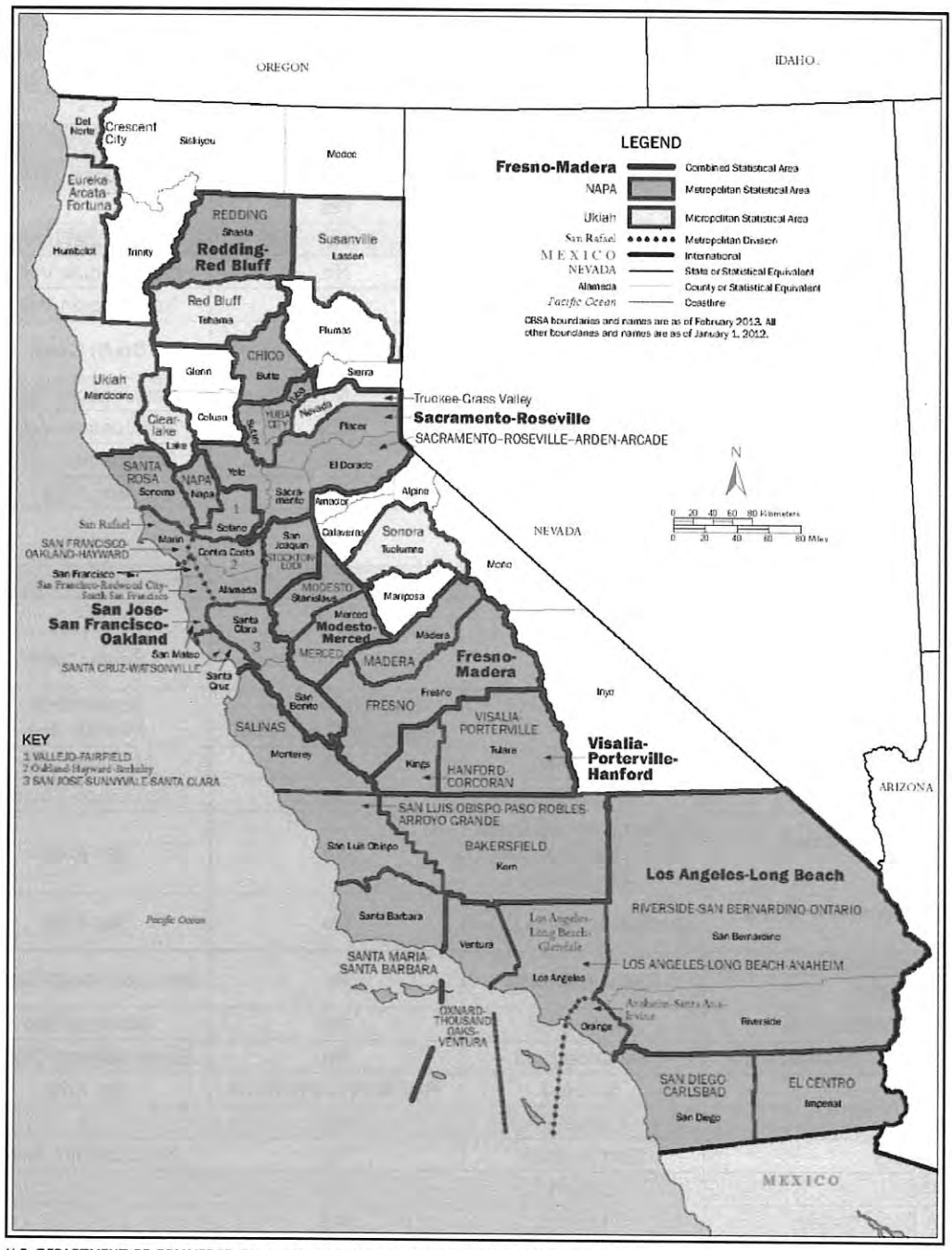
Core-Based Statistical Areas

Appendix A of this ANP also lists the location of each monitor, including the Core-Based Statistical Area (CBSA) in which each monitor is located. CBSAs are defined by the United States Office of Management and Budget (OMB) and provide a consistent set of geographical areas for federal agencies to use in collecting, tabulating, and publishing statistical data. Two types of areas are included as CBSAs: Metropolitan Statistical Areas and Micropolitan Statistical Areas, which differ by population threshold. A Metropolitan Statistical Area has an urban core with a population of 50,000 or more, whereas a Micropolitan Statistical Area has an urban core with a population of at least 10,000, but less than 50,000. Several counties in California are sparsely populated and do not meet the classification requirements for incorporation into a CBSA (Figure 2).

U.S. EPA specifies the number of monitors required for each pollutant based on the CBSA. Table 8 contains a comprehensive list of CBSAs and associated air districts for California. Several of the 25 air districts covered by this ANP are located in CBSAs that also include air districts that are preparing their own ANPs. Information regarding monitors operated by districts outside of those covered by this ANP will be included in this plan when necessary to demonstrate fulfillment of federal monitoring requirements.

For CBSAs that include multiple districts, fulfillment of minimum monitoring requirements is dependent upon coordination between air monitoring staff, particularly when changes to the monitoring network are considered. The Roles and Responsibilities documents developed by ARB specify that districts and ARB must communicate with each other when changes to the network are being considered. When proposed changes are communicated between districts and ARB, staff from both agencies will work closely to evaluate impacts on minimum monitoring requirements and develop pathways that ensure federal requirements are met. The Roles and Responsibilities documents are available on the ARB website at http://www.arb.ca.gov/aaqm/qa/pqao/repository/rr_docs.htm.

Figure 2: Core-Based Statistical Areas in California



U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. Census Bureau

Table 8: Core-Based Statistical Areas in California

CBSA Name*	County	Included in the ARB ANP?	Included in other ANP?
Bakersfield	Kern	Yes; Eastern Kern	San Joaquin Valley
Chico	Butte	Yes	--
Clearlake	Lake	Yes	--
Crescent City	Del Norte	No	North Coast Unified
El Centro	Imperial	Yes	--
Eureka-Arcata-Fortuna	Humboldt	No	North Coast Unified
Fresno	Fresno	No	San Joaquin Valley
Hanford-Corcoran	Kings	No	San Joaquin Valley
Los Angeles-Long Beach-Anaheim	Los Angeles; Orange	Yes; Antelope Valley	South Coast
Madera	Madera	No	San Joaquin Valley
Merced	Merced	No	San Joaquin Valley
Modesto	Stanislaus	No	San Joaquin Valley
Napa	Napa	No	Bay Area
Oxnard-Thousand Oaks-Ventura	Ventura	Yes	--
Red Bluff	Tehama	Yes	--
Redding	Shasta	Yes	--
Riverside-San Bernardino-Ontario	Riverside; San Bernardino	Yes, Mojave Desert	South Coast
Sacramento-Roseville-Arden Arcade	El Dorado; Placer; Sacramento; Yolo	Yes; Placer, Yolo-Solano, and El Dorado	Sacramento Metropolitan
Salinas	Monterey	No	Monterey Bay
San Diego-Carlsbad	San Diego	No	San Diego County
San Francisco-Oakland-Hayward	Alameda; Contra Costa; Marin; San Francisco; San Mateo	No	Bay Area
San Jose-Sunnyvale-Santa Clara	San Benito; Santa Clara	No	Bay Area
San Luis Obispo-Paso Robles-Arroyo Grande	San Luis Obispo	No	San Luis Obispo County
Santa Cruz-Watsonville	Santa Cruz	No	Monterey Bay
Santa Maria-Santa Barbara	Santa Barbara	No	Santa Barbara County
Santa Rosa	Sonoma	Yes; Northern Sonoma	Bay Area
Sonora	Tuolumne	Yes	--
Stockton-Lodi	San Joaquin	No	San Joaquin Valley
Susanville	Lassen	Yes	--
Truckee-Grass Valley	Nevada	Yes	--
Ukiah	Mendocino	Yes	--
Vallejo-Fairfield	Solano	Yes; Yolo-Solano	Bay Area
Visalia-Porterville	Tulare	No	San Joaquin Valley
Yuba City	Sutter; Yuba	Yes	--

* Micropolitan Statistical Areas are delineated with grey shading; Metropolitan Statistical Areas are not shaded.

Section 5: Federal Minimum Monitoring Requirements

For criteria pollutants, U.S. EPA has established minimum monitoring requirements that are specified in federal regulations (Appendix D of Title 40, Part 58 of the CFR). Generally, requirements are based on the population from the most recent census data, the severity of the air quality problem, as specified by the design value, or emissions.

Section 5A: Ozone

Minimum Number of Ozone Monitoring Sites

The criteria for minimum monitoring requirements for ozone are shown in Table 9. In the absence of a design value, requirements for "less than 85% of any ozone NAAQS" apply. There are no minimum monitoring requirements outside of metropolitan statistical areas (i.e. areas with without an urban core or less than 50,000 people). Ncore and SLAMS monitors can be used to meet minimum monitoring requirements for ozone.

Table 9: Minimum Ozone Monitoring Requirements for SLAMS

Metropolitan Statistical Area population	3-year design value concentrations ≥85% of any Ozone NAAQS	3-year design value concentrations <85% of any Ozone NAAQS
>10 million	4	2
4 - 10 million	3	1
350,000 - <4 million	2	1
50,000 - <350,000	1	0

Within each Metropolitan Statistical Area, at least one site should be sited to capture maximum ozone concentrations and the site type should be identified as 'Highest Concentration.' As shown in Table 10, the 11 metropolitan statistical areas covered by this ANP met the minimum ozone monitoring requirements for ozone in 2016. Sites from districts not covered by this ANP are also listed to provide a complete picture of all of the sites contributing towards the minimum monitoring requirements in each Metropolitan Statistical Area. Note that percentages are relative to the 0.070 ppm ozone standard, and high concentration sites are denoted with bold text.

SPMs and non-EPA Federal ozone monitors are operated in some areas covered by this ANP. Information about these monitors is provided in Appendix A of this ANP.

Table 10: CBSAs with Minimum Ozone Monitoring Requirements

Metropolitan Statistical Area	Population (2010 Census)	2014-2016 Design Value (% of NAAQS) *DV Site*	# Required Sites	SLAMS Sites Operating in 2016 (District where site is located) *High Concentration Sites Denoted by Bold Text*
Bakersfield	839,361	0.090 ppm (129%) *Bakersfield-Municipal Airport*	2	**Arvin-Di Giorgio (San Joaquin Valley)** Bakersfield-5558 California Avenue (San Joaquin Valley) **Bakersfield-Municipal Airport (San Joaquin Valley)** **Edison (San Joaquin Valley)** Maricopa-Stanislaus Street (San Joaquin Valley) **Mojave-923 Poole Street (Eastern Kern)** Oildale-3311 Manor Street (San Joaquin Valley) Shafter-Walker Street (San Joaquin Valley)
Chico	220,000	0.075 ppm (107%) *Paradise*	1	Chico-East Avenue (Butte County) **Paradise-4405 Airport Road (Butte County)**
El Centro	174,528	0.076 ppm (109%) *Calexico/ El Centro*	1	**Calexico-Ethel Street (Imperial)** **El Centro-9th Street (Imperial)** Niland-English Road (Imperial) Westmorland (Imperial)
Los Angeles-Long Beach-Anaheim	12,828,837	0.096 ppm (137%) *Glendora/ Laurel-Santa Clarita*	4	Lancaster-43301 Division Street (Antelope Valley) Anaheim-Pampas Lane (South Coast) Azusa (South Coast) Burbank (South Coast) Compton-700 North Bullis Road (South Coast) Costa Mesa-Mesa Verde Drive (South Coast) **Glendora-Laurel (South Coast)** La Habra (South Coast) Long Beach-2425 Webster Street (South Coast) Los Angeles-LAX (South Coast) Los Angeles-North Main Street (South Coast) Mission Viejo-26081 Via Pera (South Coast) Pasadena-S Wilson Avenue (South Coast) Pico Rivera-4144 San Gabriel (South Coast) Pomona (South Coast) Reseda (South Coast) **Santa Clarita (South Coast)** West Los Angeles-VA Hospital (South Coast)
Oxnard-Thousand Oaks-Ventura	823,318	0.077 ppm (110%) *Simi Valley*	2	El Rio-Rio Mesa School #2 (Ventura) Thousand Oaks-Moorpark Road (Ventura) Ojai-Ojai Avenue (Ventura) Piru-3301 Pacific Avenue (Ventura) **Simi Valley-Cochran Street (Ventura)**
Redding	177,223	0.070 ppm (100%) *Redding*	1	Anderson-North Street (Shasta County) **Redding-Health Dept Roof (Shasta County)** Shasta Lake-13791 Lake Blvd (Shasta County)

Table 10 Continued:

Metropolitan Statistical Area	Population (2010 Census)	2014-2016 Design Value (% of NAAQS) *DV Site*	# Required Sites	SLAMS Sites Operating in 2016 (District where site is located) *High Concentration Sites Denoted by Bold Text*
Riverside-San Bernardino-Ontario	4,224,851	0.108 ppm (154%) *Crestline*	3	Barstow (Mojave Desert) Blythe-445 West Murphy Street (Mojave Desert) Hesperia-Olive Street (Mojave Desert) Phelan (Mojave Desert) Trona-Athol and Telegraph (Mojave Desert) Victorville-14306 Park Avenue (Mojave Desert) Banning Airport (South Coast) **Crestline (South Coast)** Fontana-Arrow Highway (South Coast) Indio-Jackson Street (South Coast) Lake Elsinore-W Flint Street (South Coast) Mira Loma-Van Buren (South Coast) Palm Springs-Fire Station (South Coast) Perris (South Coast) Redlands-Dearborn (South Coast) Riverside-Rubidoux (South Coast) **San Bernardino-4th Street (South Coast)** Upland (South Coast) Winchester-33700 Borel Road (South Coast)
Sacramento-Roseville-Arden Arcade	2,149,127	0.085 (121%) *Placerville*	2	**Cool-Highway 193 (El Dorado County)** Echo Summit (El Dorado County) **Placerville-Gold Nugget Way (El Dorado County)** **Auburn-11645 Atwood Road (Placer County)** Colfax-City Hall (Placer County) Lincoln-1445 1st Street (Placer County) **Roseville-N Sunrise Blvd (Placer County)** Tahoe City-221 Fairway Drive (Placer County) Elk Grove (Sacramento) **Folsom (Sacramento)** North Highlands (Sacramento) Sacramento-Del Paso Manor (Sacramento) Sacramento-Goldenland (Sacramento) Sacramento-T St (Sacramento) Sloughhouse (Sacramento) Davis-UCD Campus (Yolo-Solano) Woodland-Gibson Road (Yolo-Solano)
Santa Rosa	483,878	0.059 ppm (84%) *Healdsburg-Muni*	1	Sebastopol (Bay Area) **Healdsburg-Municipal Airport (Northern Sonoma)**
Vallejo-Fairfield	413,344	0.067 ppm (96%) *Vacaville-Ulatis*	2	Fairfield-Chadbourne Road (Bay Area) Vallejo-304 Tuolumne Street (Bay Area) **Vacaville-Ulatis Drive (Yolo-Solano)**
Yuba City	166,892	0.075 ppm (107%) *Sutter Buttes*	1	**Sutter Buttes-S Butte (Feather River)** **Yuba City-Almond Street (Feather River)**

Seasonal Ozone Monitoring

The ozone monitoring season is year-round in California; however, monitoring at the six sites shown in Table 11 have operated on a seasonal basis since they were established. A seasonal waiver for ozone monitoring in 2017 at these sites was granted and ozone monitoring will be limited to April through October, the period in which peak ozone is expected or when sites are physically accessible. A copy of the waiver approved by U.S. EPA is provided in Appendix B.

Table 11: Seasonal Ozone Monitoring Sites

AQS Site ID	Site Name	District	Start Year
060170012	Echo Summit	El Dorado County	2000
060170020	Cool-Highway 193	El Dorado County	1996
060430006	Jerseydale	Mariposa County	1995
060570007	White Cloud Mountain*	Northern Sierra	1995
061010004	Sutter Butte	Feather River	1993
061030004	Tuscan Buttes	Tehama County	1995

* White Cloud Mountain site did not operate in 2016 due to logistical problems.

Section 5B: Nitrogen Dioxide (NO_2)

Minimum Number of NO_2 Monitoring Sites

Federal regulations specify both minimum area-wide and minimum near-road NO_2 monitoring requirements. Area-wide monitoring must be conducted in CBSAs with populations of one million or more. For these areas, a minimum of one monitor is required and should be sited to capture the highest concentrations at a neighborhood or larger spatial scale. PAMS sites can be used to meet area-wide minimum monitoring requirements if they meet siting criteria.

The CBSAs in California that meet the population thresholds for required area-wide NO_2 monitoring are the Los Angeles-Long Beach-Anaheim, Riverside-San Bernardino-Ontario, Sacramento-Roseville-Arden Arcade, San Diego-Carlsbad, San Francisco-Oakland-Hayward and San Jose-Sunnyvale-Santa Clara. The areas of expected highest concentration in these CBSAs are not within the jurisdictions of the districts covered by this ANP. As such, area-wide NO_2 monitoring for these CBSAs is addressed in the ANPs prepared by the South Coast AQMD, Sacramento Metropolitan AQMD, San Diego APCD, and Bay Area AQMD. Although not required, NO_2 monitors are operated in several districts covered by this ANP. Information about these monitors can be found in Appendix A of this ANP.

Near-road NO_2 monitoring requirements are based on population of the CBSA and Annual Average Daily Traffic counts (AADT) on road segments within the CBSA. One monitor is required in CBSAs with a population of one million or more persons. Two monitors are required in CBSAs with populations $\geq$ 2.5 million or in CBSAs with 500,000 or more people and AADTs $\geq$ 250,000 on one or more road segments. Near-road monitors should be sited to capture maximum one hour concentrations at a micro spatial scale. The near-road requirements are being implemented in phases, over the course of several years, with the last sites to be established in 2017. For informational purposes, all of the CBSAs in California that are required by current federal regulations to conduct near-road NO_2 monitoring are shown in Table 12.

The near-road areas with road segments with the highest AADT for the Bakersfield, Los Angeles-Long Beach-Anaheim, Riverside-San Bernardino-Ontario, and Sacramento-Roseville-Arden Arcade CBSAs are not within the jurisdiction of the districts covered by this ANP. Near-road NO_2 monitoring for these CBSAs is addressed in the ANPs prepared by the San Joaquin Valley Unified Air Pollution Control District, South Coast AQMD and the Sacramento Metropolitan AQMD. Information about near-road NO_2 monitoring for the other CBSAs can also be found in the ANPs prepared by the San Diego County Air Pollution Control District, and the Bay Area AQMD.

Table 12: CBSAs with Near-Road NO_2 Monitoring Requirements

CBSA	Population (2010 Census)	Area-wide Monitoring	Maximum AADT (2014)*	Required Near-road Sites	Near-road Sites Operating in 2016 (District where sites are located)
Bakersfield**	839,631	No	144,000	1	-- (San Joaquin Valley)
Fresno	930,450	No	141,000	1	Fresno-2482 Foundry Park Avenue (San Joaquin Valley)
Los Angeles-Long Beach-Anaheim	12,828,837	Yes	602,600	2	Anaheim-Route 5 (South Coast) Long Beach-Route 710 (South Coast)
Riverside-San Bernardino-Ontario	4,224,851	Yes	267,000	2	Ontario-Etiwanda (South Coast) Ontario-Route 60 (South Coast)
Sacramento-Roseville-Arden Arcade	2,149,127	Yes	251,000	2	Sacramento-Bercut Drive (Sacramento)
San Diego-Carlsbad**	3,095,313	Yes	299,000	2	Rancho Carmel Dr. (San Diego) -- (San Diego)
San Francisco-Oakland-Hayward	4,335,391	Yes	277,000	2	Laney College (Bay Area) Berkeley-Aquatic Park (Bay Area)
San Jose-Sunnyvale-Santa Clara	1,836,911	Yes	253,000	1	San Jose-Knox Ave (Bay Area)

* Traffic data are courtesy of California Department of Transportation.
** Near-road sites were in the planning stages and not yet operating in 2016.

Federal regulations also require NO_2 monitoring in select areas with susceptible and vulnerable populations. The locations of these areas in California were determined by the U.S. EPA Regional Administrator and include Fresno County, Los Angeles County, San Bernardino County, San Diego County, the City of Oakland, and the City of Long Beach. These areas are outside of the scope of this ANP; however, information regarding the monitoring can be found in the ANPs prepared by the Bay Area AQMD, the San Diego APCD, and the San Joaquin Valley Unified APCD.

All districts covered by this ANP met the minimum monitoring requirements for NO_2 in 2016.

Section 5C: Carbon Monoxide (CO)

Minimum Number of CO Monitoring Sites

The only federal requirement for CO monitoring is for near-road CO monitoring. In CBSAs with a population of one million or more, one CO monitor is required to operate collocated with one near-road NO_2 monitor. If a CBSA has more than one near-road NO_2 monitoring site, a CO monitor is only required at one near-road site in the CBSA. The CO monitor was required to be operational by January 1, 2015 in CBSAs having a population of 2.5 million, and by January 1, 2017 for all other CBSAs.

Table 13: CBSAs with CO Minimum Monitoring Requirements

CBSA	Population (2010 Census)	Required Near-road Sites	Near-road Sites Operating in 2016
Los Angeles-Long Beach-Anaheim	12,828,837	1	Anaheim-Route 5 (South Coast)
San Francisco-Oakland-Hayward	4,335,391	1	Laney College (Bay Area) Berkeley-Aquatic Park (Bay Area)
Riverside-San Bernardino-Ontario	4,224,851	1	Ontario-Etiwanda (South Coast)
San Diego-Carlsbad	3,095,313	1	Rancho Carmel Dr. (San Diego)
Sacramento-Roseville-Arden Arcade	2,149,127	1	Sacramento-Bercut Drive (Sacramento)
San Jose-Sunnyvale-Santa Clara	1,836,911	1	San Jose-Knox Ave (Bay Area)

As shown in Table 13, three CBSAs that include a district covered by this ANP meet the population threshold and have minimum monitoring requirements for CO; however, the near-road areas with road segments with the highest AADT for the Los Angeles-Long Beach-Anaheim, Riverside-San Bernardino-Ontario, and Sacramento-Roseville-Arden Arcade, CBSAs are not within the areas covered by this ANP. Subsequently, near-road monitoring for these CBSAs is addressed in the ANPs prepared by the South Coast AQMD, Bay Area AQMD, and the Sacramento Metropolitan AQMD. Several districts covered by this ANP conduct area-wide CO monitoring. CO concentrations at area-wide monitors are well below the standard, and California has long attained federal and State CO standards. Information about these monitors is provided in Appendix A.

Regional Administrators may require additional CO monitoring in other areas where data or other indicators suggest that concentrations may approach or exceed the NAAQS.

Section 5D: Sulfur Dioxide (SO_2)

Minimum Number of SO_2 Monitoring Sites

Monitoring regulations for SO_2 are based on the population weighted emissions index (PWEI) in a CBSA. The PWEI considers population and aggregated county-level emissions data and is calculated using the equation:

$$CBSA\ PWEI = \frac{CBSA\ Population \times \sum_{County} Emission}{1{,}000{,}000}$$

One monitor is required in CBSAs with PWEIs greater than 5,000 but less than 100,000; two monitors are required in CBSAs with PWEIs greater than 100,000 but less than one million; and three monitors are required in CBSAs with PWEI values of one million or more. As shown in Table 14, two CBSAs that contain a district covered by this plan meet the PWEI threshold and have minimum monitoring requirements for SO_2. Site types identified as population exposure, high concentration, source impacts, general background, or regional transport can satisfy minimum monitoring requirements. SO_2 monitors at NCore site shall be counted toward minimum monitoring requirements.

The most recent data available to calculate PWEI were the 2010 U.S. census data and emissions data from the 2015 ARB Emission Inventory.

Table 14: CBSAs with Minimum Monitoring Requirements for SO_2

CBSA	District covered by this ANP	Other District ANPs covering this CBSA	County SO_2 (TPY) (2015 Data)	CBSA Population (2010 Census)	PWEI	Required Sites	SLAMS Sites Operating in 2016
Los Angeles-Long Beach-Anaheim	Antelope Valley AQMD	South Coast AQMD	Los Angeles: 5,256 Orange: 475	12,828,837	73,516	1	Costa Mesa (South Coast) Fontana (South Coast) Long Beach (South Cost) Los Angeles-Main Street (South Coast) Los Angeles-Hastings (South Coast)
Riverside-San Bernardino-Ontario	Mojave Desert AQMD	South Coast AQMD	Riverside: 329 San Bernardino: 1,570	4,224,851	8,019	1	Rubidoux (South Coast) Trona (Mojave Desert) Victorville (Mojave Desert)

The SO_2 Data Requirements Rule also requires monitoring in areas with a stationary source with emissions greater than 2,000 tons per year. None of the facility emission sources in the areas covered by this ANP exceed the 2,000 tons per year threshold for source monitoring established by the SO_2 Data Requirements Rule. All districts covered by this ANP met the minimum monitoring requirements for SO_2 in 2016.

Section 5E: Lead (Pb)

Minimum Number of Pb Monitoring Sites

Monitoring is required near Pb sources which are expected or have been shown to contribute to a maximum Pb concentration in excess of the federal standard. Specifically, monitoring is required at airports which emits more than 1.0 tons per year or non-airport sources which emit 0.50 tons per year or more of Pb. None of the areas covered by this ANP exceed the threshold for source monitoring.

Pb monitoring at NCore site was previously required but no longer required. However, agencies that operate NCore site are required to obtain approval to terminate an existing Pb monitor. ARB plans to request termination of Pb monitoring at the Fresno-Garland NCore site later this year.

Section 5F: PM_{10}

Minimum Number of PM_{10} Monitoring Sites

Monitoring requirements for PM_{10} are based on population and air quality conditions in each metropolitan statistical area. The criteria for determining the minimum number of monitoring sites is listed in Table 15. The number of sites is given as a range rather than an absolute number because the goal of establishing a network of monitoring sites is to characterize national and regional air quality trends and geographic patterns, which can vary in complexity from place to place.

Table 15: Minimum Monitoring Requirements for PM_{10} Monitoring Sites

Population	High Concentration (DV exceeds NAAQS by ≥20%)	Medium Concentration (DV ≥80% of NAAQS)	Low Concentration (DV <80% of NAAQS)
> 1 million	6 – 10 sites	4 – 8 sites	2 – 4 sites
500,000 - 1 million	4 – 8 sites	2 – 4 sites	1 – 2 sites
250,000 - 500,000	3 – 4 sites	1 – 2 sites	0 – 1 sites
100,000 - 250,000	1 – 2 sites	0 – 1 sites	0 sites

The number of required monitoring sites in CBSAs with populations ≥100,000 are shown in Table 16. Only sites designated as SLAMS may be counted to meet PM_{10} minimum monitoring requirements. In contrast to the information presented on the gaseous monitoring network, sites outside of the scope of this ANP are only included in Table 16 if needed to meet minimum monitoring requirements because of the complex nature of PM monitoring.

Eleven Metropolitan Statistical Areas include at least a portion of the areas covered by this ANP. The Los Angeles-Long Beach-Anaheim Metropolitan Statistical Area includes the Antelope Valley AQMD; however, most of the area is under the jurisdiction of the South Coast AQMD. Monitoring sites operated by South Coast AQMD are necessary to meet minimum monitoring requirements for PM_{10} and include sites located in areas where high concentrations are expected. The sole monitoring site run by Antelope Valley AQMD is not needed to meet minimum monitoring requirements for this area but serves to complement the network of monitors operated by South Coast.

The monitors operated in districts covered by this ANP are adequate to meet minimum monitoring requirements in the remaining ten Metropolitan Statistical Areas; however, there are additional monitors operated in these areas that are in jurisdictions outside of the scope of this ANP. Information about these monitors can be found in the ANPs prepared by the South Coast AQMD, San Joaquin Valley Unified APCD, and the Sacramento Metropolitan AQMD

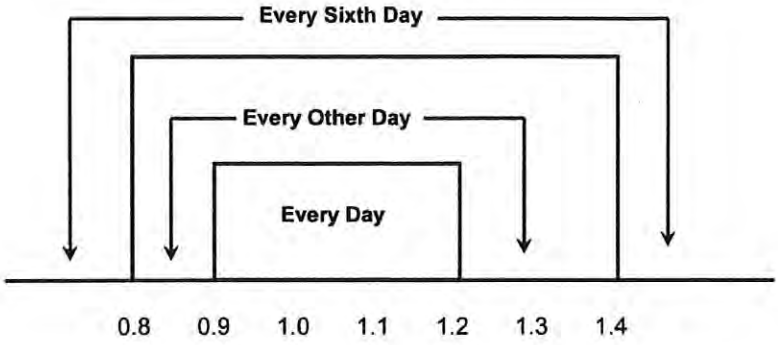
Table 16: CBSAs with Minimum Monitoring Requirements for PM_{10}

Metropolitan Statistical Area	Population (2010 Census)	2016 Max Concentration (% of NAAQS) *Max Concentration Site (District where site is located)*	Required # of Sites	SLAMS Sites Operating in 2016 (District where site is located)
Bakersfield	839,361	138 ug/m^3 (92%) *Mojave (Eastern Kern)*	2-4	Mojave (Eastern Kern) Ridgecrest (Eastern Kern) Canebrake (Eastern Kern)
Chico	220,000	57 ug/m^3 (38%) *Chico-East Ave (Butte County)*	0	Chico-East Ave (Butte County)
El Centro	174,528	285 ug/m^3 (190%) *Brawley (Imperial County)*	1-2	Calexico-Ethel St (Imperial County) Brawley (Imperial County) El Centro (Imperial County) Westmorland (Imperial County) Niland (Imperial County)
Los Angeles-Long Beach-Anaheim	12,828,837	144 ug/m^3 (96%) *Lancaster (Antelope Valley)*	4-8	Azusa (South Coast) Glendora-Laurel (South Coast) Lancaster (Antelope Valley) Los Angeles-N Main St (South Coast) Los Angeles-LAX (South Coast) Santa Clarita (South Coast) Long Beach-PCH (South Coast) Anaheim-Pampas Ln (South Coast) Long Beach-Webster (South Coast) Mission Viejo (South Coast)
Oxnard-Thousand Oaks-Ventura	823,318	166 ug/m^3 (111%) *El Rio (Ventura County)*	2-4	Simi Valley (Ventura County) El Rio (Ventura County)
Redding	177,223	37 ug/m^3 (25%) *Anderson (Shasta County)*	0	Redding (Shasta County) Anderson (Shasta County) Shasta Lake (Shasta County)
Riverside-San Bernardino-Ontario	4,224,851	468 ug/m^3 (312%) *Indio-Jackson St (South Coast)*	6-10	Barstow (Mojave Desert) Crestline (South Coast) Indio-Jackston St (South Coast) Lucerne Valley (Mojave Desert) Victorville (Mojave Desert) Trona (Mojave Desert) Hesperia (Mojave Desert)
Sacramento-Roseville-Arden Arcade	2,149,127	69 ug/m^3 (46%) *Woodland-Gibson Rd (Yolo-Solano)*	2-4	So. Lake Tahoe (El Dorado County) Roseville-N Sunrise (Placer County) Woodland-Gibson Rd (Yolo-Solano) West Sacramento (Yolo-Solano)
Santa Rosa	483,878	43 ug/m^3 (29%) *Guerneville (Northern Sonoma)*	0-1	Cloverdale (Northern Sonoma) Healdsburg (Northern Sonoma) Guerneville (Northern Sonoma)
Vallejo-Fairfield	413,344	24 ug/m^3 (16%) *Vacaville-Merchant St (Yolo-Solano)*	0-1	Vacaville-Merchant St (Yolo-Solano)
Yuba City	166,892	51 ug/m^3 (34%) *Yuba City-Almond St (Feather River)*	0	Yuba City-Almond St (Feather River)

PM_{10} Sampling Frequency Requirements for Primary FRM Monitors

Federal regulations establish procedures for determining an appropriate sampling frequency for PM_{10} monitors. All 24-hour samples must be taken from midnight to midnight, local standard time, to ensure consistency among measurements nationwide. Figure 3, reproduced from Figure 1 in 40 CFR 58.12e, shows the required sampling frequency based upon the ratio of the design value to the standard.

Figure 3: Required Sampling Frequency for manual PM_{10} monitors



The calculated required sampling frequencies for all FRM PM_{10} monitors in the districts covered by this ANP are shown in Table 17. Note that exceptional events are included in the concentrations shown.

Table 17: Required Sampling Frequency for PM_{10} FRM Sites

Site Name	District	AQS ID	2016 Max Concentration	Ratio of Max Concentration to Standard	Required Sampling Frequency	Current Sampling Frequency
Ridgecrest	Eastern Kern	060290015	66	0.44	1:6	1:6
Canebrake	Eastern Kern	060290017	58	0.39	1:6	1:6
Brawley*	Imperial	060250007	275	1.83	1:6	1:1
Niland*	Imperial	060254004	225	1.50	1:6	1:1
Anderson Springs**	Lake	060333010	26	0.17	1:6	1:6
Glenbrook**	Lake	060333011	39	0.26	1:6	1:6
Lakeport**	Lake	060333001	19	0.13	1:6	1:6
Anderson	Shasta	060890007	91	0.61	1:6	1:6
Redding	Shasta	060890004	80	0.53	1:6	1:6
Shasta Lake	Shasta	060890008	33	0.22	1:6	1:6
Red Bluff	Tehama	061030007	49	0.33	1:6	1:6
Vacaville	Yolo-Solano	060953001	24	0.16	1:6	1:6
West Sacramento	Yolo-Solano	061132001	36	0.24	1:6	1:6
Woodland	Yolo-Solano	061131003	69	0.46	1:6	1:6

* Primary manual monitors shutdown on 12/31/16, continuous monitors operating as primary monitor in 2017.
** Lake County monitors had previously reported PM10 data only in local conditions (i.e. 85101), This data has been converted and all sites now report both local and standard conditions (i.e. 81102).

Section 5G: $PM_{2.5}$

Minimum Number of $PM_{2.5}$ Monitoring Sites

The minimum number of monitoring sites that are required for the $PM_{2.5}$ network is based on population and air quality within each metropolitan statistical area, as shown in Table 18. Each Metropolitan Statistical Area is required to have at least one monitoring site situated to measure maximum concentrations at a neighborhood or larger scale.

Table 18: Minimum Monitoring Requirements for $PM_{2.5}$

Population	DV ≥ 85% of any $PM_{2.5}$ NAAQS	DV < 85% of any $PM_{2.5}$ NAAQS
> 1 million	3 sites	2 sites
500,000 - 1 million	2 sites	1 site
50,000 - <500,000	1 site	0 sites

Only SLAMS sites situated to measure concentrations that are representative of area-wide $PM_{2.5}$ concentrations should be used to meet minimum monitoring requirements. NCore and PAMS sites can count towards meeting minimum monitoring requirements if the site(s) are representative of area-wide $PM_{2.5}$ concentrations. In contrast to the information presented on the gaseous monitoring network, sites outside of the scope of this ANP are were only included in Table 19 if needed to meet minimum monitoring requirements because of the complex nature of PM monitoring.

$PM_{2.5}$ Near-Road Monitoring

Federal regulations require that at least one $PM_{2.5}$ monitor is collocated at a near-road NO_2 monitoring site in CBSAs with a million or more people. No near-road sites are located in the areas covered by this ANP. Information about near-road sites can be found in the ANPs prepared by the Sacramento Metropolitan AQMD and South Coast AQMD.

$PM_{2.5}$ Continuous Monitoring

Federal regulations require that at least half of the minimum number of required monitors operated in each Metropolitan Statistical Area should be continuous monitors. In each Metropolitan Statistical Area, at least one continuous monitor should be collocated with a required FRM/FEM/ARM monitor unless one of the required monitors is a continuous monitor. Sites outside of the scope of this ANP were only included in Table 20 if needed to meet minimum monitoring requirements.

Table 19: CBSAs with Minimum Monitoring Requirements for $PM_{2.5}$

Metropolitan Statistical Area	Population (2010 Census)	2016 Design Value (% of NAAQS) Design Value Site (District where site is located)		Required # of Sites	SLAMS Sites Operating in 2016 (District where site is located) High Concentration Sites Denoted by Bold Text
		24-hour	Annual		
Bakersfield	839,361	70 ug/m³ (200%) *Bakersfield-Golden (San Joaquin)*	18.4 ug/m³ (153%) *Bakersfield-Planz (San Joaquin)*	2	**Mojave (Eastern Kern)** Ridgecrest (Eastern Kern)
Chico	220,000	26 ug/m³ (74%) *Chico-East Ave (Butte County)*	8.5 ug/m³ (71%) *Chico-East Ave (Butte County)*	0	**Chico-East Ave (Butte County)**
El Centro	174,528	33 ug/m³ (94%) *Calexico-Ethel St (Imperial County)*	12.6 ug/m³ (108%) *Calexico-Ethel St (Imperial County)*	1	**Calexico-Ethel St (Imperial)** Brawley (Imperial) El Centro (Imperial)
Los Angeles-Long Beach-Anaheim	12,828,837	34 ug/m³ (97%) *LA-N Main St (South Coast)*	12.7 ug/m³ (105%) *Compton-N Bullis* (South Coast)*	3	Azusa (South Coast) **Los Angeles-N Main St (South Coast)** Reseda (South Coast) **Compton-N Bullis (South Coast)** Pico Rivera (South Coast) Pasadena-Wilson Ave (South Coast) Long Beach-North (South Coast) Long Beach-PCH (South Coast) Lancaster (Antelope Valley) Anaheim-Pampas Ln (South Coast) Mission Viejo (South Coast) Long Beach-Rte710 (South Coast)
Oxnard-Thousand Oaks-Ventura	823,318	20 ug/m³ (57%) *Simi Valley (Ventura County)* *Thousand Oaks (Ventura County)*	9.2 ug/m³ (77%) *Thousand Oaks (Ventura County)*	1	**Thousand Oaks (Ventura)** Piru (Ventura) Ojai (Ventura) **Simi Valley (Ventura)** El Rio (Ventura)
Redding	177,223	15 ug/m³ (43%) *Redding (Shasta County)*	6.0 ug/m³ (50%) *Redding (Shasta County)*	0	**Redding-Health Dept (Shasta County)**
Riverside-San Bernardino-Ontario	4,224,851	43 ug/m³ (123%) *Mira Loma (South Coast)*	14.5 ug/m³ (121%) *Mira Loma (South Coast)*	3	Indio (South Coast) Palm Springs (South Coast) Rubidoux (South Coast) **Mira Loma (South Coast)** Victorville (Mojave Desert) Fontana (South Coast) Big Bear (South Coast) Ontario (South Coast) San Bernardino (South Coast)
Sacramento-Roseville-Arden Arcade	2,149,127	31 ug/m³ (89%) *Del Paso (Sacramento)*	9.3 ug/m³ (78%) *Del Paso (Sacramento)*	3	Auburn-Atwood St (Placer County) Roseville-N Sunrise Blvd (Placer County) **Del Paso-Avalon Dr (Sacramento)** Sacramento-T St (Sacramento) Folsom-Natoma St (Sacramento) Woodland (Yolo-Solano)
Santa Rosa	483,878	18 ug/m³ (51%) *Sebastopol-Morris (Bay Area)*	6.5 ug/m³ (53%) *Sebastopol-Morris (Bay Area)*	0	**Sebastopol-Morris St (Bay Area)**
Vallejo-Fairfield	413,344	25 ug/m³ (71%) *Vallejo (Bay Area)*	9.0 ug/m³ (74%) *Vallejo (Bay Area)*	0	**Vallejo-Tuolumne St (Bay Area)**
Yuba City	166,892	26 ug/m³ (74%) *Yuba City (Feather River)*	9.1 ug/m³ (76%) *Yuba City (Feather River)*	0	**Yuba City-Almond St (Feather River)**

* There are no valid annual design values in this MSA, with most data incomplete for one or more years; the Compton design value here is the highest of the invalid design values.

Table 20: CBSAs with Minimum Monitoring Requirements for Continuous $PM_{2.5}$

Metropolitan Statistical Area	Minimum # of Required Sites	# of Required Continuous Monitors	Sites with Continuous Monitors Operating in 2016 (District where site is located)
Bakersfield	2	1	Mojave (Eastern Kern)
Chico	0	0	Chico-East Ave (Butte County)
El Centro	1	1	Calexico (Imperial)
Los Angeles-Long Beach-Anaheim	3	2	Lancaster (Antelope Valley) Glendora-Laurel (South Coast) Los Angeles-N Main St (South Coast) Reseda (South Coast) Santa Clarita (South Coast) Long Beach-PCH (South Coast)
Oxnard-Thousand Oaks-Ventura	1	1	Thousand Oaks (Ventura) Piru (Ventura) Ojai (Ventura) Simi Valley (Ventura) El Rio (Ventura)
Redding	0	0	--
Riverside-San Bernardino-Ontario	3	2	Banning (South Coast) Rubidoux (South Coast) Mira Loma (South Coast) Lake Elsinore (South Coast) Victorville (Mojave Desert) Temecula (South Coast) Upland (South Coast) Crestline (South Coast)
Sacramento-Roseville-Arden Arcade	3	2	Auburn-Atwood St (Placer County) Roseville-N Sunrise (Placer County) Colfax (Placer County) Lincoln (Placer County) Tahoe City (Placer County) Del Paso-Avalon Dr (Sacramento) Sacramento-T St (Sacramento) Folsom-Natoma St (Sacramento) Sloughhouse (Sacramento) Elk Grove (Sacramento) Davis (Yolo-Solano)
Santa Rosa	0	0	Sebastopol-Morris St (Bay Area)
Vallejo-Fairfield	0	0	Vallejo-Tuolumne St (Bay Area)
Yuba City	0	0	Yuba City (Feather River)

$PM_{2.5}$ Sampling Frequency Requirements for Primary FRM Monitors

Sampling frequency for manual FRM $PM_{2.5}$ monitoring can vary by site. Determination of the required sampling frequency for $PM_{2.5}$ monitors is based upon the site level design value and a number of different factors identified in federal regulations and summarized in Table 21. Sites located in areas with more severe air quality conditions generally are required collect measurements more frequently than other sites.

The current and required sampling frequency for $PM_{2.5}$ FRM monitors located in districts covered by this ANP are shown in Table 22 and also in Appendix A. Exceptional events are included in the determination of the design values shown here.

Table 21: Criteria for Minimum Sampling Frequency for FRM $PM_{2.5}$ Monitoring

1:6 may be approved by Regional Administrator	1:3	1:1
Collocated with continuous FRM/FEM/ARM monitor	Not collocated with continuous FRM/FEM/ARM monitor	Not collocated with continuous FRM/FEM/ARM monitor
AND	**OR**	**AND**
Annual DV is <90% of NAAQS and not the highest in the area	Annual DV is ± 10% of NAAQS and highest in the area	24 hour DV is ± 5% of NAAQS and the highest in the area
AND	**OR**	**AND**
24 hour DV is <90% of NAAQS and not the highest in the area	24 hour DV is ± 10% of NAAQS and highest in the area	Annual DV is below annual NAAQS
AND	**OR**	
24 hour NAAQS has not been exceeded one or more times in each of the past three years	24 hour NAAQS has been exceeded one or more times in each of the past three years	
	OR	
	NCore Site	
	OR	
	Required regional background site	
	OR	
	Required regional transport site	

Suitability for comparison to the annual $PM_{2.5}$ standard

The CFR states that for $PM_{2.5}$ FRM or FEM monitors used in area-wide monitoring, and that meet siting criteria, the reported data are comparable to the annual $PM_{2.5}$ standard. For a $PM_{2.5}$ monitor to be considered area-wide, the concentration values measured by the monitor should be representative of concentrations expected over an area with dimensions of a few kilometers. The $PM_{2.5}$ FRM and FEM monitors included in this report are sited per the definition of area-wide monitoring in the CFR and meet applicable requirements; therefore, the FRM and FEM data are suitable for comparison to the $PM_{2.5}$ NAAQS.

Requirements for $PM_{2.5}$ Background and Transport Sites

Within each state, federal regulations require at least one site measuring concentrations representative of regional background and at least one site representative of regional transport. The regulatory language referenced in 40 CFR 58 Appendix C 2.9 indicates that IMPROVE samplers used for regional background/regional transport requirements can be considered SLAMS.[1] Federal regulations require that monitors required to characterize regional background and transport have a minimum sampling frequency of one in every three days (1:3). The monitors sited to meet these requirements are listed below.

Table 22: Required $PM_{2.5}$ Sampling Frequency for FRM monitors

Site Name	AQSSite ID	District	2016 Annual DV	2016 24-hr DV	Required Sampling Frequency	Current Sampling Frequency
Chico-East	060070008	Butte	8.5	26	1:3	1:1
Colusa[1]	060111002	Colusa	7.3	19	1:6	1:6
Calexico	060250005	Imperial	12.6	33	1:1	1:1
Brawley	060250007	Imperial	8.4	22	1:3	1:3
El Centro	060251003	Imperial	7.4	20	1:3	1:3
Ridgecrest[2]	060290015	Eastern Kern	5.2	16	1:3	1:6
Lakeport[1]	060333001	Lake	3.6	10	1:6	1:6
Grass Valley[3]	060570005	Northern Sierra	5.0	28	1:1	1:6
Truckee	060571001	Northern Sierra	5.3	14	1:3	1:3
Roseville[1]	060610006	Placer	7.6	20	1:6	1:6
Quincy	060631006	Northern Sierra	9.0	32	1:1	1:1
Portola	060631010	Northern Sierra	15.0	50	1:3	1:3
Redding[1]	060890004	Shasta	6.0	15	1:6	1:6
Yreka[4]	060932001	Siskiyou	6.9	40	1:3	1:6
Yuba City	061010003	Feather River	9.1	26	1:3	1:1
Woodland[1]	061131003	Yolo-Solano	6.6	16	1: 6	1:6

[1]Colusa, Lakeport, Redding, Ridgecrest, Roseville, and Woodland were granted waivers to allow 1:6 sampling (Correspondence from G.Yoshimura, EPA to R.Ramalingam on February 24, 2017). An updated waiver request for these sites is included in Appendix B of this ANP.
[2]Ridgecrest is in the process of moving to a new site and PM2.5 monitoring is scheduled to be changed to a continuous monitor in the near future.
[3]The Northern Sierra Unified AQMD has informed CARB that the installation of an FEM BAM at the Grass Valley site is scheduled by the end of August 2017.
[4]The Siskiyou County APCD is currently conducting parallel monitoring prior to replacing the existing FRM monitor with an FEM BAM. The new monitor will be in operation by January 2018 after analysis is complete.

[1] January 13, 2017 email communication from A.Meburst, EPA, to R.Fine/G.Sweigert/T.Najita/W.Tasat citing 40 CFR 58 Appendix C 2.9.

Table 23: Regional Background and Transport Sites for $PM_{2.5}$

Regional Background Sites (Monitor Type/AQS ID)	Regional Transport Sites (Monitor Type/AQS ID)
Northern: Point Reyes National Seashore (EPA/060410002) Southern: San Rafael Wilderness (EPA/060839000)	Vallejo (SLAMS/060950004)

All districts covered by this ANP meet the requirements for $PM_{2.5}$ minimum monitoring, near-road monitoring, and continuous monitoring. ARB is working with local air districts to reassess the current sampling schedules and assist in applying for additional funding to comply with sampling frequency requirements and associated continuous collocation requirements.

Section 6: Other Federal Monitoring Requirements

Chemical Speciation Network (CSN)

Federal regulations also require that states continue to conduct speciated particulate measurements at CSN sites. These measurements are intended to support development of SIPs and research activities. Some districts in California conduct additional speciated particulate measurements to fulfill specific local objectives. Table 20 lists the California sites in the National Speciation Trends Network (STN) and State speciation network.

Table 24: $PM_{2.5}$ CSN Sites in California

Site Name	AQS ID	District	National STN Site	State Speciation Site
Anaheim-Pampas	060590007	South Coast		x
Bakersfield-California Ave	060290014	San Joaquin Valley	x	
Calexico-Ethel St	060250005	Imperial County		x
Chico-East Ave	060070008	Butte County		x
El Cajon-Floyd Smith Dr	060731018	San Diego	x	
Fontana-Arrow	060712002	South Coast		x
Fresno-Garland	060190011	San Joaquin Valley	x	
Livermore-Rincon	060010007	Bay Area		x
Los Angeles-North Main St	060371103	South Coast	x	
Modesto-14th	060990005	San Joaquin Valley		x
Oakland-West	060010011	Bay Area		x
Portola	060631010	Northern Sierra		x
Rubidoux	060658001	South Coast	x	
Sacramento-Del Paso Manor	060670006	Sacramento	x	
Sacramento-T Street	060670010	Sacramento		x
San Jose-Jackson	060850005	Bay Area	x	
Vallejo-Tuolumne	060950004	Bay Area		x
Visalia-Church St	061072002	San Joaquin Valley		x

PM Monitor Spacing

Federal regulations require that high volume monitors, defined as monitors that have a sample flow rate > 200 liters per minute, are more than 2 meters away from all other PM samplers. Further, low volume monitors, those with a sample flow rate < 200 liters per minute, are required to be more than 1 meter away from all other PM monitors.

The PM monitors in the districts covered by this ANP meet spacing requirements with the exception of the high volume PM_{10} monitor at Calexico. This monitor was less than 2 meters away from other PM monitors at the site; however, the high volume monitor was shut down in January 2016.

National Core multipollutant Network (NCore) Monitoring

Sites in the NCore Monitoring Network measure multiple pollutants to support a wide range of air quality management objectives. NCore sites are intended to be long-term sites that will generate datasets useful for trend analyses and model evaluation. The NCore Monitoring Network includes rural and metropolitan sites. As shown in Table 21, seven NCore sites are located in California; however, none of the sites are located in the districts covered by this ANP. More information about specific sites can be found in the ANPs submitted by districts in which the sites are located.

Table 25: NCore Sites in California

Site	AQS ID	District	Site Type
El Cajon-Floyd Smith Dr.	060731018	San Diego	Urban
Fresno-Garland	060190011	San Joaquin Valley	Urban
Los Angeles-N Main St.	060371103	South Coast	Urban
Riverside-Rubidoux	060658001	South Coast	Urban
Sacramento-Del Paso Manor	060670006	Sacramento	Urban
San Jose-Jackson	060850005	Bay Area	Urban
White Mountain Research Station	060270002	Great Basin	Rural

Photochemical Assessment Monitoring Station (PAMS)

Ozone nonattainment areas classified as serious, severe, or extreme were required to establish PAMS site(s) which provide enhanced monitoring of ozone, NOx, VOCs, and meteorological parameters. The enhanced monitoring is intended to provide comprehensive data to evaluate the nature of ozone pollution and craft effective planning strategies to improve air quality in effected areas.

In California, Sacramento Metropolitan AQMD, San Diego APCD, San Joaquin Valley Unified APCD, South Coast AQMD, and Ventura County APCD have established PAMS sites. Ventura County is the only district covered by this ANP that conducts monitoring as part of the PAMS program. In recent years, the PAMS program has been re-engineered and, as discussed in last year's ANP, the extent of Ventura County's continued participation in the PAMS program is not clear. However, in 2016, the Ventura County's PAMS monitoring included measurements of more than 50 target VOCs at the Simi Valley and El Rio sites; and measurement of upper air meteorological parameters at the Simi Valley upper air site.

Special Purpose Monitors (SPM)

In 2016, four SPM monitors were operating in the area covered by this ANP.

- One $PM_{2.5}$ non-FEM monitor was started on 1/29/2015 and ended on 3/2/2016 at Red Bluff-Walnut St (Tehama).
- One $PM_{2.5}$ non-FEM monitor was started during the summer of 2015 at Yreka (Siskiyou) and the district is in the process of uploading monitor information to AQS.
- One ozone monitor was established on 7/1/1995 at Jerseydale (Mariposa).
- One ozone monitor was established at Tuscan Butte (Tehama) on 6/1/1995.

All four SPM monitors covered by this ANP meet 40 CFR Part 58 Appendix A and E siting requirements.

Section 7: Federal Quality Assurance Requirements

ARB PQAO Collocation Requirements

Appendix A of 40 CFR 58 includes requirements for collocation of samplers to ensure that measurements of $PM_{2.5}$, PM_{10}, and Pb are of comparable quality throughout monitoring networks located in each PQAO.

$PM_{2.5}$ Collocation Status

Federal regulations require that 15 percent of the FEM and FRM monitors in the network of primary $PM_{2.5}$ monitors must have a collocated monitor. Collocated FRM monitors must have the same method of measurement.

For each site with collocated $PM_{2.5}$ FEM monitors, half of the collocated monitors must have the same method of measurement and half must be FRM monitors. If there are an odd number of required collocated monitors then the addition monitor must be an FRM.

Table 27: Collocation Requirements for $PM_{2.5}$ Monitoring Methods

Method Type	Method Description	# of Primary Monitors	# of Required Collocated Monitors	Sites with Collocated Monitors - Method Type (District)
117 (FRM)*	R&P Model 2000 with WINS	--	--	See footnote
118 (FRM)*	R&P Model 2025 with WINS	--	--	See footnote
143 (FRM)	R&P Model 2000 with VSCC	7	1	Roseville-N Sunrise – 143/143 (Placer)
145 (FRM)	R&P Model 2025 with VSCC	23	3	Bakersfield-California – 145/145 (San Joaquin Valley) Calexico-Ethel – 145/145 (Imperial) Fresno-Garland – 145/145 (San Joaquin Valley) Portola – 145/145 (Northern Sierra) Sacramento-Del Paso – 145/145 (Sacramento)
170 (FEM)	Met One BAM 1020 with VSCC	39	6	Folsom – 170/170 (Sacramento) Madera – 170/145 (San Joaquin Valley) Modesto – 170/143 (San Joaquin Valley)** Salinas – 170/117 (Monterey Bay) Simi Valley – 170/170 (Ventura) Stockton – 170/170 (San Joaquin Valley) Victorville – 170/170 (Mojave Desert)
181 (FEM)	Thermo TEOM 1400	2	1	Keeler – 181/145 (Great Basin)

Notes: The GRIMM monitors operated by North Coast AQMD were not considered for collocation because U.S.EPA granted a waiver for NAAQS comparison (5/20/2016) and the 2013-2015 data are now reported under parameter code 88502 and are not comparable to the NAAQS.
* ARB is in the process of converting all 117 and 118 monitors to 143 and 145 monitors, respectively. The monitors targeted for conversion to117 and 118 monitors were included in the 143 and 145 monitor counts. The 118 monitor at Ridgecrest will be replaced with a continuous monitor once parallel monitoring has been completed.
**Collocated monitor is not required; however, ARB has chosen to continue operating collocated monitors to provide additional quality assurance information.

Federal regulations require that 80 percent of collocated $PM_{2.5}$ monitors are located at sites where the design values are within 20 percent of the federal $PM_{2.5}$ standards. However, California is a large state in which environmental conditions can cause significant variation in ambient $PM_{2.5}$ concentrations across spatial and temporal scales. Thus, ARB determined that limiting the focus of collocation efforts on meeting the 80 percent metric would result in collocated monitors being tightly clustered in a limited geographic range, which would not adequately represent the range of environmental conditions in the PQAO that could potentially affect $PM_{2.5}$ measurements.

The current locations of collocated $PM_{2.5}$ samplers were collaboratively identified by ARB and local districts as representative of areas of expected high concentrations as well as areas with environmental conditions that could potentially affect measurements, which effectively addresses the quality control function of the collocated monitoring.

PM_{10} Collocation Status

Federal regulations require that 15 percent of PM_{10} sites using manual FRMs in a PQAO have collocated monitors. Collocated monitors must use the same method of measurement as the primary FRM monitor.

Per U.S. EPA's guidance, the required number of collocation sites was determined by counting all of the PM_{10} FRM monitors, regardless of method code.

Table 28: Collocation Requirements for PM_{10}

Number of Primary FRM monitors*	# of Required Collocated Monitors	Sites with Collocated Monitors - Method Types (District)
32	5	Bakersfield-California – 063/063 (San Joaquin Valley) Sacramento-Del Paso – 063/063 (Sacramento) Keeler-Cerro – 127/127 (Great Basin) Fresno-Drummond – 162/162 (San Joaquin Valley)

*This number reflects the number of monitors operating in the PQAO in 2016. As of June 2017, the number of Primary FRM monitors is 29, reducing the required number of collocated monitors from five to four.

Pb Collocation Status

There are only two Pb monitors in the ARB PQAO. These monitors are at the Fresno-Garland and Sacramento-Del Paso Manor sites. However, Pb collocation for NCore sites is addressed by U.S. EPA at the national level. Thus, ARB is not required to collocate for lead at the NCore sites.

ARB Quality Management Branch (QMB)

The information in this section, along with the information available on ARB's Quality Assurance website, http://www.arb.ca.gov/aaqm/qa/qa.htm, provides an overview of ARB's QMB compliance status with the requirements of 40 CFR Part 58, Appendices A, C, and E. The compliance status overview is part of the annual network plan requirement.

QMB Background

The Quality Assurance Section (QAS) and Quality Management Section (QMS) fulfill the QMB mission to ensure ambient air quality data meet or exceed the quality and program objectives of the end users. QAS and QMS perform various quality assurance activities to verify that the data collected comply with procedures and regulations set forth by U.S. EPA and can be considered good quality data and data-for-record.

The quality assurance activities are achieved through various audits which are independent from the ambient air monitoring program responsibilities. California's large network and unique ambient air monitoring challenges require a comprehensive state of the art audit program. ARB's audit program meets the federal requirements for conducting annual performance evaluations and has been designated as equivalent to the National Performance Audit Program. Audits are conducted by using independent National Institute of Standards and Technology (NIST) traceable standards and must adhere to federally established acceptance criteria.

QAS is responsible for conducting performance audits of criteria and non-criteria pollutant analyzers, particulate matter samplers, meteorological equipment, and laboratory analyses utilized for generating ambient level measurements. QAS also performs site reviews as well as reports quality assessment and quality control results. QMS is responsible for ensuring that ARB meets its federally mandated PQAO responsibilities. QMS performs technical system audits (TSA) and provides quality assurance oversight of the PQAO districts.

ARB Quality Assurance Activities

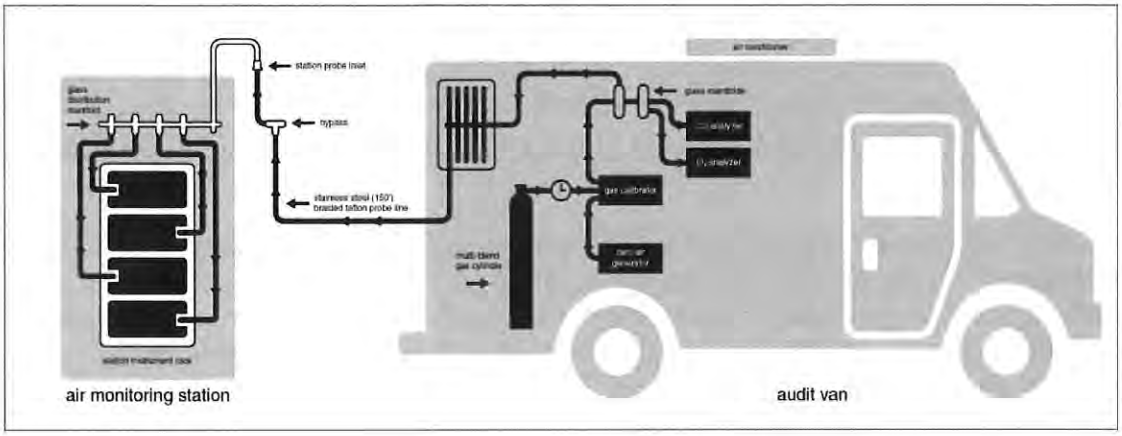
Monitoring Station Audits

Annually, QAS conducts through-the-probe (TTP) audits for all continuous gaseous analyzers in the network. TTP audits of the gaseous analyzers, which monitor for carbon monoxide, nitrogen dioxide, hydrogen sulfide, sulfur dioxide, and ozone, are conducted in accordance with U.S. EPA requirements (Title 40, CFR, Part 58, Appendix A). These audits verify the accuracy of the gaseous analyzers and ensure the integrity of the entire sampling system. For most TTP audits, an audit van is transported by QAS to the ambient air monitoring station. Audit vans house the necessary instrumentation and equipment to allow the audit to be conducted at the same condition as the station instruments. TTP audits, depicted in Figure 4, are conducted by introducing NIST

traceable gases from the van into the station sampling probe inlet at various concentrations. QAS compares the results obtained from the station analyzer to the known values generated in the van.

TTP audit methodology can identify deficiencies caused by poor analyzer response, pollutant scavenging contaminants, and sampling system leaks. Deficiencies like these can cause the gaseous analyzers to fail an audit and possibly affect the quality of the ambient air data.

Figure 4: Through-the-Probe Audit



Biannually, QAS determines the accuracy of each particulate matter sampler in the network by comparison of the instrument's flow rate to either a certified orifice or a mass flow meter. These devices are certified against a NIST traceable flow device or calibrator. The audit device is connected in-line with the sampler's flow path and the flow rate is measured while the sampler is operating under normal sampling conditions. The true flow is calculated from the audit device's calibration curve. The sampler's flow is then compared to the true flow and a percent difference is determined for verifying compliance.

QAS also conducts annual audits of meteorological sensor s using NIST traceable equipment. Accurate meteorological data are important for characterizing meteorological processes such as transport and diffusion, and to make air quality forecasts and burn-day decisions.

An integral part of a performance audit is conducting a siting evaluation. Stations that meet siting criteria at the time of initial setup may no longer conform due to updated regulations or changes in surrounding conditions and land use. Physical measurements and observations are noted on the site survey or accompanying documentation to determine compliance with 40 CFR Part 58, Appendix E requirements. Many of the siting issues result from the growth of vegetation-trees infringing on the minimum distance required from probes-inlets.

Laboratory Performance and System Audits

Laboratory mass analysis performance audits are conducted annually by QAS. These audits utilize NIST certified weights, hygrometers, and temperature sensors to verify the accuracy of the laboratory balance, relative humidity, and temperature sensors.
A TSA is an on-site inspection and review of a monitoring organization's entire ambient air monitoring program. TSA procedures utilized by QMB auditors are located in U.S. EPA's Quality Assurance Handbook, Volume II. Each local agency within a PQAO must be audited on a six year schedule. The entire measurement system is reviewed which includes sample collection, sample analysis, and data processing. TSAs include a review of staff records, procedures, instrumentation, facilities, and documentation to assure compliance with all applicable requirements. Following evaluation of available information, a report is issued which includes a summary of the audit process, and a summary of findings and recommendations to correct any issues identified.

Quality Assessment and Quality Control

QAS ensures the quality of the data collected by the air monitoring stations operating in California through the analysis of precision data submitted to U.S. EPA's AQS database. Precision checks for gaseous-continuous samplers are required once every two weeks. These precision checks are conducted nightly at ARB and some district operated sites, and weekly or bi-weekly at other district sites. Precision checks for non-continuous, collocated particulate matter samplers are to be performed at least every 12 days. QAS staff analyzes the precision data in accordance with 40 CFR 58, Appendix A.

Air monitoring staffs perform a one-point flow rate verification at least once every month on the filter-based and automated PM analyzers. Air monitoring staffs review these data and takes corrective action when the results exceed U.S. EPA's requirements. These flow rate verifications are used to assess bias of the automated instruments in accordance with 40 CFR Part 58, Appendix A, 3.2.3. These bias estimates are further verified by the semi-annual flow rate audits that are conducted five to seven months apart in each calendar year. In the course of auditing the $PM_{2.5}$ FRM and continuous samplers, the date of the last six months of flow rate and leak checks performed by the air monitoring staff are recorded.

Identifying and Correcting Deficiencies

During a performance audit, if a parameter fails to meet critical criteria (QA Handbook Volume II, Appendix D), an Air Quality Data Action (AQDA) request is issued to the facility operator. All AQDAs must be investigated by the operator and resolved to bring the parameter in question into compliance. The station operator completes the AQDA by documenting the resolution, specifying the time period during which data were potentially affected, and recommending whether the data are to be released, corrected, or invalidated. QMB reviews the completed AQDA and discusses any concerns with the operator. A finalized copy of the AQDA is forwarded to the operator and ARB's Air Quality Analysis Section. Other issues identified as systematic or operational criteria

that may impact or potentially impact data quality are documented through the issuance of a Corrective Action Notification (CAN).

Audit Report Summary

Information about each air monitoring station audited by QMB is available at: http://www.arb.ca.gov/qaweb/sitelist_create.php. This web page provides the map location, latitude and longitude coordinates, site photos, the pollutants monitored, along with a detailed site survey of the instrumentation and physical parameters for each site.

The 2016 calendar year audit dates for both the gaseous analyzers and PM monitors and residence time for each gas analyzer operating at the monitoring sites covered in this report are provided in the detailed site Tables in Appendix A. Audit results are directly submitted to AQS quarterly per Appendix A of 40 CFR Part 58.

In addition, as required by 40 CFR Part 58.15, ARB submits a data certification letter along with the required AQS reports (AMP450NC and AMP600) to U.S.EPA, annually. The most recent certification letter was sent to the U.S. EPA on June 2, 2017.

Section 8: Proposed and Recently Implemented Monitoring Site Changes

ARB utilizes the annual network plan process to document and provide the public opportunities to comment on any proposed changes to the monitoring network. Any received comments are formally addressed via letters and are documented in the network plan. The network plan is submitted to the U.S. EPA annually for formal approval of all network modifications.

This section lists the proposed and recently implemented monitoring site changes that ARB is currently aware of in the areas covered by this ANP.

District	Site (AQS ID)	Comment
Antelope Valley APCD	Lancaster (060379033)	$PM_{2.5}$ FRM monitor shutdown on 4/7/2016; FEM monitor now operated as primary monitor.
Butte County APCD	Gridley (060074001)	Site lease was renewed and a new shelter replaced the aging trailer in August 2016.
	Paradise (060070007)	Replace non-FEM BAM1020 monitor with non-FEM BAM-1022 monitor. Data used for agriculture burn program. Planned change to occur the third quarter of 2017.
Colusa County APCD	Sunrise (060111002)	PM_{10} FRM monitor shutdown and replaced with a FEM monitor in early 2016. Replace non-FEM BAM1020 monitor with non-FEM BAM-1022. Data used for agriculture burn program. Planned change to occur the third quarter of 2017.
Eastern Kern APCD	Ridgecrest (060290015)	Replacement of $PM_{2.5}$ FRM and PM_{10} FRM monitors with FEM monitors are planned for 2017. Parallel monitoring is currently underway prior to the expected relocation of the site in the fourth quarter of 2017. The District requested an evaluation of the new location, configuration, and equipment by the ARB. The site for the pilot is proposed east of N. Primavera St. and ~300 feet south of W. Ward Ave.
El Dorado County AQMD	Placerville (060170010)	ARB has found a suitable location at the Placerville airport. This site is in the lease negotiation process through the Department of General Services. The existing lease expires February 2018 but the driver on the timeline for vacating the site is the property owner's timeline for development. There is a 180 day notice requirement for termination of the lease and that notice has not been served.
Imperial County APCD	Brawley (060250007)	The PM_{10} FRM monitor was shutdown on 12/31/16. An FEM monitor is now the primary monitor.
	Calexico (060250005)	The PM_{10} FRM monitor was shutdown on 1/19/2016 and replaced with a PM_{10} FEM monitor. A non-FEM continuous $PM_{2.5}$ monitor was installed on 1/1/2016 for real-time reporting purposes.
	El Centro (060251003)	Effective June 30, 2017 the Air District intends to discontinue the CO monitor. This termination was approved by U.S. EPA (see Appendix C)
	Niland (060254004)	The PM_{10} FRM monitor at this site was shut down on 12/31/16. An FEM monitor is now the primary monitor.
Lake County	Lakeport (060333001)	PM_{10} monitor now submits data to AQS under both local and standard conditions.
	Anderson Springs (060333010)	PM_{10} monitor now submits data to AQS under both local and standard conditions.
	Glenbrook: (060333011)	PM_{10} monitor now submits data to AQS under both local and standard conditions.

District	Site (AQS ID)	Comment
Northern Sierra AQMD	Grass Valley (060570005)	Replacement of the non-FEM $PM_{2.5}$ monitor with an FEM BAM is scheduled by the end of August 2017. A new $PM_{2.5}$ site are planned for 2017. Establishment of a new $PM_{2.5}$ at site at Loyalton is planned for 2017. The Loyalton site will operate a non-FEM continuous monitor.
	White Cloud (060570007)	The site is currently not operating due to issues with the existing shelter. ARB is currently working on replacing the shelter and expects to have the station operational for the 2018 ozone season.
Placer County APCD	Lincoln (060612002)	Planning to relocate the site due to the site demolition plan proposed by the site owner. The District has initiated the process to search a new site location within the City of Lincoln and will start the paperwork process when the new site location is identified. The District proposes to finish the Lincoln site relocation in fiscal year 2017-2018.
Siskiyou County APCD	Yreka (060932001)	District is currently running a non-FEM $PM_{2.5}$ monitor as SPM in parallel with the FRM monitor. The data from the non-FEM will be submitted to AQS, and monitor switched to FEM, after the parallel monitoring is completed in January 2018.
Tehama County APCD	Red Bluff-Walnut (061030007)	Replacement of the non-FEM $PM_{2.5}$ monitor with an FEM monitor occurred in March 2016. Planning to replace an existing Teledyne 400E ozone monitor with a new T400.
Ventura County APCD		All glass sample trains used in ozone and NO_2 sampling at all District sites have been changed in 2016 - 2017. District will continue to work with U.S. EPA Regional office on Phase 3 near-road NO_2 monitoring requirements.

ARB operates multiple sites in districts that are not covered by this ANP. Below are proposed and recently implemented changes to these ARB operated sites. Changes to ARB operated sites may also be reported in the ANPs prepared by the district's where the ARB-operated monitoring sites are located.

District	Site (AQS ID)	Comment
Santa Barbara County	Armory (060830011)	The CO and NOx were shut down in June 2017 and was approved by U.S. EPA. BAM operations stopped in August 2015 due to safety issues and is expected to return to operation around July 2017 (Pending completion of the guard rail). The site lease has been extended. Relocation is currently not necessary.
Kern County	Oildale (060290232)	Shut down PM10 HiVol and installed BAM10 June 2017.
Fresno County	Fresno-Garland (060190011)	Propose to shut-down the TSP-Pb monitor. This monitor is no longer a required monitor for NCore monitoring stations. Ambient Pb concentrations are collected via the ARB toxics network. ARB will submit a monitor closure request to U.S. EPA Region 9. When the closure request be approved, the monitor will be closed within 30 days of approval or as specified.

Section 9: Network Information Resources

While this report includes a great deal of information about the ambient air quality monitoring network, much more information is readily available, including summaries of the pollutant data from the monitors around the State. Much of this information is available on the web. This section lists a number of additional sources of such information. Also listed is contact information for the agencies responsible for the monitoring covered in this report.

ARB's Monitoring and Laboratory Division (MLD) maintains web pages with information about all the existing monitoring sites that routinely monitor and submit air quality data in California. The pages also include detailed local maps showing the location of the sites. This information can be found at: http://www.arb.ca.gov/aaqm/mldaqsb/amn.htm. A more general MLD web page that provides links to other aspects of ambient monitoring is located at: http://www.arb.ca.gov/aaqm/aaqm.htm.

Summaries of the official air quality data from sites around the State can be found at: http://www.arb.ca.gov/adam/welcome.html. Summaries of the most recent preliminary data can be viewed at: http://www.arb.ca.gov/aqmis2/aqmis2.php. These last two sources of information are maintained by ARB staff of the Air Quality Planning and Science Division, as is the following more general web page that lists links to other aspects of the ambient air quality data program: http://www.arb.ca.gov/html/ds.htm.

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Appendix A

Detailed Site Reports

Amador County APCD

Local Site Name	Jackson-Clinton Road				
AQS ID	06-005-0002				
GPS Coordinates	38.34261, -120.76443				
Street Address	201 Clinton Rd, Jackson, 95642				
County	Amador				
Distance to roadways (meters)	300				
Traffic Count	6000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	5/1/1992				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.9				
Distance from supporting structure (meters)	2.6				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.1				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/17/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Antelope Valley AQMD

Local Site Name	Lancaster-Division Street				
AQS ID	06-037-9033				
GPS Coordinates	34.66959, -118.13068				
Street Address	43301 Division St, Lancaster, 93535				
County	Los Angeles				
Distance to roadways (meters)	25				
Traffic Count	30000				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Los Angeles-Long Beach-Anaheim Metropolitan Statistical Area				
Pollutant, POC	CO, 1	NO2, 1	Ozone, 1	PM10, 2	PM2.5, 1
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	Primary	Primary
Parameter Code	42101	42602	44201	81102	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS, Public Information	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 300	Teledyne API 200	Teledyne API 400	Met One BAM 1020	Met One BAM 1020
Method code	93	99	87	122	170
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	FEM
Collecting Agency	Antelope Valley	Antelope Valley	Antelope Valley	Antelope Valley	Antelope Valley
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	Antelope Valley
Reporting Agency	Antelope Valley	Antelope Valley	Antelope Valley	Antelope Valley	Antelope Valley
Spatial scale	Middle	Middle	Middle	Neighborhood	Neighborhood
Monitoring start date	11/01/2001	11/01/2001	11/01/2001	11/1/2001	11/01/2001
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	6.4	6.4	6.4	6.4	6.5
Distance from supporting structure (meters)	1.9	1.9	1.9	>2	2
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	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	N/A
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	16.7	17.1	16	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	Yes
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	Monthly
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	Every 2 weeks	Every 2 weeks	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/4/2016	42404	42404	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	2/4/2016 8/17/2016	2/4/2016 8/17/2016

Butte County AQMD

Local Site Name	Chico - East Avenue					
AQS ID	06-007-0008					
GPS Coordinates	39.76168, -121.84047					
Street Address	984 East Ave, Ste 4, Chico, 95926					
County	Butte					
Distance to roadways (meters)	75					
Traffic Count Notes	7000 AADT					
Ground Cover	Asphalt					
Representative statistical area name (i.e. MSA, CBSA, other):	Chico Metropolitan Statistical Area					
Pollutant, POC	CO, 3	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 1	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	Primary	Primary	Supplementary
Parameter Code	42101	42602	44201	81102	88101	88502
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS	Public Information
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	Highest Concentration	Highest Concentration
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	CSN supplemental	CSN supplemental
Instrument manufacturer and model	Teledyne API 300	Teledyne API 200	Teledyne API 400	Met One BAM 1020	R&P 2025	Met One BAM 1020
Method code	593	99	87	122	145	731
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	FRM	Other
Collecting Agency	ARB	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	ARB	N/A
Reporting Agency	ARB	ARB	ARB	ARB	ARB	ARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	06/01/2012	06/08/2012	06/01/2012	5/27/2012	4/27/2012	6/1/2012
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	1:1	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	1:3	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	6.3	6.3	6.3	6.5	6.2	6.5
Distance from supporting structure (meters)	2.0	2.0	2.0	2.5	>2	2.5
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A	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	2	2
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.5	14.3	14.6	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	Yes	No
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	Monthly	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Daily	Daily	Daily	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/14/2016	9/14/2016	9/14/2016	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	3/22/2016 9/14/2016	3/22/2016 9/14/2016	3/22/2016 9/14/2016

Local Site Name	Gridley				
AQS ID	06-007-4001				
GPS Coordinates	39.32756, -121.66881				
Street Address	608 Cowee Ave, Gridley, 95948				
County	Butte				
Distance to roadways (meters)	100				
Traffic Count Notes	100 AADT				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Chico Metropolitan Statistical Area				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88502				
Basic monitoring objective(s)	Public Information				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	731				
FRM/FEM/ARM/Other	Other				
Collecting Agency	California ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	California ARB				
Spatial scale	Neighborhood				
Monitoring start date	1/1/2001				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.8				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	No				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	5/24/2016 10/27/2016				

Local Site Name	Paradise - Airport				
AQS ID	06-007-0007				
GPS Coordinates	39.70845, -121.61731				
Street Address	4405 Airport Rd, Paradise, 95969				
County	Butte				
Distance to roadways (meters)	10				
Traffic Count Notes	100 AADT				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Chico Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	California ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	California ARB				
Spatial scale	Regional				
Monitoring start date	05/01/2000				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.6				
Distance from supporting structure (meters)	1.6				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.2				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/15/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Paradise - Theater				
AQS ID	06-007-2002				
GPS Coordinates	39.77919, -121.59135				
Street Address	6701 Clark Road, Paradise CA 95966				
County	Butte				
Distance to roadways (meters)	100				
Traffic Count Notes	5500/day				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Chico Metropolitan Statistical Area				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88502				
Basic monitoring objective(s)	Public Information				
Site type(s)	General Background				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	731				
FRM/FEM/ARM/Other	Other				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	9/9/2010				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	10.2				
Distance from supporting structure (meters)	2.2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	NO				
Is it suitable for comparison against the annual PM2.5 NAAQS?	NO				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Semi-Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/22/2016 9/15/2016				

Calaveras County APCD

Local Site Name	San Andreas-Gold Strike Road				
AQS ID	06-009-0001				
GPS Coordinates	38.20185, -120.68028				
Street Address	501 Gold Strike Rd, San Andreas, 95249				
County	Calaveras				
Distance to roadways (meters)	110				
Traffic Count Notes	500 AADT				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM10, 3	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS, Public Information		
Site type(s)	Highest Concentration	General Background	General Background		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	170		
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	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	05/01/1994	10/6/2014	06/15/2010		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.4	5	4.8		
Distance from supporting structure (meters)	1.2	2.1	2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.2	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 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb 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 Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/17/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/17/2016 8/24/2016	2/17/2016 8/24/2016		

Colusa County APCD

Local Site Name	Colusa-Sunrise Blvd				
AQS ID	06-011-1002				
GPS Coordinates	39.18919, -121.99887				
Street Address	100 Sunrise Blvd, Colusa, 95932				
County	Colusa				
Distance to roadways (meters)	100				
Traffic Count Notes	12000 AADT				
Ground Cover	Grass				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 1	PM2.5, 3	PM10, 6
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary	Supplementary	Primary
Parameter Code	44201	81102	88101	88502	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	General Background	Highest Concentration	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 400	Sierra Anderson 1200	Thermo 2000i	Met One BAM 1020	Met One BAM 1020
Method code	87	63	143	731	122
FRM/FEM/ARM/Other	FEM	FRM	FRM	Other	FEM
Collecting Agency	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB	N/A	N/A
Reporting Agency	ARB	ARB	ARB	ARB	ARB
Spatial scale	Regional	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	07/01/1996	5/1/1988	12/16/1998	10/12/2004	2/1/2016
Current sampling frequency	Continuous	1:6	1:6	Continuous	Continuous
Required sampling frequency including exceptional events	N/A	1:6	1:3	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	5.3	8.5	9.5	9.8	5.9
Distance from supporting structure (meters)	2	>2	2.5	2.8	2.2
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters	>10 meters	>10 meters
Distance to furnace or incinerator flue (meters)	N/A	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	N/A
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.9	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	Yes, shut down 1/31/16	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	No	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Quarterly	Monthly	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	Monthly
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/5/2016	N/A	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	5/5/2016 10/20/2016	5/5/2016 10/20/2016	5/5/2016 10/20/2016	5/5/2016 10/20/2016

Eastern Kern APCD

Local Site Name	Canebrake				
AQS ID	06-029-0017				
GPS Coordinates	35.72775, -118.13770				
Street Address	3147 Highway 178, Canebrake, 93255				
County	Kern				
Distance to roadways (meters)	100				
Traffic Count Notes	75 AADT				
Ground Cover	Sand				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	General Background; Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Tisch 6070				
Method code	141				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Eastern Kern				
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB				
Reporting Agency	ARB				
Spatial scale	Urban				
Monitoring start date	01/01/2009				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	1:6				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	2.1				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	2/11/2016 7/21/2016				

Local Site Name	Mojave				
AQS ID	06-029-0011				
GPS Coordinates	35.05045, -118.14778				
Street Address	923 Poole Street, Mojave, 93501				
County	Kern				
Distance to roadways (meters)	100				
Traffic Count Notes	24,600 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	170		
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	Regional	Neighborhood	Neighborhood		
Monitoring start date	8/1/1993	6/4/2013	4/1/2011		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.1	4.4	4.4		
Distance from supporting structure (meters)	1.5	>2	>2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.9	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 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb 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 Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/9/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/9/2016 7/22/2016	2/9/2016 7/22/2016		

Local Site Name	Ridgecrest - California Ave				
AQS ID	06-029-0015				
GPS Coordinates	35.62109, -117.67296				
Street Address	100 W California Av, Ridgecrest, 93555				
County	Kern				
Distance to roadways (meters)	90				
Traffic Count	3600 AADT (Ridgecrest Blvd 2007 Kern County DOT)				
Ground Cover	Grass				
Representative statistical area name (i.e. MSA, CBSA, other)	Bakersfield Metropolitan Statistical Area				
Pollutant, POC	PM10, 1	PM2.5, 1			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	81102	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Highest Concentration	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	GMW 1200	R & P CO 2025			
Method code	63	118			
FRM/FEM/ARM/Other	FRM	FRM			
Collecting Agency	Eastern Kern	Eastern Kern			
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB	San Diego County			
Reporting Agency	ARB	San Diego County			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	01/01/2000	06/01/1999			
Current sampling frequency	1:6	1:6			
Required sampling frequency including exceptional events	1:6	1:3			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	2.4	3.0			
Distance from supporting structure (meters)	>2	>2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	3	1			
Distance to furnace or incinerator flue (meters)	N/A	None			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	None			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A			
Will there be changes within the next 18 months?	Yes	Yes			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly	Monthly			
Frequency of flow rate verification for automated PM analyzers	N/A	N/A			
Frequency of one-point QC check for gaseous instruments	N/A	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	2/11/2016 7/21/2016	2/11/2016 7/21/2016			

El Dorado County AQMD

Local Site Name	Cool (seasonal)				
AQS ID	06-017-0020				
GPS Coordinates	38.89094, -121.00337				
Street Address	1400 American River Trail, Cool, 95614				
County	El Dorado				
Distance to roadways (meters)	125				
Traffic Count Notes	4,000 AADT				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento--Arden-Arcade--Roseville, CA				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Regional				
Monitoring start date	06/01/1996				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	Apr-Oct				
Probe height (meters)	11.9				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.4				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	7/13/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Echo Summit (seasonal)				
AQS ID	06-017-0012				
GPS Coordinates	38.81161, -120.03308				
Street Address	21200 US Hwy 50, Little Norway, 95721				
County	El Dorado				
Distance to roadways (meters)	100				
Traffic Count Notes	Unknown road; 1,900 AADT (2000)				
Ground Cover	Paved				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento--Arden-Arcade--Roseville, CA				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Regional Transport				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Regional				
Monitoring start date	01/01/2000				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	Apr-Oct				
Probe height (meters)	3.9				
Distance from supporting structure (meters)	1.4				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	None				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.4				
Will there be changes within the next 18 months?	Back online for 2016 season				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	6/20/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Placerville				
AQS ID	06-017-0010				
GPS Coordinates	38.72528, -120.82192				
Street Address	3111 Gold Nugget Way, Placerville, 95667				
County	El Dorado				
Distance to roadways (meters)	500				
Traffic Count Notes	15000				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento--Arden-Arcade--Roseville, CA				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Regional				
Monitoring start date	2/1/1992				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.1				
Distance from supporting structure (meters)	1.1				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	None				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.4				
Will there be changes within the next 18 months?	Yes				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	6/20/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	South Lake Tahoe-Sandy Way				
AQS ID	06-017-0011				
GPS Coordinates	38.94498, -119.97061				
Street Address	3337 Sandy Way, South Lake Tahoe, 96150				
County	El Dorado				
Distance to roadways (meters)	100				
Traffic Count Notes	17500 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Sacramento--Arden-Arcade--Roseville, CA				
Pollutant, POC	PM10, 5				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Middle				
Monitoring start date	6/1/2001				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.0				
Distance from supporting structure (meters)	3.0				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	None				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	6/20/2016 12/27/2016				

Feather River AQMD

Local Site Name	Sutter Buttes (seasonal)				
AQS ID	06-101-0004				
GPS Coordinates	39.20556, -121.82046				
Street Address	Top of South Butte, Sutter Buttes, 95982				
County	Sutter				
Distance to roadways (meters)	200				
Traffic Count Notes	2 AADT				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Yuba City, CA				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration; Regional Transport				
Monitor type(s)	SLAMS				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Regional				
Monitoring start date	05/01/1993				
Network affiliation(s)	N/A				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	Apr-Oct				
Probe height (meters)	6.7				
Distance from supporting structure (meters)	1.2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (No trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.0				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/24/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Yuba City				
AQS ID	06-101-0003				
GPS Coordinates	39.13876, -121.61872				
Street Address	773 Almond St, Yuba City, 95991				
County	Sutter				
Distance to roadways (meters)	75				
Traffic Count Notes	10000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Yuba City, CA				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5,1	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	Supplementary
Parameter Code	42602	44201	81102	88101	88502
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	Public Information
Site type(s)	Population Exposure	Highest Concentration	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020	R&P 2025	Met One BAM 1020
Method code	99	87	122	145	731
FRM/FEM/ARM/Other	FRM	FEM	FEM	FRM	Other
Collecting Agency	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	ARB	N/A
Reporting Agency	ARB	ARB	ARB	ARB	ARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	1/1/1989	10/01/1989	6/11/2014	12/19/1998	6/14/2004
Current sampling frequency	Continuous	Continuous	Continuous	1:1	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	1:3	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	8.4	8.4	9.6	7.7	9.7
Distance from supporting structure (meters)	1.1	1.1	2.3	2.2	2.4
Distance from obstructions on roof (meters)	1.8 (Wall)	1.8 (Wall)	1.8 (Wall)	1.8 (Wall)	1.8 (Wall)
Height above probe for obstructions on roof (meters)	0.9	0.9	0.9	0.9	0.9
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters	>10 meters	>10 meters
Distance to furnace or incinerator flue (meters)	N/A	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	1.1
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	16.2	14.4	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	No
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	Monthly	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/16/2016	9/16/2016	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	3/23/2016 9/16/2016	3/23/2016 9/16/2016	3/23/2016 9/16/2016

Glenn County APCD

Local Site Name	Willows-Colusa				
AQS ID	06-021-0003				
GPS Coordinates	39.53387, -122.19083				
Street Address	720 N. Colusa St., Willows, 95988				
County	Glenn				
Distance to roadways (meters)	500				
Traffic Count Notes	400 AADT				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM10, 3	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88502		
Basic monitoring objective(s)	NAAQS	NAAQS	Public Information		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Met One BAM 1020		
Method code	87	122	731		
Network affiliation(s)	N/A	N/A	N/A		
FRM/FEM/ARM/Other	FEM	FEM	Other		
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	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	09/13/2006	10/1/2013	09/13/2006		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.7	4.8	4.9		
Distance from supporting structure (meters)	1.9	2.0	2.1		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	5.0	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 NAAQS?	N/A	N/A	No		
Frequency of flow rate verification for manual PM samplers, including Pb 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 Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/19/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	5/12/2016 10/25/2016	5/12/2016 10/25/2016		

Imperial County APCD

Local Site Name	Brawley-Main Street #2				
AQS ID	06-025-0007				
GPS Coordinates	32.97831, -115.53904				
Street Address	220 Main St., Brawley, 92227				
County	Imperial				
Distance to roadways (meters)	30				
Traffic Count Notes	5,000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	El Centro Metropolitan Statistical Area				
Pollutant, POC	PM10, 1	PM10, 3	PM2.5, 1		
Primary, QA-Audit, Supplementary, or N/A	Primary	Supplementary	Primary		
Parameter Code	81102	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Sierra Andersen 1200	Met One BAM 1020	R & P 2025		
Method code	63	122	118		
FRM/FEM/ARM/Other	FRM	FEM	FRM		
Collecting Agency	Imperial County	Imperial County	Imperial County		
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB	N/A	San Diego County		
Reporting Agency	ARB	ARB	San Diego County		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	12/15/2003	8/11/2009	12/15/2003		
Current sampling frequency	1:6	Continuous	1:3		
Required sampling frequency including exceptional events	1:6	N/A	1:3		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	11.7	12.4	12		
Distance from supporting structure (meters)	>2	2.4	2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	N/A (No trees)	N/A (No trees)	N/A (No trees)		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A		
Will there be changes within the next 18 months?	Yes	No	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly	N/A	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly	N/A		
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	1/27/2016 7/19/2016	1/28/2016 7/19/2016	1/27/2016 7/19/2016		

Local Site Name	El Centro-9th Street				
AQS ID	06-025-1003				
GPS Coordinates	32.79215, -115.56299				
Street Address	150 9th St, El Centro, 92243				
County	Imperial				
Distance to roadways (meters)	30				
Traffic Count Notes	2,500 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	El Centro Metropolitan Statistical Area				
Pollutant, POC	CO, 1	NO2, 1	Ozone, 1	PM10, 4	PM2.5, 1
Primary, QA-Audit, Supplementary, or N/A	Primary	N/A	N/A	Primary following POC 2 shutdown	Primary
Parameter Code	42101	42602	44201	81102	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Highest Concentration	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 300	Teledyne API 200	Teledyne API 400	Met One BAM 1020	R & P 2025
Method code	93	99	87	122	118
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	FRM
Collecting Agency	Imperial County	Imperial County	Imperial County	Imperial County	Imperial County
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	San Diego County
Reporting Agency	ARB	ARB	ARB	ARB	San Diego County
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	1/1/1996	1/1/1980	02/01/1988	7/1/2015	1/1/1999
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	1:3
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	1:3
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	11	11	11	11	11.6
Distance from supporting structure (meters)	2	2	2	2	2.1
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	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	N/A
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.1	9.5	9.1	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	Yes
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	Yes
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	N/A
Frequency of one-point QC check for gaseous instruments	Daily	Daily	Daily	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/5/2016	1/28/2016	1/28/2016	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	1/28/2016 7/21/2016	1/28/2016 7/21/2016

Local Site Name:	Niland-English Road				
AQS ID:	06-025-4004				
GPS Coordinates:	33.21349, -115.54514				
Street Address:	7711 English Road, Niland, 92257				
County:	Imperial				
Distance to roadways (meters):	20				
Traffic Count Notes:	50 AADT				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	El Centro Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 3	PM10, 1		
Primary, QA-Audit, Supplementary, or N/A	Primary	Supplementary	Primary		
Parameter Code	44201	81102	81102		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020	Sierra Andersen 1200		
Method code	87	122	63		
FRM/FEM/ARM/Other	FEM	FEM	FRM		
Collecting Agency	Imperial County	Imperial County	Imperial County		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	ARB		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	10/1/1997	8/10/2009	6/2/1996		
Current sampling frequency	Continuous	Continuous	1:6		
Required sampling frequency including exceptional events	N/A	N/A	1:6		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	4.6	5.2	4.5		
Distance from supporting structure (meters)	1.6	2.2	>2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	4.6	N/A	N/A		
Will there be changes within the next 18 months?	No	No	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly	N/A		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	1/27/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	1/27/2016 7/19/2016	1/27/2016 7/19/2016		

Local Site Name:	Westmorland				
AQS ID:	06-025-4003				
GPS Coordinates:	33.03239, -115.62362				
Street Address:	570 Cook St., Westmorland, 92281				
County:	Imperial				
Distance to roadways (meters):	20				
Traffic Count Notes:	100 AADT				
Ground Cover:	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other):	El Centro Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary following POC 1 shutdown			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Imperial County	Imperial County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Regional	Middle			
Monitoring start date	04/01/1993	7/1/2015			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.3	5.5			
Distance from supporting structure (meters)	1.2	2.5			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.5	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb 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 Annual performance evaluation conducted in the past calendar year for gaseous parameters	1/28/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	1/28/2016 7/19/2016			

Local Site Name:	Calexico-Ethel Street				
AQS ID:	06-025-0005				
GPS Coordinates:	32.67618, -115.48307				
Street Address:	1029 Belcher St, Calexico, 92231				
County:	Imperial				
Distance to roadways (meters):	20				
Traffic Count Notes:	7000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	El Centro Metropolitan Statistical Area				
Pollutant, POC	CO, 3	SO2, 3	NO2, 1	Ozone, 1	PM10, 1
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	N/A	Primary
Parameter Code	42101	42401	42602	44201	81102
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS
Site type(s)	Population Exposure	Population Exposure	Population Exposure	General Background	Highest Concentration
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 300	Thermo 43i-TLE	Teledyne API 200	Teledyne API 400	Sierra Anderson 1200
Method code	593	560	99	87	63
FRM/FEM/ARM/Other	FRM	FEM	FRM	FEM	FRM
Collecting Agency	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	ARB
Reporting Agency	ARB	ARB	ARB	ARB	ARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	3/1/2013	3/1/2013	3/1/1994	4/1/1994	04/01/1994
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	1:6
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	1:2
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	5.9	5.9	5.9	5.9	5.2
Distance from supporting structure (meters)	2.2	2.2	2.2	2.2	>2
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	4(tree)	4(tree)	4(tree)	4(tree)	3(tree)
Height above probe for obstructions not on roof (meters)	2	2	2	2	3
Distance to nearest tree drip line (meters)	3	3	3	3	3
Distance to furnace or incinerator flue (meters)	N/A	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	N/A
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	5.5	7.6	8.1	5.9	N/A
Will there be changes within the next 18 months?	No	No	No	No	Yes, shutdown 1/19/2016
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A	N/A
Frequency of one-point QC check for gaseous instruments	Every Other Day	Every Other Day	Every Other Day	Every Other Day	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/5/2016	4/5/2016	2/18/2016	2/18/2016	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	N/A	2/18/2016

(continued)

Local Site Name:	Calexico-Ethel Street				
AQS ID:	06-025-0005				
GPS Coordinates:	32.67618, -115.48307				
Street Address:	1029 Belcher St, Calexico, 92231				
County:	Imperial				
Distance to roadways (meters):	20				
Traffic Count Notes:	7000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	El Centro Metropolitan Statistical Area				
Pollutant, POC	PM10, 3	PM2.5, 2	PM2.5, 1	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	Primary	QA-Audit	Primary	Primary	
Parameter Code	81102	88101	88101	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	Public Information	
Site type(s)	Highest Concentration	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	CSN supplemental	CSN supplemental	N/A	
Instrument manufacturer and model	Met One BAM 1020	R & P 2025	R & P 2025	Met One BAM 1020 W SCC	
Method code	122	145	145	731	
FRM/FEM/ARM/Other	FEM	FRM	FRM	Other	
Collecting Agency	ARB	ARB	ARB	ARB	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB	N/A	
Reporting Agency	ARB	ARB	ARB	ARB	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	01/15/2016	1/1/1999	1/1/1999	1/1/2016	
Current sampling frequency	Continuous	1:12	1:1	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	1:3	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	5.4	5.8	5.8	5.7	
Distance from supporting structure (meters)	>2	2.1	2.1	1.8	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	6 (tree)	6 (tree)	6 (tree)	6 (tree)	
Height above probe for obstructions not on roof (meters)	3	3	3	3	
Distance to nearest tree drip line (meters)	6	6	6	6	
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	1.4	1.4	N/A	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	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 NAAQS?	N/A	Yes	Yes	NO	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	Monthly	N/A	
Frequency of flow rate verification for automated PM analyzers	Monthly	N/A	N/A	Semi-Monthly	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A	7/20/2016 2/16/2017	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	2/18/2016 7/20/2016	2/18/2016 7/20/2016	2/18/2016 7/20/2016	7/20/2016 2/16/2017	

Lake County AQMD

Local Site Name	Middletown-Anderson Springs Road				
AQS ID	06-033-3010				
GPS Coordinates	38.77453, -122.69950				
Street Address	11270 Anderson Springs Road, Middletown, CA 95461				
County	Lake				
Distance to roadways (meters)	25				
Traffic Count Notes	100 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Clearlake Micropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102 and 85101				
Basic monitoring objective(s)	Public Information				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	R & P 2000				
Method code	126				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Lake County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	Lake County				
Reporting Agency	ARB				
Spatial scale	Urban				
Monitoring start date	4/1/2001, 7/1/2016				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.1				
Distance from supporting structure (meters)	2.1				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	N/A				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	7				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	1/mo				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	9/7/2016				

Local Site Name	Glenbrook				
AQS ID	06-033-3011				
GPS Coordinates	38.84846, -122.75797				
Street Address	8276 High Valley Road (Cobb), Kelseyville, CA 95451				
County	Lake				
Distance to roadways (meters)	100				
Traffic Count Notes	100 AADT				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Clearlake Micropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102 and 85101				
Basic monitoring objective(s)	Public Information				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	R & P 2000				
Method code	126				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Lake County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	Lake County				
Reporting Agency	ARB				
Spatial scale	Urban				
Monitoring start date	04/01/2001				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.1				
Distance from supporting structure (meters)	2.1				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	5 (Tree)				
Height above probe for obstructions not on roof (meters)	2				
Distance to nearest tree drip line (meters)	5				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	1/mo				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	2/25/2016 9/7/2016				

Local Site Name	Lakeport-Lakeport Blvd				
AQS ID	06-033-3001				
GPS Coordinates	39.03270, -122.92229				
Street Address	905 Lakeport Blvd, Lakeport, CA 95453				
County	Lake				
Distance to roadways (meters)	80				
Traffic Count Notes	13100 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Clearlake Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 1		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102 and 85101	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Background	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	R & P 2000	R & P 2000		
Method code	87	126	143		
FRM/FEM/ARM/Other	FEM	FRM	FRM		
Collecting Agency	Lake County	Lake County	Lake County		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Urban	Neighborhood	Neighborhood		
Monitoring start date	01/01/1980	04/01/2001	01/01/1999		
Current sampling frequency	Continuous	1:6	1:6		
Required sampling frequency including exceptional events	N/A	N/A	1:6		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	6.9	6.2	6.2		
Distance from supporting structure (meters)	1.1	2	2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10m	>10m	>10m		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.9	N/A	N/A		
Will there be changes within the next 18 months?	Yes	Yes	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	1/mo	1/mo		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/6/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/25/2016 9/6/2016	2/25/2016 9/6/2016		

Mariposa County APCD

Local Site Name:	Jerseydale (seasonal)				
AQS ID:	06-043-0006				
GPS Coordinates:	37.54377, -119.83957				
Street Address:	6440 Jerseydale, Mariposa, 95338				
County:	Mariposa				
Distance to roadways (meters):	1500				
Traffic Count Notes:	1000 AADT				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SPM				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Regional				
Monitoring start date	07/01/1995				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Apr - 31-Oct				
Probe height (meters)	3.8				
Distance from supporting structure (meters)	1.3				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	18.7				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/10/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Yosemite Village - Visitor Center				
AQS ID:	06-043-1001				
GPS Coordinates:	37.74871, -119.58709				
Street Address:	Visitors Center, Yosemite Village, Yosemite National Park, 95389				
County:	Mariposa				
Distance to roadways (meters):	100				
Traffic Count Notes:	1000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM10, 3	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	81102	88502			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020			
Method code	122	731			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	ARB	ARB			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	ARB	ARB			
Spatial scale	Middle	Middle			
Monitoring start date	8/9/2014	2/1/2002			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	8.6	8.4			
Distance from supporting structure (meters)	2.2	2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	6.6	6.6			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (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 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	Monthly	Monthly			
Frequency of one-point QC check for gaseous instruments	N/A	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	4/5/2016 10/11/2016	4/5/2016 10/11/2016			

Mendocino County AQMD

Local Site Name	Fort Bragg - 300 Dana Street				
AQS ID	06-045-0010				
GPS Coordinates	39.43734, -123.78766				
Street Address	300 Dana Street, Fort Bragg, 95437				
County	Mendocino				
Distance to roadways (meters)	1610 (Main St)				
Traffic Count Notes	3101 AADT (2015 Mendocino County DOT)				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Ukiah Micropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	General Background				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mendocino County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	08/17/2011				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.9				
Distance from supporting structure (meters)	2.6				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	6/8/2016 12/6/2016				

Local Site Name	Ukiah - Gobbi Street				
AQS ID	06-045-0008				
GPS Coordinates	39.14566, -123.20298				
Street Address	306 E. Gobbi St, Ukiah, 95482				
County	Mendocino				
Distance to roadways (meters)	40				
Traffic Count Notes	30000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Ukiah Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API T265				
Method code	199				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mendocino County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	08/01/1992				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	7				
Distance from supporting structure (meters)	3				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.5				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	6/7/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Ukiah - Library				
AQS ID	06-045-0006				
GPS Coordinates	39.15047, -123.20655				
Street Address	105 N. Main St, Ukiah, 95482				
County	Mendocino				
Distance to roadways (meters)	10				
Traffic Count Notes	5000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Ukiah Micropolitan Statistical Area				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	170				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mendocino County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	12/31/2008				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	9.5				
Distance from supporting structure (meters)	2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	No				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	6/7/2016 12/6/2016				

Local Site Name	Willits - Justice Center				
AQS ID	06-045-2002				
GPS Coordinates	39.41174, -123.35264				
Street Address	125 E. Commercial St., Willits, 95490				
County	Mendocino				
Distance to roadways (meters)	45				
Traffic Count Notes	120 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Ukiah Micropolitan Statistical Area				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88101				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	170				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mendocino County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	09/15/2009				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	11.1				
Distance from supporting structure (meters)	2.5				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	No				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	6/8/2016 12/6/2016				

Mojave Desert AQMD

Local Site Name	Barstow				
AQS ID	06-071-0001				
GPS Coordinates	34.89405, -117.02471				
Street Address	1301 W. Mountain View St., Barstow, 92311				
County	San Bernardino				
Distance to roadways (meters)	21				
Traffic Count Notes	20000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	CO, 1	NO2, 1	Ozone, 1	PM10, 1	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	Primary	
Parameter Code	42101	42602	44201	81102	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 300E	Teledyne API 200E	Teledyne API 400T	Met One BAM 1020	
Method code	93	99	87	122	
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	
Spatial scale	Middle	Middle	Middle	Neighborhood	
Monitoring start date	01/01/1973	01/01/1973	01/01/1974	01/01/2014	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	4.5	4.5	4.5	6	
Distance from supporting structure (meters)	1	1	1	2.5	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
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	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.8	11.6	10.7	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 NAAQS?	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	Every 2 weeks	Every 2 weeks	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/24/2016	2/24/2016	2/24/2016	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	2/24/2016 8/15/2016	

Local Site Name	Blythe-Murphy Street				
AQS ID	06-065-9003				
GPS Coordinates	33.61235, -114.60209				
Street Address	445 W Murphy St, Blythe, 92225				
County	Riverside				
Distance to roadways (meters)	100 meters				
Traffic Count Notes	Unknown road; 10 AADT (1983)				
Ground Cover	Unpaved				
Representative statistical area name (i.e. MSA, CBSA, other)	Riverside-San Bernardino-Ontario, CA				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Supplementary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS, Public Information				
Site type(s)	General Background				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	NEIGHBORHOOD				
Monitoring start date	05/01/2003				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)					
Distance from supporting structure (meters)	1.6				
Distance from obstructions on roof (meters)	N/A				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	N/A				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)					
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	15.7				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments					
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/10/2014				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name	Hesperia-Olive Street				
AQS ID	06-071-4001				
GPS Coordinates	34.41650, -117.28559				
Street Address	17288 Olive St, Hesperia, 92340				
County	San Bernardino				
Distance to roadways (meters)	100				
Traffic Count Notes	25 AADT				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure; General Background			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400T	Met One BAM 1020			
Method code	87	122			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	01/01/1980	01/01/2014			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	3.9	4.4			
Distance from supporting structure (meters)	1	>2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	3.9	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb 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	Every 2 weeks	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/3/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	2/3/2016 8/16/2016			

Local Site Name:	Joshua Tree National Monument - Black Rock				
AQS ID:	06-071-9002				
GPS Coordinates:	34.06957, -116.38893				
Street Address:	Joshua Tree National Monument, CA 92239				
County:	San Bernardino				
Distance to roadways (meters):	100				
Traffic Count Notes:	10				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	non-EPA Federal				
Network affiliation(s)	CASTNET				
Instrument manufacturer and model	Thermo 491				
Method code	47				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	NPS				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	NPS				
Spatial scale	Regional				
Monitoring start date	10/1/1993				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	10.3				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	4.2				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/26/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Joshua Tree National Park - Pinto Wells				
AQS ID:	06-065-1004				
GPS Coordinates:	33.93983, -115.41085				
Street Address:	Joshua Tree National Monoument, CA 92239				
County:	Riverside				
Distance to roadways (meters):	50				
Traffic Count Notes:	0				
Ground Cover:	Sand				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	Public Information				
Site type(s)	General Background				
Monitor type(s)	non-EPA Federal				
Network affiliation(s)	N/A				
Instrument manufacturer and model	2B Technologies M202				
Method code	190				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	NPS				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	NPS				
Spatial scale	Regional				
Monitoring start date	5/11/2006				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (no trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	4.8				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Unknown				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/26/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Lucerne Valley - Middle School				
AQS ID:	06-071-0013				
GPS Coordinates:	34.41008, -116.90687				
Street Address:	8560 Aliento Rd, Lucerne Valley, 92356				
County:	San Bernardino				
Distance to roadways (meters):	100				
Traffic Count Notes:	3600 AADT				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	PM10, 2				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mojave Desert AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Mojave Desert AQMD				
Spatial scale	Neighborhood				
Monitoring start date	1/14/2015				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.7				
Distance from supporting structure (meters)	2.2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (No trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	270				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	2/3/2016 8/16/2016				

Local Site Name:	Mojave National Preserve				
AQS ID:	06-071-1001				
GPS Coordinates:	35.10190, -115.77670				
Street Address:	47411 Canyon Back Rd, Kelso, 92309				
County:	San Bernardino				
Distance to roadways (meters):	Unknown				
Traffic Count Notes:	Unknown				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	Public Information				
Site type(s)	General Background				
Monitor type(s)	non-EPA Federal				
Network affiliation(s)	N/A				
Instrument manufacturer and model	2B Technologies M202				
Method code	190				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	NPS				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	NPS				
Spatial scale	Regional				
Monitoring start date	5/9/2007				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	never audited				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Unknown				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	never audited				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	Unknown				

Local Site Name:	Phelan - Beekley Road & Phelan Road				
AQS ID:	06-071-0012				
GPS Coordinates:	34.42505, -117.58982				
Street Address:	Beekley and Phelan Rd, Phelan, 92371				
County:	San Bernardino				
Distance to roadways (meters):	10				
Traffic Count Notes:	50 AADT				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400T				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Mojave Desert AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Mojave Desert AQMD				
Spatial scale	Neighborhood				
Monitoring start date	07/01/1987				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	3.9				
Distance from supporting structure (meters)	1.1				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (No trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.6				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Every 2 weeks				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/17/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Trona - Athol/Telescope #2				
AQS ID:	06-071-1234				
GPS Coordinates:	35.77446, -117.37210				
Street Address:	Telescope & Athol, Trona, 93562				
County:	San Bernardino				
Distance to roadways (meters):	300				
Traffic Count Notes:	2400 AADT				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	Sulfur dioxide, 1	NO2, 1	Ozone, 1	PM10, 2	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	Primary	
Parameter Code	42401	42602	44201	81102	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Source Impact	Source Impact	Population Exposure	Highest Concentration; Source Impact	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 100E	Teledyne API 200E	Teledyne API 400T	Met One BAM 1020	
Method code	77	99	87	122	
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	04/01/1997	04/01/1997	04/01/1997	6/1/1997	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	4	4	4	4.6	
Distance from supporting structure (meters)	1.2	1.2	1.2	>10	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
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	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.2	7.9	7	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 NAAQS?	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	Every 2 weeks	Every 2 weeks	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	10/26/2016	10/26/2016	10/26/2016	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	5/4/2016 10/26/2016	

Local Site Name:	Victorville - Park Avenue				
AQS ID:	06-071-0306				
GPS Coordinates:	34.51096, -117.32555				
Street Address:	14306 Park Av, Victorville, 92392				
County:	San Bernardino				
Distance to roadways (meters):	100				
Traffic Count Notes:	1000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	CO, 1	SO2, 1	NO2, 1	Ozone, 1	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	N/A	N/A	
Parameter Code	42101	42401	42602	44201	
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	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 300E	Teledyne API 100E	Teledyne API 200E	Teledyne API 400T	
Method code	93	77	99	87	
FRM/FEM/ARM/Other	FRM	FEM	FRM	FEM	
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	01/01/2000	01/01/2000	01/01/2000	01/01/2000	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	7.3	7.3	7.3	7.3	
Distance from supporting structure (meters)	1.9	1.9	1.9	1.9	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	N/A (no trees)	N/A (no trees)	N/A (no trees)	N/A (no trees)	
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	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	Teflon	Teflon	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	11.3	11.6	12.9	10.9	
Will there be changes within the next 18 months?	No	No	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	N/A	
Frequency of one-point QC check for gaseous instruments	Every 2 weeks	Every 2 weeks	Every 2 weeks	Every 2 weeks	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	2/2/2016	2/2/2016	2/2/2016	2/2/2016	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	N/A	N/A	

(continued)

Local Site Name:	Victorville - Park Avenue				
AQS ID:	06-071-0306				
GPS Coordinates:	34.51096, -117.32555				
Street Address:	14306 Park Av, Victorville, 92392				
County:	San Bernardino				
Distance to roadways (meters):	100				
Traffic Count Notes:	1000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Riverside-San Bernardino-Ontario Metropolitan Statistical Area				
Pollutant, POC	PM10, 1	PM10, 2	PM2.5, 1	PM2.5, 2	
Primary, QA-Audit, Supplementary, or N/A	Primary	Supplementary	Primary	QA-Audit	
Parameter Code	81102	81102	88101	88101	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	
Site type(s)	Population Exposure	Population Exposure	Regional Transport; Population Exposure	Regional Transport; Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020	R & P CO 2000	
Method code	122	122	170	117	
FRM/FEM/ARM/Other	FEM	FEM	FEM	FRM	
Collecting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	Mojave Desert AQMD	
Reporting Agency	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	Mojave Desert AQMD	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	1/1/2014	8/30/2012	1/1/2016	1/1/2000	
Current sampling frequency	Continuous	Continuous	Continuous	1:6	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	7.4	7.4	7.5	7.5	
Distance from supporting structure (meters)	2	2	2.1	2.1	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	N/A (no trees)	N/A (no trees)	N/A (no trees)	N/A (no trees)	
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	2	2	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	N/A	N/A	N/A	
Will there be changes within the next 18 months?	No	Yes, shutdown 1/1/2016	Yes	Yes	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	Monthly	
Frequency of flow rate verification for automated PM analyzers	Monthly	Monthly	Monthly	N/A	
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	2/2/2016 8/16/2016		2/2/2016 8/16/2016	2/2/2016 8/16/2016	

Northern Sierra AQMD

Local Site Name:	Chester				
AQS ID:	06-063-1007				
GPS Coordinates:	40.30965, -121.22785				
Street Address:	222 1st Ave, Chester 96020				
County:	Plumas				
Distance to roadways (meters):	115				
Traffic Count Notes:	1500 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 3				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	88501				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	731				
FRM/FEM/ARM/Other	Other				
Collecting Agency	Northern Sierra AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Northern Sierra AQMD				
Spatial scale	Neighborhood				
Monitoring start date	1/1/2007				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	7.2				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	No				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/17/2016 9/28/2016				

Local Site Name:	Grass Valley-Litton Building				
AQS ID:	06-057-0005				
GPS Coordinates:	39.23352, -121.05567				
Street Address:	200 Litton Dr., Suite 320, Grass Valley, 95945				
County:	Nevada				
Distance to roadways (meters):	100				
Traffic Count Notes:	1,000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Truckee-Grass Valley Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 1	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Supplementary		
Parameter Code	44201	88101	88501		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Thermo Scientific Partisol 2000i	Met One BAM 1020		
Method code	87	117	731		
FRM/FEM/ARM/Other	FEM	FRM	Other		
Collecting Agency	Northern Sierra	Northern Sierra	Northern Sierra		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	N/A		
Reporting Agency	Northern Sierra	ARB	Northern Sierra		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	06/01/1993	12/30/1998	1/1/2007		
Current sampling frequency	Continuous	1:6	Continuous		
Required sampling frequency including exceptional events	N/A	1:3	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	11.9	10.2	12.1		
Distance from supporting structure (meters)	3.8	2.1	4		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	270	270	270		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.2	N/A	N/A		
Will there be changes within the next 18 months?	No	No	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes	No, but will be with replacement		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	Weekly	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	9/27/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/16/2016 9/27/2016	3/16/2016 9/27/2016		

Local Site Name:	Portola				
AQS ID:	06-063-1010				
GPS Coordinates:	39.81336, -120.47069				
Street Address:	420 N Gulling St, Portola, 96122				
County:	Plumas				
Distance to roadways (meters):	18				
Traffic Count Notes:	<500 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 1	PM2.5, 2	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	Primary	QA-Audit	Supplementary		
Parameter Code	88101	88101	88501		
Basic monitoring objective(s)	NAAQS	NAAQS	Other		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	CSN supplemental	CSN supplemental	CSN supplemental		
Instrument manufacturer and model	Thermo Scientific Partisol 2025i	Thermo Scientific Partisol 2025i	Met One BAM 1020		
Method code	145	145	731		
FRM/FEM/ARM/Other	FRM	FRM	Other		
Collecting Agency	Northern Sierra AQMD	Northern Sierra AQMD	Northern Sierra AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB	ARB	N/A		
Reporting Agency	ARB	ARB	Northern Sierra AQMD		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	7/1/2013	10/30/2015	7/1/2013		
Current sampling frequency	1:3	1:12	Continuous		
Required sampling frequency including exceptional events	1:3	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	7.4	7.4	8.3		
Distance from supporting structure (meters)	2.2	2.2	3		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	2.67	2.67	3		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A	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 NAAQS?	Yes	Yes	No		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly	Monthly	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	N/A	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/17/2016 9/28/2016	3/17/2016 9/28/2016	3/17/2016 9/28/2016		

Local Site Name:	Quincy-N Church Street				
AQS ID:	06-063-1006				
GPS Coordinates:	39.93957, -120.94438				
Street Address:	267 N Church Street, Quincy, 95971				
County:	Plumas				
Distance to roadways (meters):	201				
Traffic Count Notes:	5000 AADT				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	None				
Pollutant, POC	PM2.5, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Supplementary			
Parameter Code	88101	88501			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Thermo Scientific Partisol 2025i	Met One BAM 1020			
Method code	118	731			
FRM/FEM/ARM/Other	FRM	Other			
Collecting Agency	Northern Sierra AQMD	Northern Sierra AQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB	N/A			
Reporting Agency	ARB	Northern Sierra AQMD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	03/26/1999	1/1/2007			
Current sampling frequency	1:1	Continuous			
Required sampling frequency including exceptional events	1:1	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	3.5	4.2			
Distance from supporting structure (meters)	2	1.8			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (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 NAAQS?	Yes	No			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	N/A	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/17/2016 9/28/2016	3/17/2016 9/28/2016			

Local Site Name:	Truckee - Fire Station				
AQS ID:	06-057-1001				
GPS Coordinates:	39.32782, -120.18459				
Street Address:	10049 Donner Pass Rd, Truckee, 96161				
County:	Nevada				
Distance to roadways (meters):	20				
Traffic Count Notes:	15000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Truckee-Grass Valley Micropolitan Statistical Area				
Pollutant, POC	PM2.5, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Supplementary			
Parameter Code	88101	88501			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Thermo Scientific Partisol 2025i	Met One BAM 1020			
Method code	145	731			
FRM/FEM/ARM/Other	FRM	Other			
Collecting Agency	Northern Sierra AQMD	Northern Sierra AQMD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB	N/A			
Reporting Agency	ARB	Northern Sierra AQMD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	03/31/1999	1/1/2007			
Current sampling frequency	1:3	Continuous			
Required sampling frequency including exceptional events	1:3	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	8.3	10.2			
Distance from supporting structure (meters)	2.2	2.2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	4	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (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 NAAQS?	Yes	No			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Monthly			
Frequency of one-point QC check for gaseous instruments	N/A	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/16/2016 9/27/2016	3/16/2016 9/27/2016			

Local Site Name:	White Cloud (seasonal)				
AQS ID:	06-057-0007				
GPS Coordinates:	39.31779, -120.84527				
Street Address:	26533 CA State Hwy 20, Nevada City, 95959				
County:	Nevada				
Distance to roadways (meters):	240				
Traffic Count Notes:	3500 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Truckee-Grass Valley Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	General Background				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Regional				
Monitoring start date	06/01/1995				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1 Apr - 31 Oct				
Probe height (meters)	3.9				
Distance from supporting structure (meters)	1.5				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	not operated in 2016				
Will there be changes within the next 18 months?	Yes				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	not operated in 2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Northern Sonoma County APCD

Local Site Name	Cloverdale				
AQS ID	06-097-0001				
GPS Coordinates	38.80423, -123.01820				
Street Address	100 S. Washington St, Cloverdale, 95425				
County	Sonoma				
Distance to roadways (meters)	40				
Traffic Count Notes	40000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Santa Rosa Metropolitan Statistical Area				
Pollutant, POC	PM10, 2				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sonoma				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	1/1/1990				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.9				
Distance from supporting structure (meters)	2.4				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	6/9/2016 12/7/2016				

Local Site Name	Guerneville-Church and 1st				
AQS ID	06-097-3002				
GPS Coordinates	38.50107, -122.99819				
Street Address	16255 1st Street Guerneville, 95446				
County	Sonoma				
Distance to roadways (meters)	20				
Traffic Count Notes	10000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Santa Rosa Metropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sonoma				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Northern Sonoma				
Spatial scale	Neighborhood				
Monitoring start date	4/1/1990				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5				
Distance from supporting structure (meters)	2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	6/9/2016 12/7/2016				

Local Site Name:	Healdsburg - Matheson				
AQS ID:	06-097-0002				
GPS Coordinates:	38.61090, -122.86878				
Street Address:	133 Matheson St, Healdsburg, 95448				
County:	Sonoma				
Distance to roadways (meters):	20				
Traffic Count Notes:	20000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Santa Rosa Metropolitan Statistical Area				
Pollutant, POC	PM10, 2				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Met One BAM 1020				
Method code	122				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sonoma				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	5/21/1998				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.5				
Distance from supporting structure (meters)	2.5				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	Monthly				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	6/9/2016 12/7/2016				

Local Site Name:	Healdsburg-Municipal Airport				
AQS ID:	06-097-1003				
GPS Coordinates:	38.65407, -122.90187				
Street Address:	200A Heidelberg Way, Healdsburg, 95448				
County:	Sonoma				
Distance to roadways (meters):	50				
Traffic Count Notes:	400 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Santa Rosa Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Northern Sonoma				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Regional				
Monitoring start date	06/01/1991				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6				
Distance from supporting structure (meters)	2.5				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Glass				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.5				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Biweekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	6/9/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Placer County APCD

Local Site Name:	Auburn - Atwood Rd				
AQS ID:	06-061-0003				
GPS Coordinates:	38.93568, -121.09959				
Street Address:	11645 Atwood Rd., Auburn, 95603				
County:	Placer				
Distance to roadways (meters):	500				
Traffic Count Notes:	50000 AADT				
Ground Cover:	Roof				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 1			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM1020			
Method code	87	170			
FRM/FEM/ARM/Other	FEM	FEM			
Collecting Agency	Placer County	Placer County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Placer County	Placer County			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	06/24/2011	1/1/2012			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	5.8	7			
Distance from supporting structure (meters)	2.8	4			
Distance from obstructions on roof (meters)	No obstacles	No obstacles			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstacles	No obstacles			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	16.2	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb 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	Every 8-10 days	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	7/12/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	1/26/2016 7/12/2016			

Local Site Name:	Colfax-City Hall				
AQS ID:	06-061-0004				
GPS Coordinates:	39.09979, -120.95391				
Street Address:	33 S. Main St., Colfax, 95713				
County:	Placer				
Distance to roadways (meters):	500				
Traffic Count Notes:	31,500 AADT				
Ground Cover:	Paved				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	88501			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM1020			
Method code	87	731			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	Placer County	Placer County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Placer County	Placer County			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	01/01/1992	1/1/2012			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	6.7	7.5			
Distance from supporting structure (meters)	1.4	2.2			
Distance from obstructions on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	14.0	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb 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	Every 8-10 days	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	7/13/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	1/26/2016 7/13/2016			

Local Site Name:	Lincoln-1st Street				
AQS ID:	06-061-2002				
GPS Coordinates:	38.885559, -121.30199				
Street Address:	1445 1st Street, Lincoln, 95648				
County:	Placer				
Distance to roadways (meters):	730				
Traffic Count Notes:	22000 AADT				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	88501			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM1020			
Method code	87	731			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	Placer County	Placer County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Placer County	Placer County			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	12/21/2012	12/21/2012			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.2	7.5			
Distance from supporting structure (meters)	1.1	2.2			
Distance from obstructions on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.3	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb 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	Every 8-10 days	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	7/12/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	1/27/2016 7/12/2016			

Local Site Name:	Tahoe City-Fairway Drive				
AQS ID:	06-061-1004				
GPS Coordinates:	39.16602, -120.14883				
Street Address:	221 Fairway Drive, Tahoe City, 96145				
County:	Placer				
Distance to roadways (meters):	115				
Traffic Count Notes:	5460 AADT				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary			
Parameter Code	44201	88501			
Basic monitoring objective(s)	NAAQS	Public Information			
Site type(s)	General Background	General Background			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM1020			
Method code	87	731			
FRM/FEM/ARM/Other	FEM	Other			
Collecting Agency	Placer County	Placer County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Placer County	Placer County			
Spatial scale	Urban	Urban			
Monitoring start date	11/01/2013	11/01/2013			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	3.6	4.4			
Distance from supporting structure (meters)	1.2	2			
Distance from obstructions on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstacles			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	15.2	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	No			
Frequency of flow rate verification for manual PM samplers, including Pb 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	Every 8-10 days	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	7/14/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	1/26/2016 7/14/2016			

Local Site Name:	Roseville-N Sunrise Ave					
AQS ID:	06-061-0006					
GPS Coordinates:	38.74643, -121.26498					
Street Address:	151 N Sunrise Ave, Roseville, 95661					
County:	Placer					
Distance to roadways (meters):	50					
Traffic Count Notes:	56000 AADT					
Ground Cover:	Asphalt					
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area					
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 1	PM2.5, 2	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	QA-Audit	Supplementary
Parameter Code	42602	44201	81102	88101	88101	88502
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	NAAQS	NAAQS	Public Information
Site type(s)	Population Exposure	Highest Concentration	Highest Concentration	Population Exposure	Population Exposure	Population Exposure
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	N/A	N/A	N/A	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020	R&P 2000	R&P 2000	Met One BAM 1020
Method code	99	87	122	143	143	731
FRM/FEM/ARM/Other	FRM	FEM	FEM	FRM	FRM	Other
Collecting Agency	ARB	ARB	ARB	ARB	ARB	ARB
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	ARB	ARB	N/A
Reporting Agency	ARB	ARB	ARB	ARB	ARB	ARB
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	01/13/1993	01/13/1993	4/1/2015	12/31/1998	4/18/2015	6/23/2004
Current sampling frequency	Continuous	Continuous	Continuous	1:6	1:6	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	1:3	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	8.5	8.5	7.9	7	7	7.9
Distance from supporting structure (meters)	3.5	3.5	2.9	2	2	2.9
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters	>10 meters	>10 meters	>10 meters
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	N/A	N/A	N/A
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	2.7	2.7	N/A
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.7	13.7	N/A	N/A	N/A	N/A
Will there be changes within the next 18 months?	No	No	No	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	Yes	No
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	Monthly	Monthly	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly	N/A	N/A	Monthly
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	6/14/2016	6/14/2016	N/A	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	6/14/2016 12/21/2016	6/14/2016 12/21/2016	6/14/2016 12/21/2016	6/14/2016 12/21/2016

Shasta County AQMD

Local Site Name	Anderson-North Street				
AQS ID	06-089-0007				
GPS Coordinates	40.45318, -122.29883				
Street Address	2220 North St, Anderson, 96007				
County	Shasta				
Distance to roadways (meters)	20				
Traffic Count Notes	5000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 1			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	81102			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Highest Concentration			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Sierra Andersen 1200			
Method code	87	63			
FRM/FEM/ARM/Other	FEM	FRM			
Collecting Agency	Shasta County	Shasta County			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB			
Reporting Agency	Shasta County	ARB			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	05/01/1993	05/01/1993			
Current sampling frequency	Continuous	1:6			
Required sampling frequency including exceptional events	N/A	1:6			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	7	5.5			
Distance from supporting structure (meters)	3	>2			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	teflon	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7	N/A			
Will there be changes within the next 18 months?	No	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	<90 days			
Frequency of flow rate verification for automated PM analyzers	N/A	N/A			
Frequency of one-point QC check for gaseous instruments	weekly	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/14/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/14/2016 9/14/2016			

Local Site Name	Lassen Volcanic NP				
AQS ID	06-089-3003				
GPS Coordinates	40.539991, -121.576462				
Street Address	Manzanita Lake RS, Lassen Volcanic NP				
County	Shasta				
Distance to roadways (meters)	25				
Traffic Count Notes	Hwy 89 terminal segment				
Ground Cover	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other)	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS & Research				
Site type(s)	General Background				
Monitor type(s)	Non-EPA Federal				
Network affiliation(s)	CASTNET				
Instrument manufacturer and model	Thermo 49C				
Method code	87 .				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	National Park Service				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	National Park Service				
Spatial scale	Neighborhood				
Monitoring start date	11/1/1987				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	8				
Distance from supporting structure (meters)	N/A				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	0 (Tree)				
Height above probe for obstructions not on roof (meters)	15				
Distance to nearest tree drip line (meters)	7.5				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	11.4				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/14/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Redding - Health Department				
AQS ID:	06-089-0004				
GPS Coordinates:	40.55013, -122.38092				
Street Address:	2630 Breslauer Way, Redding, 96001				
County:	Shasta				
Distance to roadways (meters):	10				
Traffic Count Notes:	300 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 1		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure; Highest Concentration	Highest Concentration	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Sierra Andersen 1200	R & P 2000		
Method code	87	63	143		
FRM/FEM/ARM/Other	FEM	FRM	FRM		
Collecting Agency	Shasta County	Shasta County	Shasta County		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB		
Reporting Agency	Shasta County	ARB	ARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	05/01/1990	01/01/1988	02/19/1998		
Current sampling frequency	Continuous	1:6	1:6		
Required sampling frequency including exceptional events	N/A	1:6	1:6		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	9.6	8.3	8.7		
Distance from supporting structure (meters)	3	>2	>2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon / glass	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.3	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 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Quarterly	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Weekly	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/15/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/15/2016 9/15/2016	3/15/2016 9/15/2016		

Local Site Name:	Shasta Lake - Lake Blvd				
AQS ID:	06-089-0009				
GPS Coordinates:	40.68908, -122.40226				
Street Address:	13791 Lake Blvd., Shasta Lake, 96019				
County:	Shasta				
Distance to roadways (meters):	20				
Traffic Count Notes:	500 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Redding Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Shasta County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	Shasta County				
Spatial scale	Neighborhood				
Monitoring start date	04/01/2009				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	5.1				
Distance from supporting structure (meters)	1.5				
Distance from obstructions on roof (meters)	1.5				
Height above probe for obstructions on roof (meters)	1.5				
Distance from obstructions not on roof (meters)	5.1				
Height above probe for obstructions not on roof (meters)	30.5				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.3				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/15/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	Shasta Lake-La Mesa				
AQS ID:	06-089-0008				
GPS Coordinates:	40.67707, -122.37429				
Street Address:	4066 La Mesa Ave, Shasta Lake, 96019				
County:	Shasta				
Distance to roadways (meters):	30				
Traffic Count Notes:	500 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Redding Metropolitan Statistical Area				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Sierra Andersen 1200				
Method code	63				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Shasta County				
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	01/01/2004				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	1:6				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	7.5				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Quarterly				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	3/15/2016 9/14/2016				

Siskiyou County APCD

Local Site Name	Yreka				
AQS ID	06-093-2001				
GPS Coordinates	41.72679, -122.63359				
Street Address	530 S. Foothill Dr., Yreka, 96097				
County	Siskiyou				
Distance to roadways (meters)	100				
Traffic Count	50000 AADT				
Ground Cover	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other)	None				
Pollutant, POC	Ozone, 1	PM10, 2	PM2.5, 1	PM2.5, None	
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary	Supplementary	
Parameter Code	44201	81102	88101	88502	
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	Other	
Site type(s)	Highest Concentration, Regional Transport, Population Exposure	Highest Concentration	Population Exposure	Population Exposure	
Monitor type(s)	SLAMS	SLAMS	SLAMS	SPM	
Network affiliation(s)	N/A	N/A	N/A	N/A	
Instrument manufacturer and model	Teledyne API 400	Sierra Andersen 1200	R & P 2000	Met One BAM 1020	
Method code	87	63	117	731	
FRM/FEM/ARM/Other	FEM	FRM	FRM	Other	
Collecting Agency	Siskiyou County	Siskiyou County	ARB	Siskiyou County	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB	N/A	
Reporting Agency	ARB	ARB	ARB	Siskiyou County	
Spatial scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood	
Monitoring start date	01/01/1981	01/01/1988	5/1/2005	Summer 2015	
Current sampling frequency	Continuous	1:6	1:6	Continuous	
Required sampling frequency including exceptional events	N/A	1:6	1:3	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	3.4	5.5	4.1	3.7	
Distance from supporting structure (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
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	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	3	N/A	N/A	N/A	
Will there be changes within the next 18 months?	Yes	Yes, shutdown 1/1/2016	No	No	
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	Yes	No	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	Monthly	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A	Monthly	
Frequency of one-point QC check for gaseous instruments	Daily	N/A	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/16/2016	N/A	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	42445	3/16/2016 9/14/2016	not operated in 2016	

Tehama County APCD

Local Site Name	Red Bluff - Walnut Street				
AQS ID	06-103-0007				
GPS Coordinates	40.17088, -122.25556				
Street Address	1834 Walnut Street, Red Bluff, 96080				
County	Tehama				
Distance to roadways (meters)	240				
Traffic Count Notes	9700 AADT				
Ground Cover	Grass				
Representative statistical area name (i.e. MSA, CBSA, other)	Red Bluff Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 1	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Highest Concentration	General Background		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	Sierra Anderson 1200	Met One BAM1020		
Method code	87	63	170		
FRM/FEM/ARM/Other	FEM	FRM	FEM		
Collecting Agency	Tehama County APCD	Tehama County APCD	Tehama County APCD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	N/A		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	1/29/2015	42028	42430		
Current sampling frequency	Continuous	1:6	Continuous		
Required sampling frequency including exceptional events	N/A	1:6	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	6.9	6.3	7.2		
Distance from supporting structure (meters)	2.4	>2	2.7		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	17	>10 m	>10 m		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Pyrex	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	9.1	N/A	N/A		
Will there be changes within the next 18 months?	No	No	Yes		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	No		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	Weekly	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	12/21/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	3/22/2016 9/13/2016	3/21/2016 9/13/2016		

Local Site Name	Tuscan Butte (seasonal)				
AQS ID	06-103-0004				
GPS Coordinates	40.26207, -122.09265				
Street Address	Fire Lookout Atop Tuscan Butte, Tuscan Butte, 95080				
County	Tehama				
Distance to roadways (meters)	5				
Traffic Count Notes	2 AADT				
Ground Cover	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other)	Red Bluff Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SPM				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Regional				
Monitoring start date	06/01/1995				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	Apr-Oct				
Probe height (meters)	4.3				
Distance from supporting structure (meters)	1.1				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	N/A (No trees)				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.8				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Daily				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/25/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Tuolumne County APCD

Local Site Name:	Sonora - Barretta Street				
AQS ID:	06-109-0005				
GPS Coordinates:	37.98178, -120.37855				
Street Address:	251 S. Barretta St, Sonora, 95370				
County:	Tuolumne				
Distance to roadways (meters):	65				
Traffic Count Notes:	500 AADT				
Ground Cover:	Gravel				
Representative statistical area name (i.e. MSA, CBSA, other):	Sonora Micropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	N/A				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Highest Concentration				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	ARB				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	07/01/1992				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.8				
Distance from supporting structure (meters)	1.0				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10 meters				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.1				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Monthly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	3/30/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Ventura County APCD

Local Site Name:	El Rio-Rio Mesa School #2				
AQS ID:	06-111-3001				
GPS Coordinates:	34.25238, -119.14318				
Street Address:	545 Central Av, El Rio, 93030				
County:	Ventura				
Distance to roadways (meters):	75				
Traffic Count Notes:	5000 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 3	
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	Primary	
Parameter Code	42602	44201	81102	88101	
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	
Network affiliation(s)	PAMS	PAMS	N/A	N/A	
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020	Met One BAM-1020 PM2.5	
Method code	99	87	122	170	
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	
Collecting Agency	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD	
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	
Reporting Agency	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD	
Spatial scale	Urban	Urban	Neighborhood	Neighborhood	
Monitoring start date	01/01/1980	01/01/1979	07/22/2012	01/26/2012	
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	
Probe height (meters)	4.4	4.4	4.6	4.7	
Distance from supporting structure (meters)	1.9	1.9	2.1	2.2	
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	
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	
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Pyrex	Teflon, Pyrex	N/A	N/A	
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	13.28	11.78	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 NAAQS?	N/A	N/A	N/A	Yes	
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Biweekly	Biweekly	
Frequency of one-point QC check for gaseous instruments	Every Other Day	Every Other Day	N/A	N/A	
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/28/2016	4/28/2016	N/A	N/A	
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	4/28/2016 11/1/2016	4/28/2016 11/1/2016	

Local Site Name:	Ojai - East Ojai Ave				
AQS ID:	06-111-1004				
GPS Coordinates:	34.44804, -119.23131				
Street Address:	1201 E. Ojai Ave, Ojai, 93023				
County:	Ventura				
Distance to roadways (meters):	250				
Traffic Count Notes:	7300 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FRM	FEM			
Collecting Agency	Ventura County APCD	Ventura County APCD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Ventura County APCD	Ventura County APCD			
Spatial scale	Urban	Neighborhood			
Monitoring start date	04/01/1996	11/29/2011			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.4	4.8			
Distance from supporting structure (meters)	1.9	2.3			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	None			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Pyrex	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	8.59	N/A			
Will there be changes within the next 18 months?	Yes	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Biweekly			
Frequency of one-point QC check for gaseous instruments	Every Other Day	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/26/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/26/2016 11/2/2016			

Local Site Name:	Piru - Pacific				
AQS ID:	06-111-0009				
GPS Coordinates:	34.40426, -118.80991				
Street Address:	3301 Pacific Ave, Piru, 93040				
County:	Ventura				
Distance to roadways (meters):	100				
Traffic Count Notes:	23000 AADT				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FRM	FEM			
Collecting Agency	Ventura County APCD	Ventura County APCD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Ventura County APCD	Ventura County APCD			
Spatial scale	Neighborhood	Neighborhood			
Monitoring start date	11/03/2000	11/15/2011			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.4	4.9			
Distance from supporting structure (meters)	1.8	2.3			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Pyrex	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.51	N/A			
Will there be changes within the next 18 months?	Yes	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Biweekly			
Frequency of one-point QC check for gaseous instruments	Every Other Day	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/27/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/27/2016 11/2/2016			

Local Site Name:	Simi Valley - Cochran Street				
AQS ID:	06-111-2002				
GPS Coordinates:	34.27636, -118.68376				
Street Address:	5400 Cochran St, Simi Valley, 93063				
County:	Ventura				
Distance to roadways (meters):	140				
Traffic Count Notes:	10200 AADT				
Ground Cover:	Paved				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM10, 3	PM2.5, 4	PM2.5, 3
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary	QA-Audit	Primary
Parameter Code	42602	44201	81102	88101	88101
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS	Public Information	NAAQS
Site type(s)	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration	Highest Concentration
Monitor type(s)	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network affiliation(s)	PAMS	PAMS	N/A	N/A	N/A
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020	Met One BAM 1020	Met One BAM 1020
Method code	99	87	122	170	170
FRM/FEM/ARM/Other	FRM	FRM	FEM	FEM	FEM
Collecting Agency	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A	N/A	N/A	N/A
Reporting Agency	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD	Ventura County APCD
Spatial scale	Urban	Urban	Neighborhood	Neighborhood	Neighborhood
Monitoring start date	06/01/1985	06/01/1985	06/19/2012	03/17/2014	06/29/2013
Current sampling frequency	Continuous	Continuous	Continuous	Continuous	Continuous
Required sampling frequency including exceptional events	N/A	N/A	N/A	N/A	N/A
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec
Probe height (meters)	3.6	3.6	4.6	4.8	4.8
Distance from supporting structure (meters)	1.1	1.1	2.1	2.3	2.3
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions	No obstructions	No obstructions
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A	N/A	N/A
Distance to nearest tree drip line (meters)	>10	>10	>10	>10	>10
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A	None	None
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A	2.1	2.1
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360	360	360
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Pyrex	Teflon, Pyrex	N/A	N/A	N/A
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	12.16	10.50	N/A	N/A	N/A
Will there be changes within the next 18 months?	Yes	Yes	No	No	No
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	N/A	Yes	Yes
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A	N/A	N/A
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Biweekly	Biweekly	Biweekly
Frequency of one-point QC check for gaseous instruments	Every Other Day	Every Other Day	N/A	N/A	N/A
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/5/2016	5/5/2016	N/A	N/A	N/A
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	5/5/2016 11/1/2016	5/5/2016 11/1/2016	5/5/2016 11/1/2016

Local Site Name:	Thousand Oaks-Moorpark Road				
AQS ID:	06-111-0007				
GPS Coordinates:	34.21015, -118.87050				
Street Address:	2323 Moorpark Rd, Thousand Oaks, 91360				
County:	Ventura				
Distance to roadways (meters):	175				
Traffic Count Notes:	17700 AADT				
Ground Cover:	Asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Oxnard-Thousand Oaks-Ventura Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM2.5, 3			
Primary, QA-Audit, Supplementary, or N/A	N/A	Primary			
Parameter Code	44201	88101			
Basic monitoring objective(s)	NAAQS	NAAQS			
Site type(s)	Population Exposure	Population Exposure			
Monitor type(s)	SLAMS	SLAMS			
Network affiliation(s)	N/A	N/A			
Instrument manufacturer and model	Teledyne API 400	Met One BAM 1020			
Method code	87	170			
FRM/FEM/ARM/Other	FRM	FEM			
Collecting Agency	Ventura County APCD	Ventura County APCD			
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	N/A			
Reporting Agency	Ventura County APCD	Ventura County APCD			
Spatial scale	Urban	Neighborhood			
Monitoring start date	03/01/1992	01/07/2012			
Current sampling frequency	Continuous	Continuous			
Required sampling frequency including exceptional events	N/A	N/A			
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec			
Probe height (meters)	4.4	4.9			
Distance from supporting structure (meters)	1.8	2.3			
Distance from obstructions on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions on roof (meters)	N/A	N/A			
Distance from obstructions not on roof (meters)	No obstructions	No obstructions			
Height above probe for obstructions not on roof (meters)	N/A	N/A			
Distance to nearest tree drip line (meters)	>10	>10			
Distance to furnace or incinerator flue (meters)	N/A	N/A			
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A			
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360			
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon, Pyrex	N/A			
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	10.75	N/A			
Will there be changes within the next 18 months?	Yes	No			
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	Yes			
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A			
Frequency of flow rate verification for automated PM analyzers	N/A	Biweekly			
Frequency of one-point QC check for gaseous instruments	Every Other Day	N/A			
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	4/27/2016	N/A			
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	4/27/2016 11/1/2016			

Yolo-Solano AQMD

Local Site Name:	Davis-UCD Campus				
AQS ID:	06-113-0004				
GPS Coordinates:	38.53455, -121.77340				
Street Address:	Campbell Rd, Davis, 95616				
County:	Yolo				
Distance to roadways (meters):	400				
Traffic Count Notes:	450000 AADT				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	NO2, 1	Ozone, 1	PM2.5, 3		
Primary, QA-Audit, Supplementary, or N/A	N/A	N/A	Primary		
Parameter Code	42602	44201	88502		
Basic monitoring objective(s)	NAAQS	NAAQS	Public Information		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 200	Teledyne API 400	Met One BAM 1020		
Method code	99	87	731		
FRM/FEM/ARM/Other	FRM	FEM	Other		
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	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	05/21/1996	09/01/1987	8/14/2003		
Current sampling frequency	Continuous	Continuous	Continuous		
Required sampling frequency including exceptional events	N/A	N/A	N/A		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	5.1	5.1	5.4		
Distance from supporting structure (meters)	1.7	1.7	2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10 meters	>10 meters	>10 meters		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	Teflon	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	16.5	16.3	N/A		
Will there be changes within the next 18 months?	No	No	No		
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A	N/A	No		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	N/A	N/A		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	Monthly		
Frequency of one-point QC check for gaseous instruments	Daily	Daily	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	11/21/2016	11/21/2016	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	N/A	4/27/2016 11/21/2016		

Local Site Name:	Vacaville-Merchant Street				
AQS ID:	06-095-3001				
GPS Coordinates:	38.35140, -121.99410				
Street Address:	650 Merchant St, Vacaville, 95688				
County:	Solano				
Distance to roadways (meters):	30				
Traffic Count Notes:	1000 AADT				
Ground Cover:	Grass and asphalt				
Representative statistical area name (i.e. MSA, CBSA, other):	Vallejo-Fairfield Metropolitan Statistical Area				
Pollutant, POC	PM10, 2				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	GMW Model 1200				
Method code	63				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Yolo-Solano AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	01/01/1988				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	1:6				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	8.5				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Monthly				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	5/11/2016 10/26/2016				

Local Site Name:	Vacaville-Ulatis Drive				
AQS ID:	06-095-3003				
GPS Coordinates:	38.35655, -121.94986				
Street Address:	2012 Ulatis Drive, Vacaville, 95687				
County:	Solano				
Distance to roadways (meters):	20				
Traffic Count Notes:	100 AADT				
Ground Cover:	Dirt				
Representative statistical area name (i.e. MSA, CBSA, other):	Vallejo-Fairfield Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	44201				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	Teledyne API 400				
Method code	87				
FRM/FEM/ARM/Other	FEM				
Collecting Agency	Yolo-Solano AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	07/21/2003				
Current sampling frequency	Continuous				
Required sampling frequency including exceptional events	N/A				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	4.4				
Distance from supporting structure (meters)	2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	7.3				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	Weekly				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/10/2016				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A				

Local Site Name:	West Sacramento-15th Street				
AQS ID:	06-113-2001				
GPS Coordinates:	38.57146, -121.52579				
Street Address:	132 W. 15th St, West Sacramento, 95691				
County:	Yolo				
Distance to roadways (meters):	3500				
Traffic Count Notes:	26500 AADT				
Ground Cover:	Pavement				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento--Arden-Arcade--Roseville, CA				
Pollutant, POC	PM10, 1				
Primary, QA-Audit, Supplementary, or N/A	Primary				
Parameter Code	81102				
Basic monitoring objective(s)	NAAQS				
Site type(s)	Population Exposure				
Monitor type(s)	SLAMS				
Network affiliation(s)	N/A				
Instrument manufacturer and model	GMW Model 1200				
Method code	63				
FRM/FEM/ARM/Other	FRM				
Collecting Agency	Yolo-Solano AQMD				
Analytical Lab (i.e. weigh lab, toxics lab, other)	ARB				
Reporting Agency	ARB				
Spatial scale	Neighborhood				
Monitoring start date	09/01/1990				
Current sampling frequency	1:6				
Required sampling frequency including exceptional events	1:6				
Sampling season	1-Jan - 31-Dec				
Probe height (meters)	6.1				
Distance from supporting structure (meters)	>2				
Distance from obstructions on roof (meters)	No obstructions				
Height above probe for obstructions on roof (meters)	N/A				
Distance from obstructions not on roof (meters)	No obstructions				
Height above probe for obstructions not on roof (meters)	N/A				
Distance to nearest tree drip line (meters)	>10				
Distance to furnace or incinerator flue (meters)	N/A				
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A				
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360				
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	N/A				
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	N/A				
Will there be changes within the next 18 months?	No				
Is it suitable for comparison against the annual PM2.5 NAAQS?	N/A				
Frequency of flow rate verification for manual PM samplers, including Pb samplers	Weekly				
Frequency of flow rate verification for automated PM analyzers	N/A				
Frequency of one-point QC check for gaseous instruments	N/A				
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	N/A				
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	5/11/2016 10/26/2016				

Local Site Name:	Woodland-Gibson Road				
AQS ID:	06-113-1003				
GPS Coordinates:	38.66121, -121.73269				
Street Address:	41929 E Gibson Rd, Woodland, 95776				
County:	Yolo				
Distance to roadways (meters):	150				
Traffic Count Notes:	17000 AADT				
Ground Cover:	Grass				
Representative statistical area name (i.e. MSA, CBSA, other):	Sacramento-Roseville-Arden-Arcade Metropolitan Statistical Area				
Pollutant, POC	Ozone, 1	PM10, 1	PM2.5, 1		
Primary, QA-Audit, Supplementary, or N/A	Primary	Primary	Primary		
Parameter Code	44201	81102	88101		
Basic monitoring objective(s)	NAAQS	NAAQS	NAAQS		
Site type(s)	Population Exposure	Population Exposure	Population Exposure		
Monitor type(s)	SLAMS	SLAMS	SLAMS		
Network affiliation(s)	N/A	N/A	N/A		
Instrument manufacturer and model	Teledyne API 400	GMW Model 1200	R & P 2025		
Method code	87	63	118		
FRM/FEM/ARM/Other	FEM	FRM	FRM		
Collecting Agency	Yolo-Solano AQMD	Yolo-Solano AQMD	Yolo-Solano AQMD		
Analytical Lab (i.e. weigh lab, toxics lab, other)	N/A	ARB	ARB		
Reporting Agency	ARB	ARB	ARB		
Spatial scale	Neighborhood	Neighborhood	Neighborhood		
Monitoring start date	05/27/1998	10/26/1998	01/09/1999		
Current sampling frequency	Continuous	1:6	1:6		
Required sampling frequency including exceptional events	N/A	1:6	1:6		
Sampling season	1-Jan - 31-Dec	1-Jan - 31-Dec	1-Jan - 31-Dec		
Probe height (meters)	3.6	2.2	2.1		
Distance from supporting structure (meters)	1	>2	2		
Distance from obstructions on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions on roof (meters)	N/A	N/A	N/A		
Distance from obstructions not on roof (meters)	No obstructions	No obstructions	No obstructions		
Height above probe for obstructions not on roof (meters)	N/A	N/A	N/A		
Distance to nearest tree drip line (meters)	>10	>10	>10		
Distance to furnace or incinerator flue (meters)	N/A	N/A	N/A		
Distance between monitors fulfilling a QA collocation requirement (meters)	N/A	N/A	N/A		
Unrestricted airflow (degrees around probe/inlet or % of monitoring path)	360	360	360		
Probe material for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (e.g. Pyrex, stainless steel, Teflon)	Teflon	N/A	N/A		
Residence time for reactive gases NO/NO2/NOy, SO2, O3; PAMS: VOCs, Carbonyls (seconds)	6.3	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 NAAQS?	N/A	N/A	Yes		
Frequency of flow rate verification for manual PM samplers, including Pb samplers	N/A	Monthly	Monthly		
Frequency of flow rate verification for automated PM analyzers	N/A	N/A	N/A		
Frequency of one-point QC check for gaseous instruments	Weekly	N/A	N/A		
Date of Annual performance evaluation conducted in the past calendar year for gaseous parameters	5/10/2016	N/A	N/A		
Date of two semi-annual flow rate audits conducted in the past calendar year for PM monitors	N/A	5/10/2016 10/25/2016	5/10/2016 10/25/2016		

Appendix B

2017 Ozone Seasonal Monitoring Waiver
and U.S. EPA Approval

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

March 29, 2017

Michael Flagg, Acting Director
Air Quality Analysis Office
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street, AIR-7
San Francisco, California 94105-3901

Dear Mr. Flagg:

The Air Resources Board (ARB) is requesting a renewal of the ozone seasonal monitoring waiver for six remote ozone monitors operated by ARB. The required ozone monitoring season for California is the entire year, unless a waiver is approved by the U.S. Environmental Protection Agency (U.S. EPA). California's existing ozone seasonal waiver was approved by the U.S. EPA on March 8, 2016.

The Code of Federal Regulations, Title 40, Part 58, Appendix D, 4.1(i), allows agencies operating ozone monitors to request an alternate operating season. The enclosed analysis, *Waiver Justification for Seasonal Ozone Monitoring Sites*, provides an updated justification that includes preliminary data for 2016. Based on the enclosed waiver request, ARB has demonstrated that an operating season of April through October would capture all months with the greatest potential for exceedances of the current 0.070 parts per million (ppm) federal 8-hour ozone standard, while accommodating complex monitoring and maintenance constraints.

If you or your staff has any comments or questions regarding this waiver request, please contact me at (916) 322-2085, or via email at ravi.ramalingam@arb.ca.gov. Alternatively, you may contact Ms. Gayle Sweigert, Manager, Air Quality Analysis Section, at (916) 322-6923, or via email at gayle.sweigert@arb.ca.gov.

Sincerely,

Ravi Ramalingam, Chief
Consumer Products and Air Quality Assessment Branch

Enclosure

cc: via email (with enclosure):

Gwen M. Yoshimura, U.S. EPA Region 9
(Yoshimura.Gwen@epa.gov)

Gayle Sweigert, Air Resources Board
(Gayle.Sweigert@arb.ca.gov)

ENCLOSURE

Ozone Seasonal Waiver Renewal Request

WAIVER JUSTIFICATION FOR SEASONAL OZONE MONITORING SITES

California's ozone monitoring season is defined in 40 Code of Federal Regulations (CFR) Part 58, Appendix D, Table D-3, as January through December. However, section 4.1(i) of the same regulation allows for deviations from the listed ozone season on a state-by-state basis, provided that sufficient information is provided to the United States Environmental Protection Agency (U.S. EPA) and approved by the Regional Administrator. The Air Resources Board (ARB) maintains six ozone monitors that only operate seasonally during the months of April through October. None of these monitors have ever operated year-round. In 2016, U.S. EPA renewed ARB's seasonal ozone waiver with an increase in the ozone season from six months (May – October) to seven months with the inclusion of April. The purpose of this document is to provide justification for continuing the waivers utilizing the most recent data and evaluating those data against the current 0.070 ppm federal 8-hour ozone standard.

ARB staff has updated several tables and graphs which demonstrated in the past that a April through October monitoring season is adequate for the six seasonal ozone monitors. The following analyses provide the justification needed for the U.S. EPA to continue to grant a waiver for the seasonal sites, in accordance with 40 CFR Part 58.12 (a)(3). The six ozone monitors included in the analyses are listed in Table 1 and shown in Figure 1.

TABLE 1
SEASONAL OZONE MONITORS

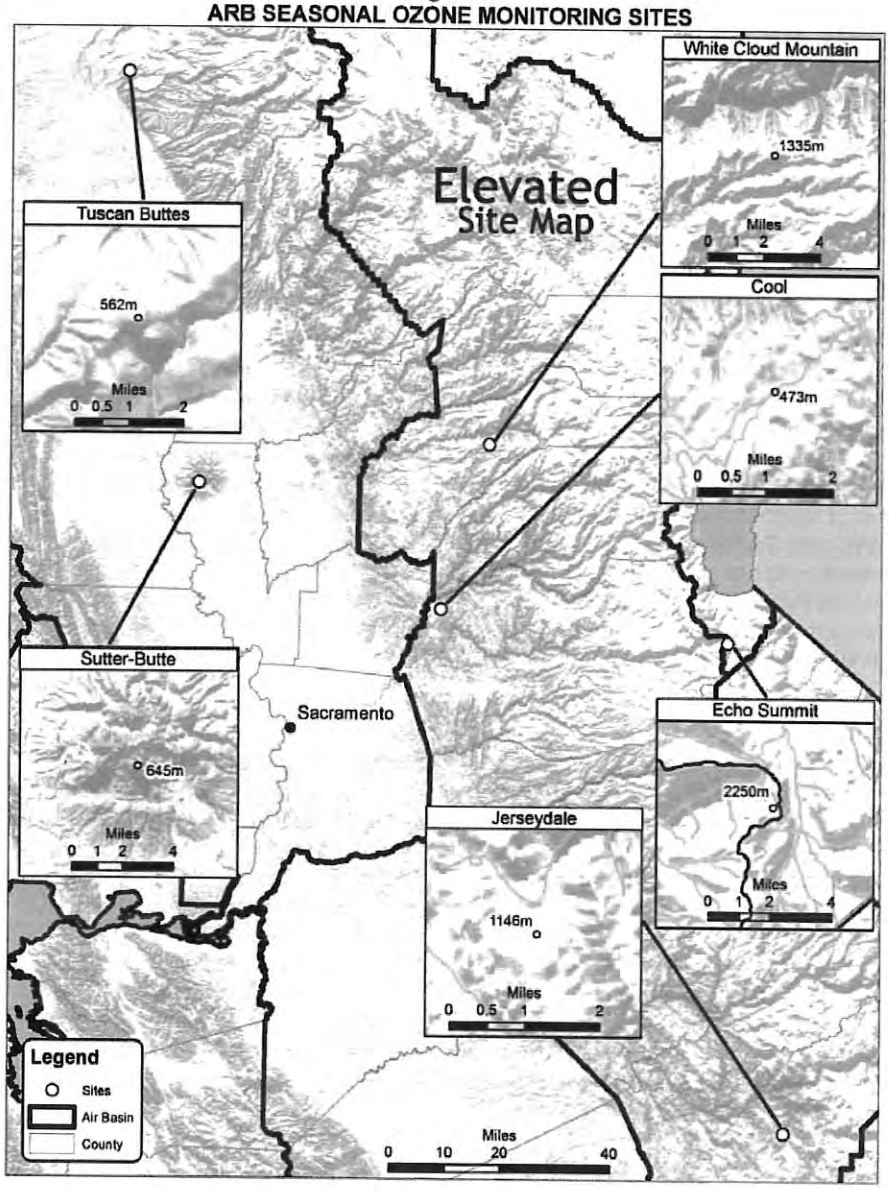
AQS Site ID	Site Name	County	Start Year	Current Operating Season	Preliminary 2016 Design Value (ppm)*
060170012	Echo Summit	El Dorado	2000	April-October	N/A*
060170020	Cool-Highway 193	El Dorado	1996	April-October	0.082
060430006	Jerseydale-6440 Jerseydale	Mariposa	1995	April-October	0.075
060570007	White Cloud Mountain	Nevada	1995	April-October	N/A**
061010004	Sutter Buttes	Sutter	1993	April-October	0.075
061030004	Tuscan Buttes	Tehama	1995	April-October	0.079

Data obtained on March 12, 2017, from ARB's ADAM database: http://www.arb.ca.gov/adam and ARB's AQMIS database: http://www.arb.ca.gov/aqmis2/aqmis2.php

* Did not operate in 2015 due to lease issue.

** Did not operate in 2016 due to operational issue.

Figure 1
ARB SEASONAL OZONE MONITORING SITES



Ozone concentration data used in the analyses presented here were retrieved from ARB's ADAM and AQMIS databases in March 2017. Graphs of the 5-year average monthly maximum 8-hour ozone concentrations for each seasonal site are shown in Figures 2 through 7. The averages are based on data collected from 2012 through 2016. In addition to averages for the seasonal sites, average monthly maximum concentrations are also graphed for the closest surrounding site(s) that operate year-round. Beginning with 2016, the seasonal site data collection period was extended to include April, which explains why April minimum, maximum, and average converge at the same point. Additionally, to enhance understanding of the five-year averages, a table of monthly maximums for each of the five years is also included (Table 2).

Figures 2 to 7 show that the highest average monthly maximum 8-hour average ozone concentrations measured at both the seasonal sites and the surrounding sites occur during the summer months (June - September), when weather conditions are conducive to ozone formation and buildup. They show that concentrations at the seasonal sites during June - September average seven percent higher than the averages of the preceding months (April/May) and an average of nine percent higher than the averages for the following month (October). Concentrations at year-round sites show similar patterns with the percent of change between the months of April to May nearly tripling that of March to April. Additionally, the percentage drops by the same magnitude when comparing September and October with October and November. This indicates that maximum ozone concentrations are significantly lower in the early spring and late fall months than in the summer ozone season months. Thus, for the six seasonal ozone monitoring sites, the April through October monitoring season captures the highest annual concentrations.

In addition, fourth high annual ozone concentrations, used in calculating design values, were also evaluated. These are compared with the federal standard to determine an area's designation status. Annual fourth high concentrations for each of the seasonal and year-round sites are shown in Table 3, along with the measurement date. Nearly all of the fourth high concentrations occurred between June and September, indicating that those are the key monitoring months. Only two of the fourth high concentrations, across all of the seasonal sites, occurred either before June (Echo Summit, 2014) or after September (Jerseydale, 2012). Both of these fourth high concentrations were just outside of the June to September period, on May 27, 2014, and October 2, 2012, respectively. It is important to note that for all of the monitoring sites considered in this analysis all of the fourth high measurements shown in Table 3 occurred during the April through October period, the previously approved seasonal monitoring season. Finally, the fourth high concentrations at the seasonal sites are generally lower than those at the surrounding sites, reflecting the fact that the seasonal ozone sites are not the design sites for their respective planning areas.

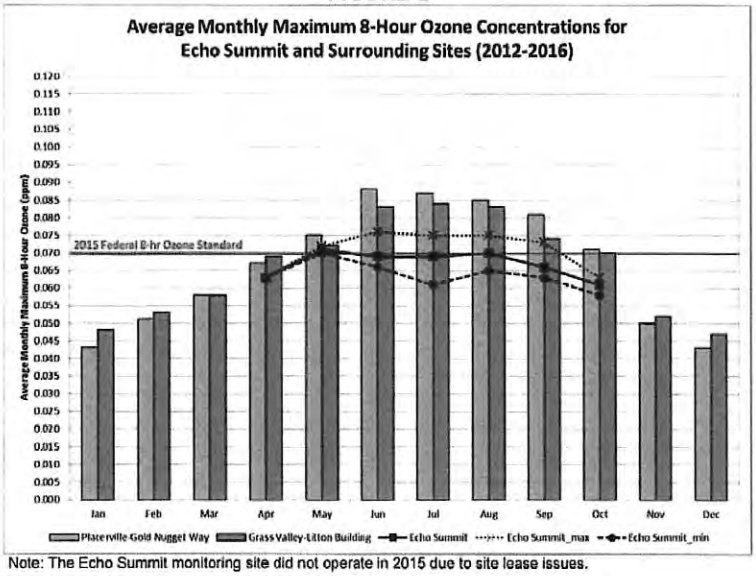
The two exceptions, to the observation that seasonal sites are generally lower than the surrounding sites, are the Sutter Butte and the Tuscan Buttes sites, which present unique situations. Sutter Butte and Tuscan Buttes are high elevation sites, located on isolated hilltops (refer to Figures 8 and 9). The sites were originally deployed to measure the impact of pollutant transport. Because there are no nearby developed areas, ozone concentrations measured at Sutter Butte and Tuscan Buttes are not representative of population exposure. U.S. EPA recognized the uniqueness of the Sutter Butte site when promulgating area designations for the 0.08 ppm federal 8-hour ozone standard. U.S. EPA limited the nonattainment area to the area immediately surrounding the Sutter Butte monitor. Although concentrations at Sutter Butte are higher than those at Yuba City (the closest populated area), concentrations continue to decrease. Tuscan Buttes received similar recognition during designations for the 2008 federal 8-hour ozone standard and the area immediately surrounding the monitor was designated a nonattainment area.

To account for the lower concentration of the current ozone standard, ozone concentrations were evaluated at two thresholds suggested by U.S. EPA: 0.070 ppm, the current ozone standard threshold (Table 4), and 0.054 ppm, the moderate Air Quality Index (AQI) threshold (Table 5). The tables show counts of the number of days above each threshold by site and month. Table 4 indicates that exceedances of the new 0.070 ppm standard at the year-round sites are rare between the months of November and March and that the current April through October operating season will continue to be adequate. Both Tables 4 and 5 clearly indicate that monitoring, based on concentration information alone, is not needed from November through March.

In addition to air quality, there are other considerations for maintaining a seasonal monitoring schedule at the Echo Summit, Cool, Jerseydale, White Cloud Mountain, Sutter Butte, and Tuscan Buttes locations. For instance, all six seasonal monitoring sites are located in remote, mountainous areas, and significant distances from ARB headquarters in Sacramento. Also, as denoted in Figure 1, all of the monitors are located at high elevations, with the lowest site, Cool, at 473 meters (1,552 feet) and the highest site, Echo Summit, at 2,250 meters (7,382 feet). These physical characteristics require significant time and resources for servicing the monitoring equipment. Winter weather conditions further complicate the issue, at times making the access roads impassable due to a lack of plowing and unsafe for travel.

Based on our analyses of the measured data against the current 0.070 ppm 8-hour average federal ozone standard and other considerations, ARB finds that the April through October monitoring season continues to be adequate for capturing the highest ozone concentrations at the Echo Summit, Cool, Jerseydale, White Cloud Mountain, Sutter Butte, and Tuscan Buttes monitoring sites. Therefore, ARB is recommending that U.S. EPA grant a renewal waiver for seasonal monitoring (April through October) at these sites, in accordance with 40 CFR Part 58.12 (a)(3).

FIGURE 2



Note: The Echo Summit monitoring site did not operate in 2015 due to site lease issues.

FIGURE 3

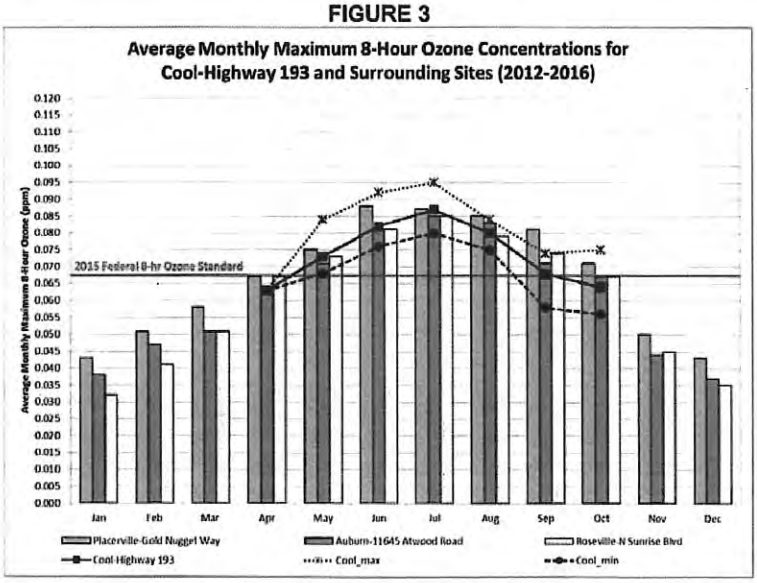


FIGURE 4

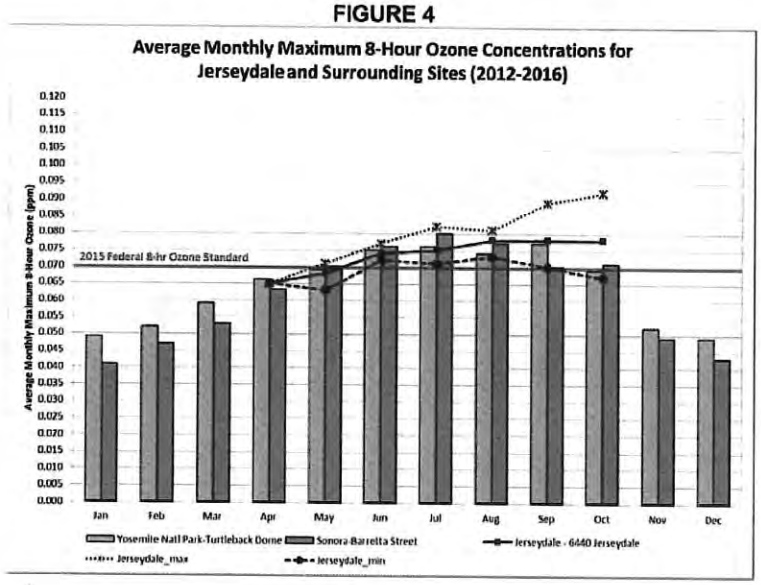
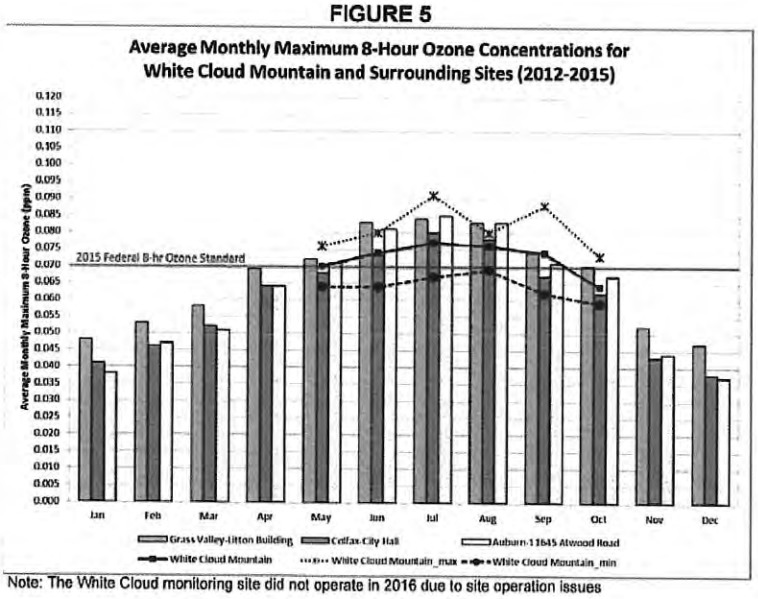
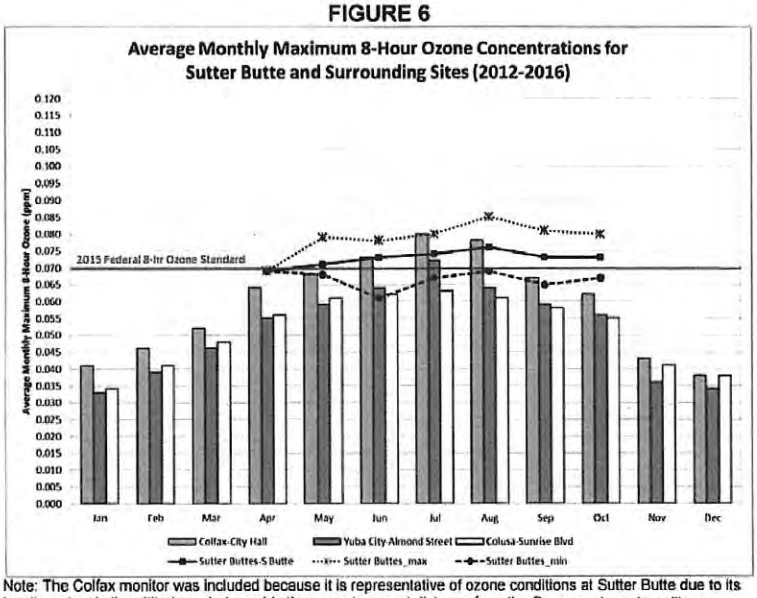


FIGURE 5



Note: The White Cloud monitoring site did not operate in 2016 due to site operation issues

FIGURE 6



Note: The Colfax monitor was included because it is representative of ozone conditions at Sutter Butte due to its location at a similar altitude and at roughly the same transport distance from the Sacramento metropolitan area.

FIGURE 7

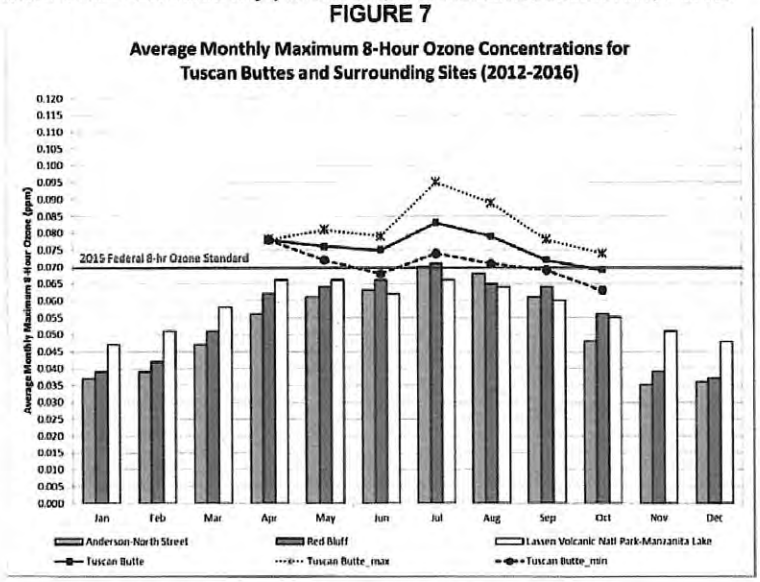


TABLE 2
MONTHLY MAXIMUM 8-HOUR OZONE CONCENTRATIONS AT SEASONAL AND SURROUNDING MONITORING SITES
(Ozone in parts per million)

Month & Year	SITE																		
	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
	060890007	060610003	060610004	060111002	060170020	060170012	060670012	060570005	060430006	060893003	060170010	061030005 & 061030007	060610006	061090005	061010004	061030004	060570007	060430003	061010003
JAN '12	0.031	0.037	0.041	0.031	---	---	0.035	0.044	---	0.048	0.041	0.041	0.035	0.046	---	---	---	0.048	0.032
FEB '12	0.039	0.052	0.044	0.037	---	---	0.046	0.051	---	0.050	0.058	0.044	0.041	0.049	---	---	---	0.056	0.039
MAR '12	0.047	0.050	0.050	0.046	---	---	0.053	0.056	---	0.058	0.058	0.053	0.049	0.051	---	---	---	0.064	0.048
APR '12	0.054	0.062	0.066	0.051	---	---	0.069	0.067	---	0.081	0.063	0.058	0.065	0.065	---	---	---	0.071	0.053
MAY '12	0.059	0.078	0.074	0.063	0.084	0.071	0.084	0.074	0.067	0.068	0.082	0.062	0.078	0.067	0.068	0.072	0.076	0.071	0.066
JUN '12	0.058	0.076	0.072	0.053	0.084	0.076	0.099	0.074	0.073	0.067	0.089	0.069	0.088	0.078	0.061	0.076	0.078	0.078	0.060
JUL '12	0.069	0.088	0.085	0.067	0.095	0.075	0.103	0.081	0.082	0.077	0.096	0.085	0.092	0.081	0.080	0.083	0.091	0.091	0.073
AUG '12	0.073	0.083	0.080	0.064	0.081	0.065	0.097	0.078	0.079	0.067	0.094		0.087	0.072	0.085	0.079	0.080	0.075	0.073
SEP '12	0.062	0.077	0.068	0.065	0.069	0.073	0.084	0.075	0.078	0.062	0.079	0.066	0.081	0.070	0.076	0.072	0.088	0.078	0.064
OCT '12	0.052	0.081	0.065	0.056	0.070	0.062	0.105	0.070	0.092	0.057	0.073	0.060	0.086	0.073	0.072	0.071	0.066	0.081	0.063
NOV '12	0.034	0.043	0.038	0.041	---	---	0.045	0.046	---	0.050	0.045	0.034	0.038	0.045	---	---	---	0.055	0.033
DEC '12	0.036	0.037	0.038	0.035	---	---	0.042	0.044	---	0.052	0.042	0.037	0.038	0.045	---	---	---	0.049	0.037
JAN '13	0.041	0.036	0.039	0.033	---	---	0.036	0.046	---	0.050	0.044	0.038	0.030	0.036	---	---	---	0.051	0.035
FEB '13	0.045	0.047	0.047	0.044	---	---	---	0.056	---	0.052	0.051	0.043	0.045	0.046	---	---	---	0.052	0.042
MAR '13	0.058	0.048	0.052	0.051	---	---	0.055	0.062	---	---	0.061	0.054	0.053	0.051	---	---	---	0.054	0.050
APR '13	0.054	0.055	0.057	0.056	---	---	0.070	0.065	---	0.062	0.065	0.061	0.068	0.061	---	---	---	0.066	0.057
MAY '13	0.067	0.067	0.065	0.061	0.071	0.070	0.075	0.072	0.071	0.065	0.075	0.068	0.073	0.070	0.071	0.081	0.064	0.071	0.056
JUN '13	0.064	0.066	0.063	0.060	0.076	0.066	0.070	0.074	0.077	0.056	0.080	0.072	0.073	0.070	0.078	0.068	0.064	0.073	0.059
JUL '13	0.067	0.074	0.076	0.059	0.080	0.061	0.087	0.082	0.076	0.072	0.084	0.075	0.083	0.074	0.067	0.077	0.067	0.077	0.067
AUG '13	0.058	0.080	0.071	0.053	0.077	0.075	0.083	0.078	0.081	0.058	0.081	0.063	0.079	0.076	0.074	0.071	0.069	0.074	0.055
SEP '13	0.060	0.067	0.066	0.051	0.058	0.063	0.076	0.070	0.070	0.062	0.077	0.066	0.068	0.063	0.075	0.069	0.062	0.066	0.056
OCT '13	0.042	0.059	0.059	0.049	0.056	0.063	0.067	0.068	0.078	0.056	0.068	0.054	0.055	0.065	0.067	0.063	0.059	0.070	0.048
NOV '13	0.038	0.051	0.051	0.040	---	---	0.061	0.060	---	0.054	0.058	0.049	0.048	0.053	---	---	---	0.058	0.042
DEC '13	0.035	0.040	0.037	0.033	---	---	0.045	0.051	---	0.050	0.046	0.043	0.032	0.040	---	---	---	0.050	0.033

Month & Year	SITE																		
	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
	060890007	060610003	060610004	060111002	060170020	060170012	060670012	060570005	060430006	060893003	060170010	061030005 & 061030007	060610006	061090005	061010004	061030004	060570007	060430003	061010003
JAN '14	0.039	0.040	0.045	0.035	---	---	0.041	0.057	---	0.050	0.050	0.043	0.029	0.044	---	---	---	0.054	0.033
FEB '14	0.038	0.048	0.051	0.039	---	---	0.049	0.054	---	0.046	0.054	0.044	0.039	0.053	---	---	---	0.059	0.043
MAR '14	0.041	0.054	0.053	0.047	---	---	0.059	0.062	---	0.067	0.063	0.053	0.054	---	---	---	---	0.063	0.048
APR '14	0.056	0.063	0.064	0.056	---	---	0.070	0.067	---	0.062	0.063	0.071	0.064	0.066	---	---	---	0.066	0.054
MAY '14	0.063	0.074	0.070	0.061	0.075	0.072	0.078	0.076	0.070	0.068	0.078	0.068	0.075	0.071	0.071	0.075	0.075	0.071	0.064
JUN '14	0.066	0.081	0.073	0.067	0.083	0.068	0.080	0.083	0.077	0.066	0.090	---	0.083	0.075	0.075	0.076	0.080	0.078	0.071
JUL '14	0.077	0.084	---	0.064	0.087	0.071	0.083	0.085	---	0.060	0.083	0.065	0.086	0.080	0.080	0.086	0.080	0.075	0.088
AUG '14	0.072	0.081	0.076	0.060	0.083	0.068	0.081	0.082	---	0.065	0.076	0.061	0.077	0.074	0.069	0.075	0.078	0.074	0.064
SEP '14	0.064	0.066	0.065	0.058	---	0.065	0.084	0.081	0.084	0.059	0.084	0.063	0.072	0.071	0.071	0.071	0.071	0.084	0.063
OCT '14	0.044	0.068	0.064	0.054	0.075	0.061	0.078	0.074	0.081	0.059	0.074	0.051	0.068	0.071	0.077	0.069	0.073	0.070	0.061
NOV '14	0.036	0.048	0.047	0.046	---	---	0.055	0.054	---	0.048	0.048	0.039	0.049	0.052	---	---	---	0.048	0.040
DEC '14	0.039	0.040	0.041	0.040	---	---	0.041	0.048	---	0.045	0.040	0.036	0.036	0.047	---	---	---	0.052	0.037
JAN '15	0.036	0.040	0.042	0.031	---	---	0.035	0.051	---	0.043	0.039	---	0.029	0.040	---	---	---	0.043	0.032
FEB '15	0.043	0.044	0.044	0.040	---	---	0.044	0.052	---	0.050	0.043	0.043	0.039	0.039	---	---	---	0.043	0.037
MAR '15	0.049	0.056	0.060	0.051	---	---	0.059	0.059	---	0.056	0.054	0.052	0.052	0.053	---	---	---	0.057	0.048
APR '15	0.057	0.069	0.066	0.058	---	---	0.063	0.075	---	0.069	0.075	0.064	0.069	0.063	---	---	---	0.065	0.059
MAY '15	0.063	0.074	0.073	0.057	0.068	---	0.068	0.073	0.070	0.068	0.070	0.066	0.067	0.074	0.068	0.076	0.067	0.070	0.057
JUN '15	0.073	0.100	0.079	0.070	0.092	---	0.093	0.089	0.072	0.066	0.090	0.063	0.084	0.078	0.076	0.079	0.074	0.073	0.074
JUL '15	0.073	0.083	0.075	0.062	0.080	---	0.074	0.081	0.071	0.059	0.082	0.060	0.073	0.075	0.068	0.074	0.072	0.067	0.069
AUG '15	0.068	0.088	0.085	0.063	0.075	---	0.085	0.092	0.073	0.066	0.080	0.064	0.069	0.077	0.072	0.081	0.078	0.073	0.064
SEP '15	0.061	0.072	0.072	0.056	0.073	---	0.071	0.072	0.070	0.062	0.073	0.063	0.065	0.070	0.065	0.072	0.076	0.083	0.056
OCT '15	0.056	0.066	0.064	0.059	0.063	---	0.067	0.068	0.067	0.052	0.071	0.062	0.059	0.074	0.072	0.071	0.059	0.053	---
NOV '15	0.038	0.038	0.038	0.037	---	---	0.037	0.048	---	0.049	0.049	0.039	---	0.044	---	---	---	0.050	0.031
DEC '15	0.037	0.034	0.037	0.040	---	---	0.035	0.049	---	0.047	0.044	0.031	0.035	0.041	---	---	---	0.048	0.033

Appendix B

Month & Year	SITE																		
	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
	060990007	060610003	060610004	060111002	060170020	060170012	060670012	060570005	060430006	060993003	060170010	061030005 & 061030007	060610006	061090005	061010004	051030004	060570007	060430003	061010003
JAN '16	0.038	0.041	0.041	0.040	---	---	0.036	0.045	---	0.047	0.045	0.037	0.039	0.043	---	---	---	0.049	0.036
FEB '16	0.033	0.048	0.048	0.045	---	---	0.044	0.055	---	0.057	0.051	0.040	0.045	0.051	---	---	---	0.051	0.037
MAR '16	0.043	0.047	0.046	0.047	---	---	0.045	0.054	---	0.052	0.055	0.044	0.049	0.057	---	---	---	---	0.039
APR '16	0.060	0.071	0.067	0.062	0.063	0.063	0.068	0.071	0.065	0.058	0.069	0.060	0.071	0.063	0.069	0.078	---	0.062	0.056
MAY '16	0.056	0.066	0.062	0.064	0.070	---	0.073	0.067	0.063	0.064	0.074	0.059	0.072	0.069	0.079	0.077	---	0.064	0.053
JUN '16	0.056	0.085	0.080	0.063	0.078	0.066	0.089	0.097	0.075	0.059	0.091	0.060	0.078	0.079	0.077	0.076	---	0.075	0.057
JUL '16	0.067	0.099	0.085	0.064	0.094	0.070	0.094	0.093	0.072	0.064	0.094	0.073	0.092	0.091	0.079	0.095	---	0.073	0.064
AUG '16	0.072	0.087	0.081	0.065	0.084	0.072	0.084	0.086	0.080	0.086	0.094	0.072	0.084	0.086	0.084	0.089	---	0.078	0.065
SEP '16	0.059	0.074	0.068	0.064	0.074	0.064	0.089	0.075	0.089	0.059	0.093	---	0.088	0.077	0.081	0.078	---	0.074	0.056
OCT '16	0.050	0.062	0.060	0.057	0.059	0.058	0.071	0.074	0.073	0.054	---	0.053	0.068	0.073	0.080	0.074	---	0.062	0.052
NOV '16	0.029	0.042	0.042	0.041	---	---	0.041	0.055	---	0.056	0.054	0.038	0.045	0.053	---	---	---	0.051	0.036
DEC '16	0.037	0.038	0.037	0.044	---	---	0.037	0.045	---	0.048	0.044	0.038	0.035	---	---	---	---	0.046	0.031

Notes:
1 Surrounding monitors used for comparison with more than one seasonal site are only listed once
2 Data for the Red Bluff-Oak Street and Red Bluff-1834 Walnut Street monitoring sites were merged to make a continuous Red Bluff record for the 5-year period
3 Months with no data or less than 75% data completeness are denoted by "---"
4 Highlighted cells indicate the maximum 8-hour average concentration for each site during each calendar year
5 An exceedance of the 2015 federal 8-hour average ozone standard is any concentration greater than 0.070 ppm

TABLE 3
ANNUAL 4th HIGH 8-HOUR OZONE CONCENTRATIONS AT SEASONAL AND SURROUNDING MONITORING SITES
(Ozone in parts per million; seasonal sites highlighted)

Site Name	2012		2013		2014		2015		2016	
	High	Date	High	Date	High	Date	High	Date	High	Date
Anderson-North Street	0.069	7/10/2012	0.064	6/6/2013	0.071	7/1/2014	0.068	8/18/2015	0.067	8/13/2016
Auburn-11645 Atwood Road	0.081	10/2/2012	0.073	7/8/2013	0.081	6/5/2014	0.085	6/20/2015	0.085	6/29/2016
Colfax-City Hall	0.077	7/23/2012	0.071	7/25/2013	0.073	6/5/2014	0.075	6/20/2015	0.081	8/20/2016
Colusa-Sunrise Blvd	0.063	5/9/2012	0.056	4/27/2013	0.061	5/31/2014	0.064	6/8/2015	0.065	8/18/2016
Cool-Highway 193	**0.081**	**8/3/2012**	**0.076**	**6/3/2013**	**0.083**	**8/27/2014**	**0.080**	**7/30/2015**	**0.084**	**8/16/2016**
Echo Summit	**0.075**	**7/13/2012**	**0.066**	**6/12/2013**	**0.068**	**5/27/2014**			**0.070**	**7/30/2016**
Folsom-Natoma Street	0.097	8/10/2012	0.079	7/19/2013	0.081	8/27/2014	0.081	6/16/2015	0.088	7/27/2016
Grass Valley-Litton Building	0.077	8/3/2012	0.078	8/20/2013	0.082	8/27/2014	0.085	8/19/2015	0.086	8/16/2016
Jerseydale - 6440 Jerseydale	**0.081**	**10/2/2012**	**0.077**	**6/8/2013**	**0.077**	**6/2/2014**	**0.071**	**7/2/2015**	**0.077**	**8/19/2016**
Lassen Volcanic Natl Park-Manzanita Lake	0.071	4/7/2012	0.068	7/8/2013	0.065	5/2/2014	0.066	6/11/2015	0.064	8/14/2016
Placerville-Gold Nugget Way	0.089	6/1/2012	0.082	7/2/2013	0.082	6/6/2014	0.080	7/1/2015	0.093	9/26/2016
Red Bluff	0.075	8/13/2012	0.072	7/9/2013	0.068	5/31/2014	0.063	5/1/2015	0.070	8/20/2016
Roseville-N Sunrise Blvd	0.086	8/30/2012	0.075	8/18/2013	0.083	7/14/2014	0.073	7/30/2015	0.084	8/13/2016
Sonora-Barretta Street	0.075	7/11/2012	0.070	6/1/2013	0.075	6/4/2014	0.076	6/30/2015	0.088	7/28/2016
Sutter Buttes-S Butte	**0.077**	**7/12/2012**	**0.072**	**6/7/2013**	**0.075**	**6/6/2014**	**0.072**	**8/18/2015**	**0.080**	**8/17/2016**
Tuscan Butte	**0.077**	**7/11/2012**	**0.072**	**7/9/2013**	**0.076**	**6/1/2014**	**0.076**	**6/24/2015**	**0.087**	**8/20/2016**
White Cloud Mountain	**0.084**	**9/7/2012**	**0.065**	**7/30/2013**	**0.078**	**8/27/2014**	**0.072**	**7/16/2015**		
Yosemite Natl Park-Turtleback Dome	0.081	10/3/2012	0.073	6/1/2013	0.077	9/13/2014	0.073	8/18/2015	0.074	8/11/2016
Yuba City-Almond Street	0.069	8/10/2012	0.060	7/20/2013	0.069	7/7/2014	0.064	8/18/2015	0.063	8/13/2016

Notes:
1 Surrounding monitors used for comparison with more than one seasonal site are only listed once
2 Data for the Red Bluff-Oak Street and Red Bluff-1834 Walnut Street monitoring sites were merged to make a continuous Red Bluff record for the 5-year period
3 The Echo Summit monitoring site did not operate in 2015 due to site lease issues
4. The White Cloud Mountain monitoring site did not operate in 2016 due to site operation issues

TABLE 4
NUMBER OF DAYS WITH MAXIMUM 8-HOUR OZONE CONCENTRATION >0.070 PPM
(April-October ozone season highlighted in orange; seasonal sites denoted by gray)

Year	Month	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
2012	Jan																			
2012	Feb																			
2012	Mar																			
2012	Apr										3								1	
2012	May		2	1		2	1	4	1			3		2			1	1	1	
2012	Jun		2	1		3	3	4	2	1		6		3	4		1	4	4	
2012	Jul		7	8		5	4	9	3	9	1	9	3	5	7	4	4	3	16	1
2012	Aug	1	11	5		5		16	11	7		12	3	13	1	5	7	4	5	1
2012	Sep		4				1	16	4	9		11		3		5	1	4	4	
2012	Oct		4					4		4		1		1	1	1	1		3	
2012	Nov																			
2012	Dec																			
2013	Jan																			
2013	Feb																			
2013	Mar																			
2013	Apr																			
2013	May					1		2	2	1		2		1		1	1		1	
2013	Jun					2			1	4		3	1	1		2			3	
2013	Jul		5	4		4		8	14	6	2	10	7	2	1		4		5	
2013	Aug		1	1		2	1	4	3	1		4		2	1	1	1		1	
2013	Sep							2				2				1				
2013	Oct									5										
2013	Nov																			
2013	Dec																			

Year	Month	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
2014	Jan																			
2014	Feb																			
2014	Mar																			
2014	Apr												1							
2014	May		1			2	1	4	5			4		4	1	1	2	2	1	
2014	Jun		4	3		6		5	5	8		11		4	7	1	4	5	5	1
2014	Jul	3	6	1		5	1	7	7	1		6		7	5	3	4	4	3	2
2014	Aug	1	4	2		10		6	4	2		5		3	1		4	4	3	
2014	Sep					5		7	8	4		3		1	1	1	1	1	3	
2014	Oct					5		5	2	3		3			1	2		1		
2014	Nov																			
2014	Dec																			
2015	Jan																			
2015	Feb																			
2015	Mar																			
2015	Apr								1			1								
2015	May		1	2					3						1		2			
2015	Jun	1	6	4		6		6	15	2		7		4	5	4	6	2	2	1
2015	Jul	1	4	3		5		3	5	1		4		2	2		4	1		
2015	Aug		3	2		1		1	5	1		2			2	2	2	1	1	
2015	Sep		1	1		1		1	1			4					1	1	2	
2015	Oct											1			1	1	1			
2015	Nov																			
2015	Dec																			

Year	Month	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
2016	Jan																			
2016	Feb																			
2016	Mar																			
2016	Apr		1						2					1			2			
2016	May							1				1		1		2	2			
2016	Jun		3	2		1		3	4	1		5		3	13	4	3		1	
2016	Jul		8	6		7		7	14	1		8	2	5	15	8	10		3	
2016	Aug	2	10	6		8	2	6	17	7		15	1	4	14	10	19		6	
2016	Sep		5			3		5	7	7		11		6	4	5	4		1	
2016	Oct							1	1	2		1			1	1	2			
2016	Nov																			
2016	Dec																			

*Notes:
1 Surrounding monitors used for comparison with more than one seasonal site are only listed once
2 Data for the Red Bluff-Oak Street and Red Bluff-1834 Walnut Street monitoring sites were merged to make a continuous Red Bluff record for the 5-year period
3 The Echo Summit monitoring site did not operate in 2015 due to site lease issues
4 The White Cloud Mountain monitoring site did not operate in 2016 due to site operation issues

TABLE 5
NUMBER OF DAYS WITH MAXIMUM 8-HOUR OZONE CONCENTRATION >0.054 PPM
(April-October ozone season highlighted in orange)

Year	Month	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
2012	Jan																			
2012	Feb											1							1	
2012	Mar								1		7	1							6	
2012	Apr		2	2				3	3		6	5	1	5	3				11	
2012	May	3	18	17	7	16	25	18	14	18	16	20	9	16	19	15	21	14	25	7
2012	Jun	1	9	13		12	21	12	12	14	6	15	4	11	17	5	7	13	21	3
2012	Jul	13	24	26	8	27	27	23	26	27	24	28	24	24	26	20	25	26	28	15
2012	Aug	20	25	27	11	18	25	26	29	28	26	27	18	25	23	23	27	28	28	18
2012	Sep	9	29	28	10	22	22	30	24	29	11	28	19	20	25	24	27	24	29	17
2012	Oct		4	3	1	4	8	9	5	11	1	7	2	4	5	8	8	6	8	4
2012	Nov																		1	
2012	Dec																			
2013	Jan																			
2013	Feb								1											
2013	Mar	1						1	2			4								
2013	Apr		2	2	1		1	4	10		4	9	3	4	4				4	1
2013	May	5	9	7	3	18	20	13	21	16	8	20	9	11	15	11	14	7	19	1
2013	Jun	2	8	9	2	9	7	8	11	15	1	17	6	9	14	6	4	11	18	2
2013	Jul	20	24	26	1	25	6	22	31	27	20	31	28	23	21	21	29	28	28	13
2013	Aug	1	13	16		15	9	13	27	23	5	21	16	11	11	13	16	15	20	1
2013	Sep	2	9	6		2	5	9	14	20	4	12	5	5	6	8	8	6	15	3
2013	Oct		4	3		1	5	11	18	22	2	17		1	9	17	11	6	16	
2013	Nov							1	3			1							1	
2013	Dec																			

Year	Month	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
2014	Jan								2											
2014	Feb																		1	
2014	Mar							2	4		2	3							6	
2014	Apr	2	4	7	1			11	14		8	10	11	4	12	1		1	14	
2014	May	6	11	13	6	14	17	14	14	15	8	16	13	10	19	8	14	15	18	5
2014	Jun	4	18	16	6	18	15	14	21	25	3	19	6	16	22	14	17	23	23	11
2014	Jul	17	24	16	5	26	5	20	28	11	5	22	13	21	22	17	26	21	20	12
2014	Aug	13	21	17	4	24	16	21	27	15	9	21	9	17	20	19	23	24	26	9
2014	Sep	3	10	11	1	14	10	16	18	20	5	11	9	12	13	9	16	11	19	5
2014	Oct		10	6		11	7	11	15	19	3	12		8	12	13	7	12	13	4
2014	Nov							1												
2014	Dec																			
2015	Jan																			
2015	Feb																			
2015	Mar		1	2				3	6		2								2	
2015	Apr	2	9	9	1			6	18	1	5	10	5	4	12		1		11	1
2015	May	9	16	16	3	14		8	21	13	11	16	10	6	14	9	23	13	15	3
2015	Jun	17	26	25	11	26		18	27	25	12	24	8	16	24	22	25	24	24	13
2015	Jul	10	13	15	6	14		12	19	16	4	15	5	10	13	11	15	11	12	6
2015	Aug	11	16	19	5	13		9	21	17	8	19	5	6	14	12	19	14	16	4
2015	Sep	2	10	10	2	9		11	14	17	3	17	9	6	12	13	15	16	17	1
2015	Oct	2	10	8	3	9		7	16	11		19	6	5	11	12	12	4	10	1
2015	Nov																			
2015	Dec																			

Year	Month	Anderson-North Street	Auburn-11645 Atwood Road	Colfax-City Hall	Colusa-Sunrise Blvd	Cool-Highway 193	Echo Summit	Folsom-Natoma Street	Grass Valley-Litton Building	Jerseydale - 6440 Jerseydale	Lassen Volcanic Natl Park-Manzanita Lake	Placerville-Gold Nugget Way	Red Bluff	Roseville-N Sunrise Blvd	Sonora-Barretta Street	Sutter Buttes-S Butte	Tuscan Butte	White Cloud Mountain	Yosemite Natl Park-Turtleback Dome	Yuba City-Almond Street
2016	Jan																			
2016	Feb								1		2					3	3			
2016	Mar											1			1	1	3			
2016	Apr	1	4	5	5	3	11	3	9	4	1	8	2	4	8	11	17		4	1
2016	May	1	8	4	4	8	6	7	9	9	2	13	2	6	13	13	15		6	
2016	Jun	1	17	13	7	15	16	13	22	18	2	23	4	14	26	20	25		13	1
2016	Jul	10	21	22	8	18	21	15	26	20	4	21	11	14	27	18	22		21	6
2016	Aug	19	28	29	17	27	27	23	31	30	15	29	20	22	29	27	31		29	6
2016	Sep	1	15	13	7	15	8	17	22	27	1	21	1	14	22	18	21		15	3
2016	Oct		2	4	1	2	4	2	8	15		2		2	8	6	6		2	
2016	Nov								2		1					1				
2016	Dec																			

Notes:
1 Surrounding monitors used for comparison with more than one seasonal site are only listed once
2 Data for the Red Bluff-Oak Street and Red Bluff-1834 Walnut Street monitoring sites were merged to make a continuous Red Bluff record for the 5-year period
3 The Echo Summit monitoring site did not operate in 2015 due to site lease issues
4 The White Cloud Mountain monitoring site did not operate in 2016 due to site operational issues

FIGURE 8
PHOTOS OF AREA SURROUNDING THE SUTTER BUTTE OZONE MONITORING SITE

Sutter Butte: Looking north from probe.

Sutter Butte: Looking east from probe.

Sutter Butte: Looking south from probe.
(from 2016 site audit)

Sutter Butte: Looking west from probe.

FIGURE 9
PHOTOS OF AREA SURROUNDING THE TUSCAN BUTTES OZONE MONITORING SITE

Tuscan Buttes: Looking north from probe.

Tuscan Buttes: Looking east from probe.

Tuscan Buttes: Looking south from probe.
(from 2016 site audit)

Tuscan Buttes: Looking west from probe.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

APR 26 2017

Mr. Ravi Ramalingam
Chief, Consumer Products and Air Quality Assessment Branch
California Air Resources Board
P.O. Box 2815
Sacramento, California 95812

Dear Mr. Ramalingam:

This letter serves as an approval for your request dated March 29, 2017 for a waiver to suspend operation of six California Air Resources Board (CARB) state or local air monitoring station (SLAMS) ozone sites (Echo Summit – Air Quality System (AQS) ID 06-017-0012, Cool-Highway – AQS ID 06-017-0020, Jerseydale – AQS ID 06-043-0006, White Cloud Mountain – AQS ID 06-057-0007, Sutter Buttes – AQS ID 06-101-0004, Tuscan Buttes – AQS ID 06-103-0004) from November 1, 2017 through March 31, 2018. Per 40 CFR Part 58, Appendix D Section 4.1(i), monitoring agencies must have ozone season deviations approved by the U.S. Environmental Protection Agency (EPA), documented in the Annual Ambient Air Quality Monitoring Network Plan, and updated in EPA's AQS database. Please note that an updated request with updated 2017 data will be required for future ozone season waiver approvals after March 31, 2018.

Thank you for the thorough analysis included with your March 29th letter. The continuing record of data from CARB sites shows a low probability that these sites would measure an exceedance of the 2015 8-hour Ozone National Ambient Air Quality Standard (NAAQS) during these winter months. EPA also notes that there are logistical issues due to winter weather conditions during winter months that may limit access to some of these monitoring sites. The past five years of data show no exceedances of the 2015 8-hour ozone NAAQS for ozone at any CARB monitors during the months of November through March. In addition, CARB will continue to operate ozone monitors at nearby locations throughout the waiver period. Please attach this approval letter and update the relevant monitor and site information in your next Annual Ambient Air Quality Monitoring Network Plan.

If you have any questions, please contact me at (415) 972-3372 or Gwen Yoshimura of my staff at (415) 947-4134. Thank you for your continued attention to detail and thorough data analyses.

Sincerely,

Michael Flagg
Acting Manager, Air Quality Analysis Office

cc (via email): Gayle Sweigert, CARB

Appendix C

Updated Waiver Request for 1-IN-6 Day $PM_{2.5}$ Monitoring

UPDATED WAIVER REQUEST FOR 1-IN-6 DAY $PM_{2.5}$ MONITORING IN 2017

The required number of $PM_{2.5}$ monitoring sites and their sampling schedules are based in part on population of the Metropolitan Statistical Area (MSA) and on the magnitude of measured concentrations (Tables 1 and 2). 40 Code of Federal Regulations (CFR) Part 58.12(d)(1) requires manual $PM_{2.5}$ monitors to operate on a 1-in-3 day schedule (minimally), unless a waiver for an alternate schedule has been approved. For sites with a collocated continuous monitor, U.S. EPA may approve a reduced 1-in-6 day schedule based on an assessment of factors including historical data, location of current design site, and regulatory needs. During 2016, three $PM_{2.5}$ monitoring sites included in this CARB 2017 Annual Network Report have manual $PM_{2.5}$ monitors operating on a 1-in-6 day schedule without a collocated continuous monitor (reporting data to AQS) and two $PM_{2.5}$ monitoring sites have manual $PM_{2.5}$ monitors operating on a 1-in-6 day schedule in parallel with a continuous monitor (Tables 3 and 4).

Sites with a Collocated Monitor

$PM_{2.5}$ concentrations at the three sites with a collocated continuous monitor are well below the federal $PM_{2.5}$ standards. U.S. EPA approved 1-in-6 day monitoring for two of these sites (Colusa and Roseville) on February 24, 2017.

As shown in Table 3, 2016 $PM_{2.5}$ annual design values at the Colusa and Roseville sites are 7.3 and 7.6 $\mu g/m^3$, respectively, with $PM_{2.5}$ 24-hour design values of 19 and 20 $\mu g/m^3$. The percent of these concentrations to the standards are low (Table 4) and are consistent with the historically low design values (and percentages) at both sites.

Colusa operates outside an MSA while the Roseville site is part of the Sacramento-Roseville-Arden Arcade MSA. As noted in this Network Plan, the Sacramento-Roseville-Arden Arcade MSA has a minimum monitoring requirement of three sites but operates eleven. The current $PM_{2.5}$ design value site for the MSA is Del Paso (AQS ID 06-067-0006), in Sacramento County.

Sites without a Collocated Monitor

In addition to the two sites described above, CARB's annual network report includes three additional sites with a manual $PM_{2.5}$ monitor operating on a 1-in-6 day schedule (Tables 3 and 4). CARB is requesting a waiver of the 1-in-3 day monitoring requirements for these sites based on historically low $PM_{2.5}$ concentrations and regulatory needs.

As shown in Table 3, 2016 annual design values at these sites range from 3.6 to 6.9 $\mu g/m^3$, and their 24-hour design values range from 10 to 16 $\mu g/m^3$. The percent of these concentrations to the standards are very low (Table 4) and are consistent with the historically low design values (and percentages) at the sites.

The Lakeport site operates in Lake County, outside an MSA. The $PM_{2.5}$ design value site for the local air district is the Lakeport monitor (AQS ID 06-033-3001). Lakeport is not part of any $PM_{2.5}$ nonattainment areas for either of the $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS).

The Redding site, in Shasta County, is part of the Redding MSA. As noted in this Network Plan, the Redding MSA has a minimum monitoring requirement of zero monitors but operates one. The current design value site for the Redding MSA is the Redding monitor (AQS ID 06-089-0004). The Redding MSA does not contain any areas in nonattainment of either of the $PM_{2.5}$ NAAQS.

The Woodland site, in Yolo County, is part of the Sacramento-Roseville-Arden Arcade MSA. As noted in this Network Plan, the Sacramento-Roseville-Arden Arcade MSA has a minimum monitoring requirement of three sites but operates eleven. The current design value site for the MSA is Del Paso (AQS ID 06-067-0006), in Sacramento County. The Sacramento $PM_{2.5}$ 24-hour NAAQS nonattainment area, which includes the Woodland monitoring site, was given a Clean Data Determination effective August 14, 2013. The MSA does not contain any areas in nonattainment for the $PM_{2.5}$ annual NAAQS.

While not required under 40 CFR Part 58 Appendix D due to population and particulate matter concentrations, CARB chose to deploy the sites which operate without a collocated monitor to improve spatial coverage throughout California. These sites also collect data for comparison to the State $PM_{2.5}$ Standard. These data, although collected on a 1-in-6 day schedule, accurately represent the air quality in these sparsely populated, low concentration areas.

In the future, as part of the network review, we will continue to evaluate the monitoring frequency at all sites to ensure that they collect the needed data in an effective and cost efficient manner.

Table 1. Minimum Number of Required $PM_{2.5}$ Monitors*

MSA Population	Most recent 3-year design value > or = 85% of any $PM_{2.5}$ NAAQS	Most recent 3-year design value < 85% of any $PM_{2.5}$ NAAQS
> 1,000,000	3	2
500,000 – 1,000,000	2	1
50,000 – 500,000	1	0

Table D-5 of Appendix D to Part 58 – $PM_{2.5}$ Minimum Monitoring Requirements

Table 2. Populations Represented by 1-in-6 Day $PM_{2.5}$ Sites

County	Site	AQS ID	MSA	Population*
Colusa	Colusa	06-011-1002	Outside MSA	22,043 (county)
Lake	Lakeport	06-033-3001	Outside MSA	64,945 (county)
Placer	Roseville	06-061-0006	Sacramento-Roseville-Arden Arcade	2,149,127 (MSA); 382,837 (county)
Shasta	Redding	06-089-0004	Redding	177,223 (MSA); 382,837 (county)
Yolo	Woodland	06-113-1003	Sacramento-Roseville-Arden Arcade	2,149,127 (MSA); 218,896 (county)

**2017 county population estimates from State of California, Department of Finance; MSA population estimates from 2010 U.S. Census and CARB 2017 Annual Network Plan*

Table 3: 3-Year Design Values at Waiver-Requested $PM_{2.5}$ Sites

Site	AQS ID	Collocated?	Annual DV ($\mu g/m^3$)					24-Hr DV ($\mu g/m^3$)				
			2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Colusa	06-011-1002	Yes	6.3	7.1	7.2	7.6	7.3	22	24	21	22	19
Roseville	06-061-0006	Yes	7.2	7.5	7.3	7.9	7.6	19	19	18	20	20
Lakeport	06-033-3001	No	3.4	3.7	4.0	4.0	3.6	9	10	12	10	10
Redding	06-089-0004	No	5.3	5.7	5.7	6.2	6.0	14	17	16	17	15
Woodland	06-113-1003	No*	6.6	7.2	6.6	7.0	6.9	20	21	16	19	16

** Woodland and Yreka sites have non-FEM BAMs that do not report to AQS.*

Table 4. Percent of Design Value to Standard at Waiver-Requested $PM_{2.5}$ Sites

Site	AQS ID	Collocated?	Percent of Annual DV (%)					Percent of 24-Hr DV (%)				
			2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Colusa	06-011-1002	Yes	53	59	60	63	61	63	69	60	63	54
Roseville	06-061-0006	Yes	60	63	61	65	63	54	54	51	57	57
Lakeport	06-033-3001	No	29	31	33	33	30	26	29	34	29	28
Redding	06-089-0004	No	44	48	48	52	50	40	49	46	49	43
Woodland	06-113-1003	No*	55	60	55	58	58	57	60	46	54	46

** Woodland and Yreka sites have non-FEM BAMs that do not report to AQS.*

Appendix D

Supporting Documentation for Site Changes

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

TELEPHONE: (442) 265-1800
FAX: (442) 265-1799

AIR POLLUTION CONTROL DISTRICT

May 30, 2017

Michael Flagg, Acting Manager
Air Quality Analysis Office
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Attn: Michael Flagg-Acting Manager Air Quality Analysis

Dear Mr. Flagg

The Imperial County Air Pollution Control District (ICAPCD) is formally requesting the discontinuation of the Carbon Monoxide Analyzer (API T300 Model) located at the El Centro air monitoring station (06-025-1003). This is a SLAMs monitor which has measured very low CO values for a number of years. It has shown attainment for the last five years from 2011 to 2015 and has a probability of less than 10% of exceeding 80% of the CO National Ambient Air Quality Standard (NAAQS). In addition, this monitor is not required under any State Implementation Plan (SIP) or maintenance plan.

The request by ICAPCD follows the requirements under Title 40 of the Code of Federal Regulations (CFR) Part 58 Ambient Air Quality Surveillance, Subpart B Monitoring Network which allows for network modifications apart from SLAMS network assessments and annual monitoring network plans.

Discontinuing this monitor will free up resources and allow the District to focus on more critical monitoring activities. Based on the analysis, **Tables A and B**, the carbon monoxide monitor (El Centro station) meets the requirements of 40 CFR Part 58.14(c)(1). Pending your approval, we would like to shut down the monitor by June 30, 2017.

The removal the CO monitor does not affect the requirements of appendix D and subsection (2).

Appendix D requirements:

1) Monitoring Objectives and Spatial Scales would remain the same
2) General Monitoring Requirements would remain the same
3) Design Criteria for NCore Sites does not apply
4) Pollutant-Specific Design Criteria for SLAMS Sites would remain the same
5) Design Criteria for Photochemical Assessment Monitoring Stations (PAMS) does not apply.

Respectfully Submitted,

Monica N. Soucier
APC Division Manager

Cc: Gwen M. Yoshimura, Acting Manager, Air Quality Analysis Office, USEPA Region 9
Patrick Rainey, Manager, Quality Management Section, CARB
Gayle M. Swelgert, Manager, Air Quality Analysis Section, CARB

TABLE A

2011-2015 1-HOUR CO NAAQS

Less than 10% Chance of Exceeding 80% of the 35 ppm CO NAAQS

Site	Year 1 DV (ppm) 2011	Year 2 DV (ppm) 2012	Year 3 DV (ppm) 2013	Year 4 DV (ppm) 2014	Year 5 DV (ppm) 2015	Average DV (ppm) 2011-2015
El Centro-9th Street (060251003)	2.6	2.5	2	1.5	1.2	*1.9600*

Std. Dev. *s*	Student's *t* value (90% confidence)	Number of Data Values (*n*)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test	Responsible Agency
0.54626	*2.13*	5	*2.4803*	28.0000	*PASS*	Imperial APCD

TABLE B

2011-2015 8-HOUR CO NAAQS

Less than 10% Chance of Exceeding 80% of the 9 ppm CO NAAQS

Site	Year 1 DV (ppm) 2011	Year 2 DV (ppm) 2012	Year 3 DV (ppm) 2013	Year 4 DV (ppm) 2014	Year 5 DV (ppm) 2015	Average DV (ppm) 2011-2015
El Centro-9th Street (060251003)	1.6	1.7	1.4	0.9	0.4	*1.2000*

Std. Dev. *s*	Student's *t* value (90% confidence)	Number of Data Values (*n*)	90% Upper CI (ppm)	80% NAAQS (ppm)	Test	Responsible Agency
0.54314	*2.13*	5	*1.7174*	7.2000	*PASS*	Imperial APCD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

June 20, 2017

Mr. Matt Dessert
Air Pollution Control Officer
Imperial County Air Pollution Control District
150 South Ninth Street
El Centro, California 92243-2850

Dear Mr. Dessert:

This letter provides the U.S. Environmental Protection Agency's (EPA's) review and approval for Imperial County Air Pollution Control District's (ICAPCD's) discontinuation of the CO State or Local Air Monitoring Station (SLAMS) monitor at the El Centro air monitoring station (AQS ID: 06-025-1003). On May 30, 2017, following discussions with the California Air Resources Board (CARB), ICAPCD sent a letter to EPA with a description of this network change. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors.

Discontinuation of the CO monitor was reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1). According to data submitted to EPA's Air Quality System (AQS), the El Centro site was in attainment of the CO National Ambient Air Quality Standards (NAAQS) from 2012 through 2016. Based on these five design values, there is a less than 10 percent probability of exceeding 80 percent of the CO 1-hour and 8-hour NAAQS during the next three years at this site. The monitor has not had a design value that exceeded 80 percent of the CO 1-hr or 8-hr NAAQS during the past fifteen years. This monitor is not specifically required by an attainment or maintenance plan, and is not the last monitor in a nonattainment or maintenance area. Furthermore, discontinuance of this monitor will not prevent ICAPCD and CARB from meeting 40 CFR 58 Appendix D requirements. After this discontinuation, there will still be a CO monitor within Imperial County, at the CARB-operated Calexico-Ethel monitoring station (AQS ID: 06-025-0005). Based on this analysis, EPA approves discontinuation of the El Centro CO monitor.

If you have any questions, please contact me at (415) 972-3372 or Jennifer Williams of my staff at (415) 972-3938.

Sincerely,

Michael Flagg
Acting Manager, Air Quality Analysis Office

cc (via email): Reyes Romero, ICAPCD
Monica Soucier, ICAPCD
Gayle Sweigert, CARB
Patrick Rainey, CARB

Printed on Recycled Paper

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

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FAX: (442) 265-1799

AIR POLLUTION CONTROL DISTRICT

December 12, 2016

Elizabeth Adams
Air Division Director
Region 9 (AZ, CA, HI, NV)
Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Attn: Gwen Yoshimura-Acting Manager Air Quality Analysis

Dear Ms Adams

The Imperial County Air Pollution Control District (ICAPCD) is formally requesting the discontinuation of two Federal Reference Method (FRM) Hi-Volume Samplers for PM_{10} located at the Niland and Brawley air monitoring stations. The request by ICAPCD follows the requirements under Title 40 of the Code of Federal Regulations (CFR) Part 58 Ambient Air Quality Surveillance, Subpart B Monitoring Network.

BACKGROUND

The Niland and Brawley air monitoring stations have been sampling for particulate matter of less than 10 microns since 1986. Since as early as 2009 both monitoring sites have had operating PM_{10} continuous monitors, alongside the Size Selective Inlet (SSI) FRM samplers. The intended purpose of the dual method sampling was to compare and understand the accuracy and any bias resulting from the continuous monitors. As advancements in technology continue and the knowledge base associated with continuous sampling increases the ICAPCD sees the benefit of utilizing the Beta Attenuation Monitors (BAM) for PM_{10} sampling and eliminating the SSI FRM samplers. The increased sampling frequency from the BAM monitors allows for better analysis of air parcels and their impacts.

DISCONTINUATION OF SAMPLERS

As mentioned above the ICAPCD is formally requesting the discontinuation of the SSI FRM samplers from both the Niland and Brawley air monitoring stations. According to 40 CFR 58.14 (c) the ICAPCD is allowed to request such a discontinuation, subject to the review of the Regional Administrator if **any** of the six subjects are met.

40 CFR PART 58 Subsection (c)	Applicability
(1) Any $PM_{2.5}$, O_3, CO, PM_{10}, SO_2, Pb, or NO_2 SLAMS monitor which has shown attainment during the previous five years, that has a probability of less than 10 percent of exceeding 80 percent of the applicable NAAQS during the next three years based on the levels, trends, and variability observed in the past, and which is not specifically required by an attainment plan or maintenance plan. In a nonattainment or maintenance area, if the most recent attainment or maintenance plan adopted by the State and approved by EPA contains a contingency measure to be triggered by an air quality concentration and the monitor to be discontinued is the only SLAMS monitor operating in the nonattainment or maintenance area, the monitor may not be discontinued.	Does not apply
(2) Any SLAMS monitor for CO, PM10, SO2, or NO2 which has **consistently measured lower concentrations than another monitor for the same pollutant in the same county** (or portion of a county within a distinct attainment area, nonattainment area, or maintenance area, as applicable) during the **previous five years**, and which is **not specifically required by an attainment plan or maintenance plan**, if control measures scheduled to be implemented or discontinued during the next five years would apply to the areas around both monitors and have similar effects on measured concentrations, such that **the retained monitor would remain the higher reading of the two monitors being compared.**	**Data Analysis Attachment A**
(3) For any pollutant, any SLAMS monitor in a county (or portion of a county within a distinct attainment, nonattainment, or maintenance area, as applicable) provided the monitor has not measured violations of the applicable NAAQS in the previous five years, and the approved SIP provides for a specific, reproducible approach to representing the air quality of the affected county in the absence of actual monitoring data.	Does not apply
(4) A $PM_{2.5}$ SLAMS monitor which EPA has determined cannot be compared to the relevant NAAQS because of the siting of the monitor, in accordance with §58.30.	Does not apply
(5) A SLAMS monitor that is designed to measure concentrations upwind of an urban area for purposes of characterizing transport into the area and that has not recorded violations of the relevant NAAQS in the previous five years, if discontinuation of the monitor is tied to start-up of another station also characterizing transport.	Does not apply
(6) A SLAMS monitor not eligible for removal under any of the criteria in paragraphs (c)(1) through (c)(5) of this section may be moved to a nearby location with the same scale of representation if logistical problems beyond the State's control make it impossible to continue operation at its current site.	Not applicable

The ICAPCD would appreciate an expedited review of the attached data analysis which supports the conclusion that both stations would still meet the requirements of appendix D and subsection (2) as identified above. The ICAPCD intends to remove the samplers as early as December 31, 2016.

Appendix D requirements:

1) Monitoring Objectives and Spatial Scales would remain the same
2) General Monitoring Requirements would remain the same
3) Design Criteria for NCore Sites does not apply
4) Pollutant-Specific Design Criteria for SLAMS Sites would remain the same
5) Design Criteria for Photochemical Assessment Monitoring Stations (PAMS) does not apply.

Respectfully Submitted,

Reyes Romero
Interim Air Pollution Control Officer

Appendix D

FIGURE 1
Brawley FRM and FEM Comparison
Using 1-6 Sampled Days only

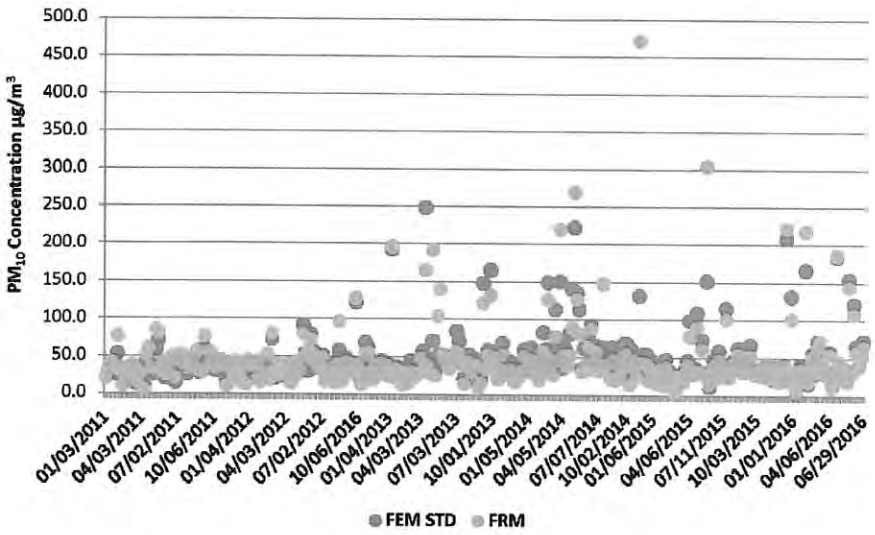


FIGURE 2
Brawley FRM and FEM Annual Avg
Number of Sampled Days

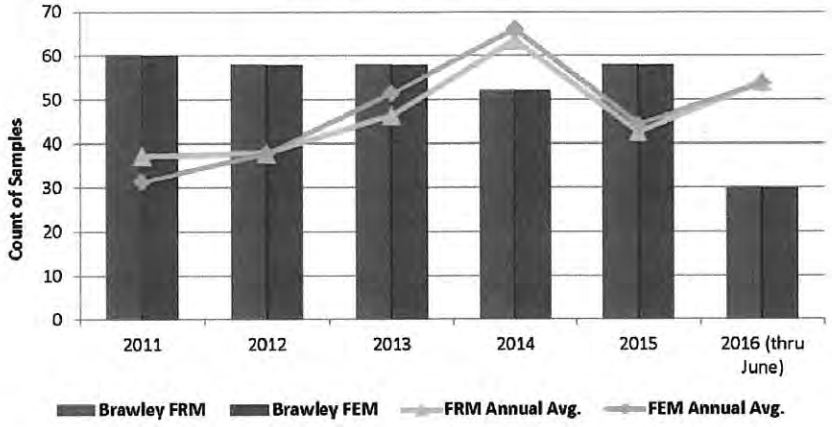
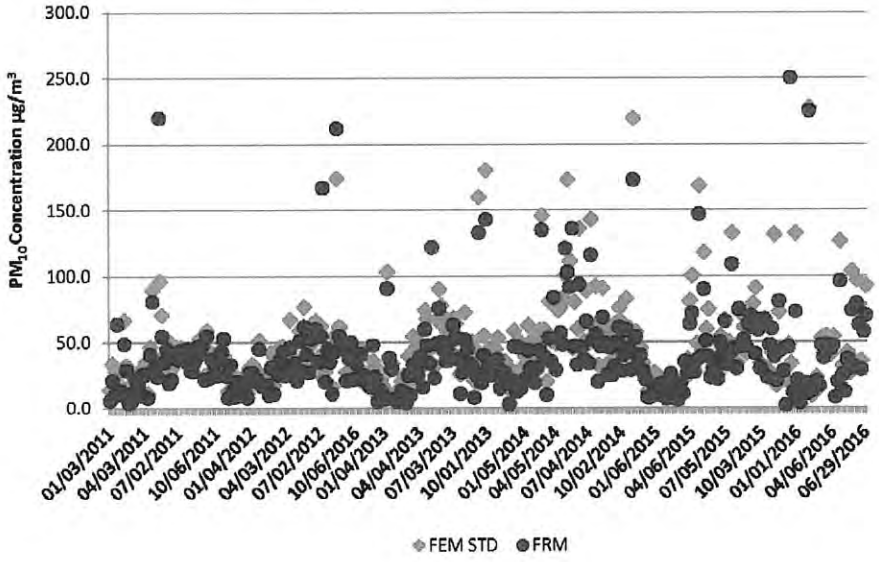


FIGURE 3
Niland FRM and FEM Comparison
Using 1-6 Sampled Days only



Appendix D

FIGURE 4
Niland FRM and FEM Annual Avg
Number of Sampled Days

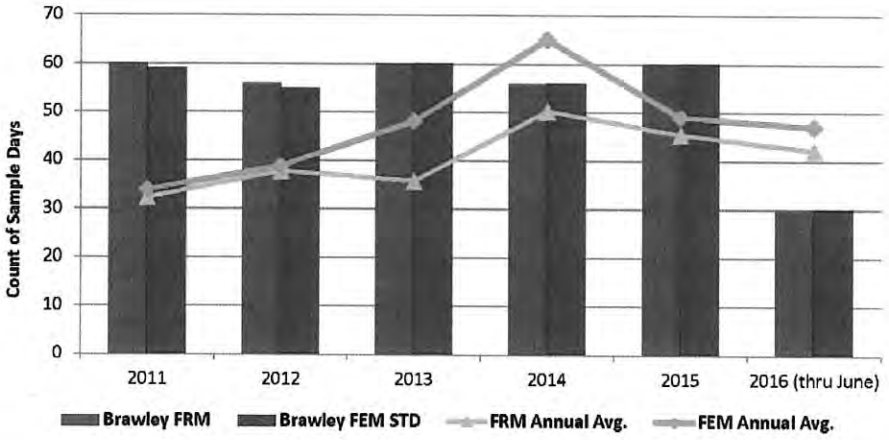


TABLE 1
Brawley FRM and FEM Comparison
Exceedances (Actual)

BRAWLEY EXCEEDANCE-NON EXCEEDANCE COMPARISON: YEARS 2011-(JUNE)2016				
	FRM	FRM DATE	FEM	FEM DATE
2011	0		2	07-03-11; 08/28/11
2012	0		5	11-09-12; 11-08-12; 08-09-12; 06-19-12;01-21-12
2013	3	01-10-13; 05-04-13; 04-16-13	7	10-09-13; 04-15-13; 01-10-13; 07-02-13; 09-25-13
2014	3	11-01-14; 05-05-14; 03-30-14	13	05-06-14; 03-26-14; 04-26-14; 05-20-14; 05-05-14; 09-27-14; 11-16-14; 10-31-14; 03-17-14; 06-26-14; 04-25-14; 04-13-14; 04-01-14
2015	2	05-18-15; 12-14-15	6	05-21-15; 05-22-15; 09-14-15; 10-04-15; 11-25-15; 12-14-15
2016	2	01-31-16; 04-24-16	9	01-31-16; 03-06-16; 03-11-16; 03-28-16; 04-24-16; 04-25-16; 05-05-16; 05-21-16; 05-22-16

TABLE 2
Niland FRM and FEM Comparison
Exceedances (Actual)

NILAND EXCEEDANCE-NON EXCEEDANCE COMPARISON: YEARS 2011-(JUNE)2016				
	FRM	FRM DATE	FEM	FEM DATE
2011	1	5/9/2011	3	08-28-11; 07-03-11; 05-08-11
2012	2	08-13-12; 07-08-12	4	05-25-12; 08-09-12; 08-13-12; 07-11-12
2013	0		6	04-15-13; 07-02-13; 09-07-13; 09-25-13; 10-09-13; 10-25-13
2014	1	11/1/2014	7	03-26-14; 04-12-14; 05-11-14; 08-15-14; 10-31-14; 11-01-14; 11-16-14
2015	1	12/14/2015	7	04-24-15; 05-07-15; 05-21-15; 06-30-15; 07-08-15; 10-01-15; 11-25-15
2016	1	1/31/2016	4	01-31-16; 04-25-16; 05-15-16; 05-20-16

TABLE 3
Brawley FRM and FEM Expected Exceedances (Design Value)

Brawley FEM	Q1	Q2	Q3	Q4	TOTAL EXPECTED EXCEEDANCES
2011	0	0	2	0	2
2012	1	1	1	2	5
2013	1	2.02	2.02	2.04	7.08
2014	3.03	8	1	1	13.03
2015	0	2.07	1	3	6.07

Brawley FRM	Q1	Q2	Q3	Q4	TOTAL EXPECTED EXCEEDANCES
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	7	12.1	0	0	19.1
2014	6.4	6.1	0	8.4	20.9
2015	0	6.5	0	6.1	12.6

3-YEAR DESIGN VALUES
Brawley FEM

	AQS	ICAPCD
2013-2011	2	4.7
2014-2012	6.4	8.4
2015-2013	8.4	8.7

Brawley FRM

	AQS	ICAPCD
2013-2011	6.4	6.4
2014-2012	13.3	13.3
2015-2013	17.5	17.5

TABLE 4
Niland FRM and FEM Expected Exceedances (Design Value)

Niland FEM	Q1	Q2	Q3	Q4	TOTAL EXPECTED EXCEEDANCES
2011	0	0	2	0	2
2012	0	1	3	0	4
2013	0	1	3	2	6
2014	1	2.1	1	3.1	7.2
2015	0	4	1	1	6

Niland FRM	Q1	Q2	Q3	Q4	TOTAL EXPECTED EXCEEDANCES
2011	1	6.5	0	0	7.5
2012	0	0	12.2	0	12.2
2013	0	0	0	0	0
2014	0	0	0	6.1	6.1
2015	0	0	0	6.1	6.1

3-YEAR DESIGN VALUES
Niland FEM

	AQS	ICAPCD
2013-2011	2	4
2014-2012	4.4	2.4
2015-2013	6.7	6.1

Niland FRM

	AQS	ICAPCD
2013-2011	6.5	6.5
2014-2012	6.4	6.1
2015-2013	4.1	4.1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

MAY 03 2017

Mr. Matt Dessert
Air Pollution Control Officer
Imperial County Air Pollution Control District
150 South Ninth Street
El Centro, California 92243-2850

Dear Mr. Dessert:

This letter provides the U.S. Environmental Protection Agency's (EPA's) review and approval for the Imperial County Air Pollution Control District's (ICAPCD's) discontinuation of the PM_{10} Federal Reference Method (FRM) State and Local Air Monitoring Station (SLAMS) monitors at the Brawley (AQS ID: 06-025-0007) and Niland (AQS ID: 06-025-4004) sites.

On December 21, 2016, following discussions with California Air Resources Board, ICAPCD sent a letter to EPA with a description of this network change. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors. These monitor discontinuations were specifically reviewed under 40 CFR 58.14(c) which states that "discontinuation may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for the implementation of the NAAQS [National Ambient Air Quality Standards] and if the requirements of appendix D to this part, if any, continue to be met."

As stated in ICAPCD's letter, PM_{10} has been measured at these two sites since 1986. In 2009, continuous Federal Equivalent Method (FEM) monitors were installed in addition to the existing FRMs. ICAPCD began submitting FEM data to the Air Quality System (AQS) under parameter code 81102 in 2013. According to certified PM_{10} data from 2013-2016 submitted to EPA's AQS, the Brawley and Niland FEM monitors measured higher 24-hour concentrations than the FRM monitors 85% and 87% of the time, respectively. Similarly, on exceedance days, the Brawley and Niland FEM monitors measured higher 24-hour concentrations than the FRM monitors 100% of the time.[1] Also, due to differences in sampling frequency, the Brawley and Niland FEM monitors measured a higher number of exceedances compared to the FRM monitors, which only sample on a 1 in 6 day schedule.

Based on these analyses, the discontinuance of the Brawley and Niland FRM monitors does not compromise data collection needed for the implementation of the NAAQS and will not prevent ICAPCD and CARB from meeting the 40 CFR 58, Appendix D requirements. Therefore, EPA approves ICAPCD's request for discontinuation of the Brawley and Niland PM_{10} FRM SLAMS monitors on a case-by-case basis per 40 CFR 58.14(c).

[1] Percentiles for both analyses were calculated using matching FRM and FEM data for which there was a complete 24-hour period measured on the FEM monitors. Data with missing hourly data from the FEM were not used, as the comparison to a 24-hour average FRM measurement would not be appropriate.

If there are any questions regarding this letter, please feel free to contact me at (415) 972-3372 or Jennifer Williams of my staff at (415) 972-3938.

Sincerely,

Michael Flagg
Acting Manager, Air Quality Analysis Office

cc (via email): Reyes Romero, ICAPCD
Monica Soucier, ICAPCD
Webster Tasat, CARB
Gayle Sweigert, CARB
Patrick Rainey, CARB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

MAR 0 3 2017

Mr. Douglas Gearhart
Air Pollution Control Officer
Lake County Air Quality Management District
885 Lakeport Boulevard
Lakeport, California 95453

Dear Mr. Gearhart:

This letter provides the U.S. Environmental Protection Agency's (EPA's) review and approval for the Lake County Air Quality Management District's (LCAQMD's) relocation of the $PM_{2.5}$, PM_{10}, and O_3 State and Local Air Monitoring Station (SLAMS) monitors at the Lakeport site (AQS ID: 06-033-3001). On September 9, 2014, LCAQMD sent a letter to EPA with a description of this network change. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the relocation of SLAMS monitors. The monitor relocations were specifically reviewed under 40 CFR 58.14(b). Generally, relocations may be appropriate for approval if they do not compromise data needed for implementation of the National Ambient Air Quality Standards (NAAQS) or if they satisfy one of the criteria for monitor discontinuation under 40 CFR 58.14(c)(1) through (c)(5).

The relocation is intended to resolve issues with incompatible activities occurring near the existing SLAMS station that interfere with O_3 and $PM_{2.5}$ monitoring, as well as staff safety issues. Maintaining the monitoring site at a LCAQMD-owned building and eliminating current issues associated with siting criteria were cited as additional reasons to support relocation. Relocation of these instruments was specifically requested to allow LCAQMD to show continuing attainment of all $PM_{2.5}$, PM_{10}, and O_3 NAAQS.

The proposed site (2617 South Main Street, Lakeport, CA) is located approximately 1.5 miles away from the current site, and both sites are characterized by residential, commercial, and agricultural land uses. The relocation site is expected to measure similar $PM_{2.5}$, PM_{10}, and O_3 concentrations from similar sources as the current site due to the consistency in land uses and proximity to sources. Therefore, the relocation site is expected to have the same scale of representation, and will not prevent LCAQMD and the California Air Resources Board (CARB) from meeting 40 CFR 58 Appendix D requirements.

Additionally, for $PM_{2.5}$ and PM_{10} SLAMS monitors, EPA reviewed the data against criteria in 40 CFR 58.14 (c)(1). According to certified $PM_{2.5}$ data from 2011-2015 and PM_{10} data from 2013-2015[1] submitted to EPA's Air Quality System (AQS), EPA determined that these monitors meet the requirements for discontinuation under 40 CFR 58.14(c)(1) and there is a less than 10 percent

[1] Until recently, LCAQMD has been reporting PM_{10} data to AQS in local conditions only, not standard conditions. PM_{10} data is required to be reported in standard conditions for comparison to the NAAQS. After receiving LCAQMD's relocation request, LCAQMD and CARB worked together with EPA to ensure that PM_{10} concentrations from 2013-2015 were recalculated in standard conditions for the Lakeport PM_{10} monitor and submitted to AQS. This was determined to be an appropriate historical period to assess whether Lakeport PM_{10} concentrations met requirements for discontinuation of the monitor.

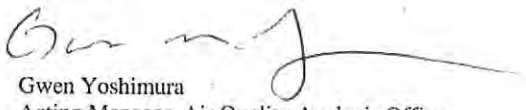
probability of exceeding 80 percent of the applicable NAAQS during the next three years (2016-2018) at this site. For relocation of the O_3 SLAMS monitor, EPA also reviewed additional data. According to certified data submitted to AQS, the Lakeport O_3 monitor was in attainment of the 2015 O_3 8-hour NAAQS from 2011 through 2015. Design values during that period ranged from approximately 81-87% of the NAAQS. In addition, the Lakeport O_3 monitor measured only three exceedances of the NAAQS during 2011-2015. Preliminary 2016 data show concentrations below the applicable NAAQS for all aforementioned pollutants.

Based on the assessment of scale of representation at both locations and these analyses, EPA has determined that the LCAQMD's request does not compromise data needed for implementation of the NAAQS and approves relocation of the Lakeport PM_{10}, $PM_{2.5}$, and O_3 SLAMS monitors to the proposed site.

This approval assumes that the new site will meet all 40 CFR 58 requirements, including the siting requirements specified in Appendix E. Please work with EPA and CARB to ensure that the new site meets all relevant requirements. As this is a relocation, the data from the old and new sites will be combined to form one continuous data record for design value calculations. Please note this in the AQS comment field for both the old and the new AQS site. Also, this letter should be attached and the relevant monitor and site information should be included in the next CARB Annual Network Plan. EPA approval is not required for relocation of other monitors at the Lakeport site (soil index, light scatter, and meteorological monitors) as these are not SLAMS monitors.

If there are any questions regarding this letter, please feel free to contact me at (415) 947-4134 or Anna Mebust of my staff at (415) 972-3265.

Sincerely,



Gwen Yoshimura
Acting Manager, Air Quality Analysis Office

cc (via email): Elizabeth Knight, LCAQMD
Gayle Sweigert, CARB
Andrea McStocker, CARB

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

March 10, 2017

Meredith Kurpius, Ph. D.
Air Quality Analysis Office, Manager
U.S. EPA Region 9
75 Hawthorne Street
Mail Code: AIR-7
San Francisco, CA 94105

Dear Dr. Kurpius:

The California Air Resources Board (ARB) is requesting approval from U.S. EPA to discontinue the nitrogen dioxide (NO2) and carbon monoxide (CO) monitors at the Santa Barbara – National Guard air monitoring station (AQS# 06-083-0011 henceforth, "Site") in Santa Barbara County, based on 40 CFR Part 58.14 (c)(1): "...SLAMS monitor which has shown attainment during the previous five years, that has a probability of less than 10 percent of exceeding 80 percent of the applicable National Ambient Air Quality Standards (NAAQS) during the next three years based on the levels, trends, and variability observed in the past, and which is not specifically required by an attainment plan or maintenance plan..."

Based on the analysis included with this request for 2011 to 2015 data, the NO2 and CO monitors at the Site meet the requirements of 40 CFR Part 58.14 (c)(1) and are not specifically required by an attainment or maintenance plan.

The Site averages the highest NO2 concentrations out of the 11 county sites, producing a 3-year 98th percentile average of 43 ppb (43 percent of the 100 ppb 1-hour standard based on 2012-2014 data). However, yearly concentrations have remained fairly stable over the past 5 years and are highly unlikely to exceed the NAAQS. There are no minimum monitoring requirements for this pollutant within Santa Barbara County, and the monitor is not required by an attainment or maintenance plan. The only NO2 monitors required in the county are for operating-permit conditions of nearby sources. The requirements of Appendix D in 40 CFR Part 58.14 will continue to be met with the removal of this monitor from the Site.

The Site averages the highest CO concentrations out of the 6 county sites, producing a 3-year 2nd maximum average of 2.3 ppm (6.6 percent of the 35 ppm 1-hour standard based on 2012-2014 data). However, yearly concentrations have remained fairly stable over the past 5 years and are high unlikely to exceed the NAAQS. There are no minimum monitoring requirements for this pollutant within Santa Barbara County, and the monitor is not required by an attainment or maintenance plan. The only CO monitors required in the county are for operating-permit conditions of nearby sources. The requirements of Appendix D in 40 CFR Part 58.14 will continue to be met with the removal of this monitor from the Site.

The NO2 and CO monitors have served to measure the impacts of high population exposure since 2002; however, there are nearby sites in the county that also fulfill the same objectives. Both monitors at the Site have been consistently well below the NAAQS over the last 5 years, and there are no trends of increasing concentrations. Goleta (AQS# 0-083-2011) is the closest station (8 miles west) to the Site, and it measures all of the same pollutants as the Site. NO2 and CO concentrations at Goleta are slightly lower than those at the Site, but between the two sites, NO2 and CO data are highly correlated. Data from Goleta could be used as an indicator of the NO2 and CO trends in Santa Barbara.

Discontinuing both monitors will make resources available that can be used elsewhere in the ARB network. With the approval of U.S. EPA, ARB intends to discontinue the NO2 and CO monitors at the Santa Barbara – National Guard air monitoring station this year.

Sincerely,

Ken Stroud
Air Quality Surveillance Branch Chief

Attachments (7)

cc: Gayle Sweigert, Manager
Air Quality Planning and Science Division

Joel Cordes, Supervisor
Santa Barbara County Air Pollution Control District

Attachment 1
System Modification Analysis 40 CFR 58.14 for Nitrogen Dioxide

System Modification Analysis 40 CFR 58.14

Site: **Santa Barbara - National Guard Armory (AQS# 06-083-0011)**
Pollutant: **Nitrogen Dioxide (42602)**

2011 - 2015 1-Hour Nitrogen Dioxide NAAQS

0.100	ppm	<-- Nitrogen Dioxide 98th percentile of 1-Hour NAAQS

Design Value (ppm) 2011	Design Value (ppm) 2012	Design Value (ppm) 2013	Design Value (ppm) 2014	Design Value (ppm) 2015	Average Design Value (ppm) $\overline{X}$	Standard Deviation s	Student's t value (90% confidence)	Number of Data Values n	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?	Shown Attainment of NAAQS for 5 Years?
0.0420	0.0430	0.042	0.041	0.04	0.0416	0.00114	2.13	5	0.0427	0.0800	YES	YES

2011 - 2015 Annual Mean Nitrogen Dioxide NAAQS

0.053	ppm	<-- Nitrogen Dioxide Annual Mean NAAQS

Design Value (ppm) 2011	Design Value (ppm) 2012	Design Value (ppm) 2013	Design Value (ppm) 2014	Design Value (ppm) 2015	Average Design Value (ppm) $\overline{X}$	Standard Deviation s	Student's t value (90% confidence)	Number of Data Values n	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?	Shown Attainment of NAAQS for 5 Years?
0.0095	0.0103	0.0095	0.0080	0.0082	0.0091	0.00097	2.13	5	0.0100	0.0424	YES	YES

Attachment 2
System Modification Analysis 40 CFR 58.14 for Carbon Monoxide

System Modification Analysis 40 CFR 58.14

Site: **Santa Barbara - National Guard Armory (AQS# 06-083-0011)**
Pollutant: **Carbon Monoxide (42101)**

2011 - 2015 8-Hour Carbon Monoxide

9.000	ppm	Carbon Monoxide 2nd Maximum 8-Hour NAAQS										
Design Value (ppm) 2011	Design Value (ppm) 2012	Design Value (ppm) 2013	Design Value (ppm) 2014	Design Value (ppm) 2015	Average Design Value (ppm) $\overline{X}$	Standard Deviation s	Student's t value (90% confidence)	Number of Data Values n	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?	Shown Attainment of NAAQS for 5 Years?
1.900	0.900	1.100	1.100	0.800	1.16	0.43359	2.13	5	1.5730	7.2000	YES	YES

2011 - 2015 1-Hour Carbon Monoxide

35.000	ppm	Carbon Monoxide 2nd Maximum 1-Hour NAAQS										
Design Value (ppm) 2011	Design Value (ppm) 2012	Design Value (ppm) 2013	Design Value (ppm) 2014	Design Value (ppm) 2015	Average Design Value (ppm) $\overline{X}$	Standard Deviation s	Student's t value (90% confidence)	Number of Data Values n	90% Upper Confidence Interval (ppm)	80% of NAAQS (ppm)	< 10% Probability of exceeding 80% of NAAQS?	Shown Attainment of NAAQS for 5 Years?
							2.13	5		28		

* No AQS 1-Hour Data available
* No Exceedances recorded for past 5 years

Attachment 3
Nitrogen Dioxide Summary for Santa Barbara County

Nitrogen Dioxide Summary for Santa Barbara County

Table 4-2 shows the summary of the county's NO2 concentrations from 2012 – 2014 compared with this new standard. No sites in the county exceed the standard. Santa Barbara, Santa Maria and Goleta measure the highest concentrations. They are located in urban areas and are influenced by exhaust from automobile traffic.

Table 4-2
Nitrogen Dioxide Summary

AQS #	STREET_ADDRESS	2012 98th ppb	2013 98th ppb	2014 98th ppb	3 Yr Avg 98th ppb	% of Std 100 %	Rank
06-083-0011	Santa Barbara	43	42	43	43	43%	1
06-083-1008	Santa Maria	33.4	37	34	35	35%	2
06-083-2011	Goleta	32	32	33	32	32%	3
06-083-2004	Lompoc H Street	26	26	23	25	25%	4
06-083-0008	El Capitan	23	21	25	23	23%	5
06-083-1018	Nojoqui	18	19	22	20	20%	6
06-083-1021	Carpinteria	12	12	18	14	14%	7
06-083-1025	Las Flores Canyon #1	15	13	11	13	13%	8
06-083-1013	Lompoc HS&P	8	10	8	9	9%	9
06-083-4003	VAFB STS	4	5	8	6	6%	10
06-083-1014	Paradise Road	5	4	6	5	5%	11

*Taken from the Network Assessment of the Santa Barbara Air Pollution Control District Ambient Air Monitoring Network, Section 4.0; SBCAPCD, July 1, 2015

Attachment 4
Nitrogen Dioxide Summary for Santa Barbara County

Carbon Monoxide Summary for Santa Barbara County

Table 4-4 compares the county concentrations from 2012 – 2014 with the 1 hour standard for CO that is set at 35 ppm. The form of the standard is not to exceed more than once per year. Table 4.4 compares the 2nd maximum daily hourly maximum value for years 2012 – 2014. No site exceeds the standard with the highest reading being 6.6% of the standard at Santa Barbara.

Table 4-4
Carbon Monoxide Summary

AQS #	STREET_ADDRESS	2012 98th ppb	2013 98th ppb	2014 98th ppb	3 Yr Avg 98th ppb	% of Std 100 %	Rank
06-083-0011	Santa Barbara	1.9	2.5	2.5	2.30	6.6%	1
06-083-1008	Santa Maria	1.9	1.6	1.6	1.70	4.9%	2
06-083-2004	Lompoc H Street	1.3	1.4	1.9	1.53	4.4%	3
06-083-2011	Goleta	1.2	1	0.8	1.00	2.9%	4
06-083-4003	VAFB STS	0.5	0.9	1.5	0.97	2.8%	5
06-083-1025	Las Flores Canyon #1	0.6	0.5	0.5	0.53	1.5%	6

*Taken from the Network Assessment of the Santa Barbara Air Pollution Control District Ambient Air Monitoring Network, Section 4.0; SBCAPCD, July 1, 2015

Attachment 5
Current Santa Barbara Monitoring Station Details

Site Name			**Santa Barbara**		
AQS ID			060830011		
GIS coordinates			34.427711 -119.690844		
Location			In parking lot of the National Guard Armory		
Address			700 E. Canon Perdido, Santa Barbara CA 93103		
County			Santa Barbara County		
Dist. to road			De La Guerra, 7meters; N Quarantina, 85 meters; N. Nopal, 60 meters; E. Canon Perdido, 140 meters; N. Milpas, 200 meters		
Traffic count (AADT, year)			De La Guerra - 4500 (1996); Canon Perdido - 7300 (1996); Quarantina - 100 est.; Milpas - 14600 (1996)		
Groundcover			Asphalt		
Representative area			MSA (Santa Barbara – Santa Maria, CA)		
Pollutant, POC	**O3,1**	**NO2,1**	**CO,3**	**PM2.5,3**	**PM10,1**
Monitor Type	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
Network Affiliation	NA	NA	NA	NA	NA
Parameter Code	44201	42602	42101	88101	81102
Monitoring Objective	NAAQS, public	NAAQS, public	NAAQS, public	NAAQS, public	NAAQS, public
Site type(s)	population	High concentration	High concentration	Highest concentration	population
MFG/ Model	TAPI 400	TAPI 200	TAPI 300eu	BAM 1020	BAM 1020
Method Code	087	099	593	170	122
FRM/FEM or other	FEM	FRM	FRM	FEM	FEM
Collecting Agency	CARB	CARB	CARB	CARB	CARB
Reporting Agency	CARB	CARB	CARB	CARB	CARB
Spatial Scale	Urban	Neighborhood	Middle Scale	Neighborhood	Neighborhood
Start date	5/1/02	5/1/02	5/1/02	7/1/10	5/1/02
Operation schedule	Continuous	Continuous	Continuous	Continuous	Continuous
Sampling season	All Year	All Year	All Year	All Year	All Year
Probe height	6.0 m	6.0 m	6.0 m	7.0 m	7.0 m

Distance from supporting structure	2.5 m	2.5 m	2.5 m	2.0 m	2.0 m
Distance from obstructions on roof	None	None	None	None	None
Distance from obstructions not on roof	None	None	None	None	None
Distance from trees	None	None	None	None	None
Distance to furnace or incinerator	None	None	None	None	None
Unrestricted airflow	360o	360o	360o	360o	360o
For low volume PM instruments, is any PM instrument within 1 m of the lovol? If yes, please list distance (meters) and instrument(s)	NA	NA	NA	No	No
Probe material	Glass & Teflon	Glass & Teflon	Glass & Teflon	N/A	N/A

*Taken from the Santa Barbara County Annual Air Monitoring Network Plan; SBCAPCD, July 1, 2015

Attachment 6
Map of Closest Air Monitoring Stations to Santa Barbara –
National Guard Armory

Map showing closest air monitoring stations to Santa Barbara – National Guard Armory. Goleta – Fairview is 8 miles away from Santa Barbara – National Guard Armory, and Carpenteria – Gobernador is 14 miles away.

Attachment 7
CFR Part 58.14 Reference

§ 58.14 System modification

(a) The State, or where appropriate local, agency shall develop and implement a plan and schedule to modify the ambient air quality monitoring network that complies with the findings of the network assessments required every 5 years by § 58.10(e). The State or local agency shall consult with the EPA Regional Administrator during the development of the schedule to modify the monitoring program, and shall make the plan and schedule available to the public for 30 days prior to submission to the EPA Regional Administrator. The final plan and schedule with respect to the SLAMS network are subject to the approval of the EPA Regional Administrator. Plans containing modifications to NCore Stations or PAMS Stations shall be submitted to the Administrator. The Regional Administrator shall provide opportunity for public comment and shall approve or disapprove submitted plans and schedules within 120 days.

(b) Nothing in this section shall preclude the State, or where appropriate local, agency from making modifications to the SLAMS network for reasons other than those resulting from the periodic network assessments. These modifications must be reviewed and approved by the Regional Administrator. Each monitoring network may make or be required to make changes between the 5-year assessment periods, including for example, site relocations or the addition of PAMS networks in bumped-up ozone nonattainment areas. These modifications must address changes invoked by a new census and changes due to changing air quality levels. The State, or where appropriate local, agency shall provide written communication describing the network changes to the Regional Administrator for review and approval as these changes are identified.

(c) State, or where appropriate, local agency requests for SLAMS monitor station discontinuation, subject to the review of the Regional Administrator, will be approved if any of the following criteria are met and if the requirements of appendix D to this part, if any, continue to be met. Other requests for discontinuation may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of a NAAQS and if the requirements of appendix D to this part, if any, continue to be met.

(1) Any PM2.5 , O3 , CO, PM10 , SO2 , Pb, or NO2 SLAMS monitor which has shown attainment during the previous five years, that has a probability of less than 10 percent of exceeding 80 percent of the applicable NAAQS during the next three years based on the levels, trends, and variability observed in the past, and which is not specifically required by an attainment plan or maintenance plan. In a nonattainment or maintenance area, if the most recent attainment or maintenance plan adopted by the State and approved by EPA contains a contingency measure to be triggered by an air quality concentration and the monitor to be discontinued is the only SLAMS monitor operating in the nonattainment or maintenance area, the monitor may not be discontinued.

(2) Any SLAMS monitor for CO, PM10 , SO2 , or NO2 which has consistently measured lower concentrations than another monitor for the same pollutant in the same county (or portion of a county within a distinct attainment area, nonattainment area, or maintenance area, as applicable) during the previous five years, and which is not specifically required by an attainment plan or maintenance plan, if control measures scheduled to be implemented or discontinued during the next five years would apply to the areas around both monitors and have similar effects on measured concentrations, such that the retained monitor would remain the higher reading of the

two monitors being compared.

(3) For any pollutant, any SLAMS monitor in a county (or portion of a county within a distinct attainment, nonattainment, or maintenance area, as applicable) provided the monitor has not measured violations of the applicable NAAQS in the previous five years, and the approved SIP provides for a specific, reproducible approach to representing the air quality of the affected county in the absence of actual monitoring data.

(4) A PM2.5 SLAMS monitor which EPA has determined cannot be compared to the relevant NAAQS because of the siting of the monitor, in accordance with § 58.30.
(5) A SLAMS monitor that is designed to measure concentrations upwind of an urban area for purposes of characterizing transport into the area and that has not recorded violations of the relevant NAAQS in the previous five years, if discontinuation of the monitor is tied to start-up of another station also characterizing transport.

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

(c) State, or where appropriate, local agency requests for SLAMS monitor station discontinuation, subject to the review of the Regional Administrator, will be approved if any of the following criteria are met and if the requirements of appendix D to this part, if any, continue to be met. Other requests for discontinuation may also be approved on a case-by-case basis if discontinuance does not compromise data collection needed for implementation of a NAAQS and if the requirements of appendix D to this part, if any, continue to be met.

(1) Any PM 2.5, O3, CO, PM 10, SO2, Pb, or NO2 SLAMS monitor which has shown attainment during the previous five years, that has a probability of less than 10 percent of exceeding 80 percent of the applicable NAAQS during the next three years based on the levels, trends, and variability observed in the past, and which is not specifically required by an attainment plan or maintenance plan. In a nonattainment or maintenance area, if the most recent attainment or maintenance plan adopted by the State and approved by EPA contains a contingency measure to be triggered by an air quality concentration and the monitor to be discontinued is the only SLAMS monitor operating in the nonattainment or maintenance area, the monitor may not be discontinued.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

MAY 11 2017

Mr. Ken Stroud, Chief
Air Quality Surveillance Branch
Monitoring and Laboratory Division
California Air Resources Board
1001 I Street, 6th Floor
Sacramento, California 95814

Dear Mr. Stroud:

This letter provides the U.S. Environmental Protection Agency's (EPA's) review and approval for California Air Resources Board's (CARB's) discontinuation of the NO_2 and CO State or Local Air Monitoring Station (SLAMS) monitors at the CARB-operated Santa Barbara-National Guard monitoring station (AQS ID: 06-083-0011). On March 10, 2017, CARB sent a letter to EPA with a description of this network change. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors.

Discontinuation of the CO monitor was reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1). According to data submitted to EPA's Air Quality System (AQS), the Santa Barbara-National Guard site was in attainment of the CO National Ambient Air Quality Standards (NAAQS) from 2012 through 2016. Based on these five design values, there is a less than 10 percent probability of exceeding 80 percent of the CO 1-hour and 8-hour NAAQS during the next three years at this site. These monitors are not specifically required by an attainment or maintenance plan, and they are not the last monitors in a nonattainment or maintenance area. Furthermore, discontinuance of these monitors will not prevent CARB from meeting 40 CFR 58 Appendix D requirements. Five additional CO monitors located in Santa Barbara County reported data to AQS in 2016. Based on this analysis, EPA approves discontinuation of the Santa Barbara-National Guard CO monitor.

Under 40 CFR 58.14(c), requests for closures may be approved on a case-by-case basis as long as the discontinuance does not compromise data collection for implementation of the NAAQS and the requirements of 40 CFR 58 Appendix D continue to be met. Discontinuation of the NO_2 monitor was reviewed according to these provisions.

In 2013, Santa Barbara-National Guard had only three complete quarters of 1-hour NO_2 data, resulting in incomplete 1-hour NO_2 design values for 2013, 2014, and 2015. All other years from 2011 through 2016 have four complete quarters of data. The valid 2011, 2012, and 2016 1-hr NO_2 design values were 42, 43, and 39 parts per billion (ppb), respectively. Over this six-year period, the maximum 1-hour value measured at the site was 52.1 ppb, well below the 100 ppb NAAQS. The annual NO_2 design values is also well below the 53 ppb annual NAAQS, with valid 2011 to 2015 design values between 8 to 10 ppb, passing the 40 CFR 58.14(c)(1) criteria for the annual NO_2 NAAQS. Ten additional NO_2 monitors located in Santa Barbara County reported data to AQS in 2016. Based on this analysis, EPA approves

discontinuation of the Santa Barbara-National Guard NO_2 monitor.

In summary, discontinuance of the CO and NO_2 monitors at Santa Barbara-National Guard would not compromise data collection needed for implementation of a NAAQS, and the requirements of Appendix D would continue to be met. EPA therefore approves discontinuation of the CO and NO_2 monitoring at Santa Barbara-National Guard.

If you have any questions, please contact me at (415) 972-3372 or Gwen Yoshimura of my staff at (415) 947-4134. Thank you for your continued attention to detail and thorough data analyses.

Sincerely,

Michael Flagg
Acting Manager, Air Quality Analysis Office

cc (via email): Gayle Sweigert, CARB
Joel Cordes, Santa Barbara County Air Pollution Control District

Appendix E

Summary of Public Comments and ARB Responses

Comment #1 from Sam Michie, Santa Barbara APCD:

Comment: The language on page 40 of the DRAFT CARB ANP is not clear. Although at one time Santa Barbara APCD operated a PAMS monitoring program/site, it has not been in operation for many years. It is not clear if this paragraph is saying that a PAMS site in Santa Barbara was established at one time or is insinuating that a PAMS site is currently established.

ARB Response: That is an oversight and ARB will correct it when the plan is submitted to U.S. EPA.